



**Chien-Sing LEE\***

Citizenship:

Malaysian

Age: 56++

**Research Interests:** Advancing  
Technology for Humanity

*Creative thinking, design, design  
thinking, computational thinking,  
data mining, knowledge management,  
collaborative learning/systems,  
games, optimization, Art & Design*

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<https://chiensinglee.wixsite.com/chiensinglee>

|                              |                                                                                                                                                                |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ResearcherID:<br>N-5930-2016 | <a href="https://www.webofscience.com/wos/author/record/1346981">https://www.webofscience.com/wos/author/record/1346981</a><br>h-index: 11                     |
| SCOPUS                       | <a href="https://www.scopus.com/authid/detail.uri?authorid=57205431488">https://www.scopus.com/authid/detail.uri?authorid=57205431488</a><br>h-index: 14       |
| Google Scholar               | <a href="https://scholar.google.com/citations?user=wCRM7wsAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=wCRM7wsAAAAJ&amp;hl=en</a><br>h-index: 20 |
| ORCID                        | <a href="https://orcid.org/0000-0002-4703-457X">https://orcid.org/0000-0002-4703-457X</a>                                                                      |
| DBLP                         | <a href="https://dblp.org/pid/45/5141.html">https://dblp.org/pid/45/5141.html</a>                                                                              |

## PROFESSIONAL AFFILIATIONS

### MEMBERSHIP

1. **Committee Member**, IEEE Systems Council ( Jan, 2025-Current)
2. **Member**, ACM (Jan 13, 2023-Current). Membership number: 5847349
3. **Member**, Design Society, Scotland (February 15, 2019-2020)
4. **Member**, IEEE Smart Cities Community (2017-Current),
5. **SIG Member**, Machine Intelligence Labs, University of Washington, USA. (2016-2022)
6. **Founding committee/Committee member**, IEEE Consultants Network Affinity Group (Nov. 2016-Dec. 2018, Coopted Research Consultant (2019-2021), **Member** (2022- )
7. **Member**, IASAGlobal (IT Architecture) (2016-Current) [started in MMU 2009 but not a member then]
8. **IEEE Technology Management Society (M): Co-founder/Vice-chair** IEEE Technology Management Council (M) (Feb. 2014- Feb. 2015), **Committee member**, IEEE Technology Management Society (M) (Feb. 2015-Feb 2022, Feb. 2025-2026), **Auditor** (Feb 2023-Feb 2025)
9. **Member**, Centre for Computing and Intelligent Systems, Universiti Tunku Abdul Rahman (2013-2015)
10. **IEEE SMC Member**, 2013- ; **Committee member**, IEEE Systems, Man, Cybernetics, (M) (Jan. 2014-2021-2), **Vice-Chair** (Jan. 19, 2019-Dec. 2020), **co-opted Executive committee** for DLP (Feb 2023-5)
11. **Member**, International Learning Sciences Society (2009, 2016, 2018)
12. **Life member**, JICA Alumni Association (2007- Current), Fulbright Alumni Association of Malaysia [FAAM] (2008- Current), Malaysian Invention and Design Society (2014-Current), Malaysian TRIZ Innovation Society (2009- Current)
13. **IEEE Member** (2001-)(Membership number: 41466049), **Senior Member** (Sept. 2007- Current).

## INTERNATIONAL EXECUTIVE COMMITTEE

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1. **Council member**, Hong Kong Society of Robotics and Automation (HKSRA), (2020-Current).
2. **Founding committee/Vice-chair**, SIG on *Development of Information and Communication Technology in the Asia Pacific Neighborhood*, Asia-Pacific Society on Computers in Education (Dec 2011-Dec 2013) [became the WICTTEE workshop in the ICCE]

## OVERSEAS TRAINING

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|                     |                                                                                                             |
|---------------------|-------------------------------------------------------------------------------------------------------------|
| March 9-18, 2019    | International Development Programme (IDP) – Sunway-Lancaster training program: Theme: A Global Curriculum   |
| Feb 1-June 30, 2009 | Fulbright Visiting Scholar Fellowship, School of Interactive Computing, Georgia Tech, GA, USA               |
| Jan 1-Jan 31, 2009  | Fulbright Visiting Scholar Fellowship, EECS, Lehigh University, PA, USA                                     |
| Jan-Feb 2007        | Visited industries and universities in Japan funded by the Japanese International Cooperation Agency (JICA) |

## CERTIFICATIONS

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|                        |                                                                                                                                                                                                                                                                                   |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| July 27, 2020-2025     | Salesforce Certified Administrator ID 21378277                                                                                                                                                                                                                                    |
| January 14, 2020       | Train the trainer, HRDF, Ministry of Human Resource Certificate No. 6994.                                                                                                                                                                                                         |
| March 13, 2019         | IREB Certified Professional Requirements Engineering - Foundation Level (CPRE-FL), Malaysian Software Testing Board. (MY-CPRE-FL-2019-00007)<br><a href="https://www.ireb.org/en/service/cpre-registry-list/15533/">https://www.ireb.org/en/service/cpre-registry-list/15533/</a> |
| July 17, 2018-Current  | Professional Technologist, by the Malaysian Board of Technologists (MBOT) (PT18070112)                                                                                                                                                                                            |
| April 25, 2018-Current | Graduate Technologist, by the Malaysian Board of Technologists (MBOT) (GT18050966)                                                                                                                                                                                                |
| January, 2010          | Torrance Creativity Test (Figural), University of Georgia, Athens, USA                                                                                                                                                                                                            |

## EMPLOYMENT

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- |               |                                                                                                                                                                                                            |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 18, 2015- | □ Professor, Department of Computing and Information Systems, School of Engineering and Technology ( <i>formerly known as School of Science and Technology</i> ), Sunway University, Malaysia. (permanent) |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                |                                                                                                                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aug 19, 2013-<br>May 17, 2015  | □ Associate Professor, Department of Graphic Design and Multimedia, Faculty of Creative Industries, Universiti Tunku Abdul Rahman, Malaysia (permanent)                                                     |
| Aug 15, 2011-<br>July 31, 2013 | □ Associate Professor, Graduate Institute of Network Learning Technology, <i>(Institute of eLearning Technology as of end of 2013 or beginning of 2014)</i> , 網絡學習技術研究, National Central University, Taiwan |
| June 23, 2008-<br>Aug 2011     | □ Associate Professor, Faculty of Information Technology*, Multimedia University (permanent) [ <i>Faculty of Computing and Informatics as of 2010</i> ]                                                     |
| Dec 16, 2005-<br>July 2008     | □ Senior Lecturer, Faculty of Information Technology, Multimedia University (permanent)                                                                                                                     |
| March 31, 1999-<br>2005        | □ Lecturer, Faculty of Information Technology, Multimedia University (permanent)                                                                                                                            |
| 1997-1999                      | □ Assistant Lecturer, Center for Foundation Studies and Continuing Education, Multimedia University (permanent)                                                                                             |
| 1996-1997                      | □ English Language Teacher, Matriculation Centre, Universiti Putra Malaysia                                                                                                                                 |
| 1993-1996                      | □ Yoke Kuan Chinese Secondary School, Sekinchan, Selangor, Malaysia.                                                                                                                                        |

### Language proficiency:

Basic Mandarin (oral only), fluent English and Bahasa Malaysia (oral, reading and writing)

\* In some Western circles, some prefer to call me Rachel

\*\*Note: The sections below are in reverse chronological order

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## EDUCATION

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### PhD (Information Technology) (5<sup>th</sup> July 2005)

|                       |                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------|
| Title of dissertation | Hypermedia interaction design: A cognitive constructivist approach (hybrid unsupervised learning) |
| Institution           | Multimedia University, Malaysia                                                                   |
| Supervisor            | <a href="#">Prof. Yashwant Prasad Singh</a>                                                       |

- Chien-Sing Lee, "Diagnostic, predictive and compositional modelling with data mining in integrated learning environments", *Computers & Education*, Volume 49, Issue 3, 2007, Pages 562-580.
- C. S. Lee and Y. P. Singh, "A neural-linear approach to student modelling for the OntoID authoring tool," *WSEAS Transactions on Computers*, vol. 4, no. 10, 2005, pp. 1399-1408
- Chien-Sing Lee and Yashwant Prasad Singh, "Student modelling using principal component analysis of SOM clusters," *IEEE International Conference on Advanced Learning Technologies*, 2004. Joensuu, Finland, 2004, pp. 480-84,
- Chien-Sing Lee, "Reuse in modeling instructional design", *World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media 2004)*, AACE, Lugano, Switzerland, June 21-26, 2004, pp. 1422-1429.
- Chien-Sing Lee, Yashwant Prasad Singh and Chek-Ling Ngo, "Student modeling using SOM for adaptive hypermedia learning", *International Conference on Multimedia and Information and Communication Technologies*, Badajoz, Spain, December 3-6, 2003, pp. 1814-1818. [based on the adaptive hypermedia learning discipline's traditions]

- Chien-Sing Lee, "Shared cognitive space: An enabling tool for conceptual frameworks", *International Conference on Computers in Education*, IEEE Computer Society Press, Auckland, New Zealand, December 3-6, 2002, pp. 813-817.
- Chien-Sing Lee, "A distance learning framework: Cognitive interfaces and concept spaces", *International Conference on Computers in Education/SchoolNet2001*, Chul-Hwan Lee et. al (eds), Incheon National University of Education, Seoul, Korea, November 12-15, 2001, pp. 1794-1795.
- Chien-Sing Lee and Yashwant Prasad Singh, "A case-based agent framework for adaptive learning," *IEEE International Conference Advanced Learning Technologies*, 2001. IEEE Xplore, 235 -238.
- Chien-Sing Lee and Yashwant Prasad Singh, "Interaction design: A systemic review", *International Conference on Internet and Multimedia Systems and Applications*, B. Furht (ed.), Nevada, USA, November 19-23, 2000, pp. 361-367.

### **M. Education (Computers in Education) (30<sup>th</sup> July 1999) (coursework + dissertation)**

Title of dissertation                      Collaboration in Networked Writing Classrooms: A Case Study on the AT & T Virtual Classroom Contest

Institution                                      University Malaya, Malaysia

### **B. (Hons) Education (Teaching of English as a Second Language) (28<sup>th</sup> Aug 1993) [MoE Scholarship]**

Institution                                      Universiti Putra Malaysia, Malaysia

### **Sijil Pelajaran Malaysia**

Institution                                      Methodist Girls' Secondary School, Melaka

*\*Achieved A2 for Sijil Pelajaran Malaysia's Modern Mathematics, Additional Mathematics, Chemistry and A1 for English, in secondary school. Financial constraints led to a different but rewarding path. Thanks to the leadership of Malaysia, Universiti Putra Malaysia, Universiti Malaya, Multimedia University, Universiti Tunku Abdul Rahman, Prof. Yashwant Prasad Singh (MMU PhD supervisor), the Fulbright Commission, local Fulbright Visiting Scholar mentors (Prof. Malachi Edwin [UPM], Prof. Abtar Kaur [UM], Prof. Hean-Teik Chuah [MMU, UTAR-]), Prof. Hong-Tat Ewe [MMU, UTAR-], Prof. Kinshuk, JICA, IEEE, US Fulbright Visiting Scholar mentors (Prof. Janet L. Kolodner and Prof. Ashok K. Goel [Georgia Tech-], Prof. Rob Koper, Prof. John Hedberg, Prof. Piet Kommers, Prof. Bo Jiang [China NSF], Prof. John H. Hughes, Tan Sri Augustine Ong (MINDS/ITEX), global and local Editorial Committee and reviewers, postgraduate and undergraduate students, the global AI, HCI, IS textbooks, Google, YouTube, ACM and Sunway University.*

## **TEACHING**

### **Sunway University, Malaysia**

\*unless stated, all were as lecturer and tutor for each course

### **Postgraduate (online distance learning)**

2025    MET5033 Data Science Ethics (July-Aug)

2024    MET5033 Data Science Ethics (July-Aug)

### **Undergraduate**

2025    SEG2202 Software Engineering (February-April) [tutor], MAN 3154 Information Systems Management and Strategy (April)

2024    MAN 3154 Information Systems Management and Strategy, SWE Requirements Engineering (April, September)

- 2023 MU4 2422 Community Service (Jan), BIS 2102 Information Systems Analysis and Design, MAN 3154 Information Systems Management and Strategy (April), CSC3024 (tutor), MAN 3154, SWE Requirements Engineering (August)
- 2022 WEB 1201 Web Fundamentals (Jan), BIS 2102 Information Systems Analysis and Design, BIS 3104 Customer Relationship Management, GCM 5001/RSM 5010 Research Methodology (March), CSC3024 Human-computer interaction (August)
- 2021 BIS 2102 Information Systems Analysis and Design, BIS 3104 Customer Relationship Management, MU 2422/2413 Community Service (March), CSC 3024 Human-Computer Interaction (August)
- 2020 CSC 1014 Computer Fundamentals (Jan), BIS 2102 Information Systems Analysis and Design, BIS 3104 Customer Relationship Management (March), CSC 3024 Human-Computer Interaction [HCI] (August)
- 2019 BIS 2102 Information Systems Analysis and Design [ISAD], DIT 1054 Systems Analysis and Design, BIS 3208 Seminar series (March), BIS 2102 Information Systems Analysis and Design, BIS 3106 Project Management (August)
- 2018 BIS 2102 Information Systems Analysis and Design, CSC 3024 Human-Computer Interaction (March-July), BIS 2102 Information Systems Analysis and Design, BIS 3106 Project Management (August)
- 2017 BIS2212 (MU3 2422) Social and Professional Responsibilities (Jan), BIS 2102 Information Systems Analysis and Design, BIS 3215 Knowledge Management [KM] (March), BIS 2102 Information Systems Analysis, BIS 3106 Project Management [PM] (August)
- 2016 BIS 2204 E-commerce, BIS 2102 Information Systems Analysis and Design [ISAD] (March, August)
- 2015 BIS 2204 E-commerce (August)

### **Universiti Tunku Abdul Rahman, Malaysia**

#### *Postgraduate*

Research Methodology (one Web seminar)

#### *Undergraduate*

2013- Design Reflective Practice (graphic design), Design Research (graphic design),  
May 2015 Introduction to Multimedia (early childhood education), Web page design  
(games studies), Multimedia broadcasting (broadcasting)

### **National Central University, Taiwan**

#### *Postgraduate*

2012-2013 Research Seminar, Creativity and Problem-solving, Research Seminar, Knowledge Management

2011 Creativity and Problem-solving

## Multimedia University, Malaysia

### Postgraduate

Masters (Information Technology) (coursework)

### Undergraduate

Decision Sciences and Artificial Intelligence: TDS3281 Decision Support Systems, TKM2191 Introduction to Knowledge Management, TES3111 Artificial Intelligence, TME3071 Multimedia Expert Systems, Multimedia Database, TEP1281 Ethics and Professional Conduct

Security: TSC2111 Computer Auditing, TSC2211 Computer Security

Multimedia Technologies: TMT1011 Multimedia Technology and Applications (includes Macromedia Dreamweaver, Fireworks and Flash), TMS2091 Multimedia Information Systems and Management, TIM2341 Multimedia Courseware Development, Multimedia Database

*Centre for Foundation Studies and Continuing Education*: Web page design, basic C programming

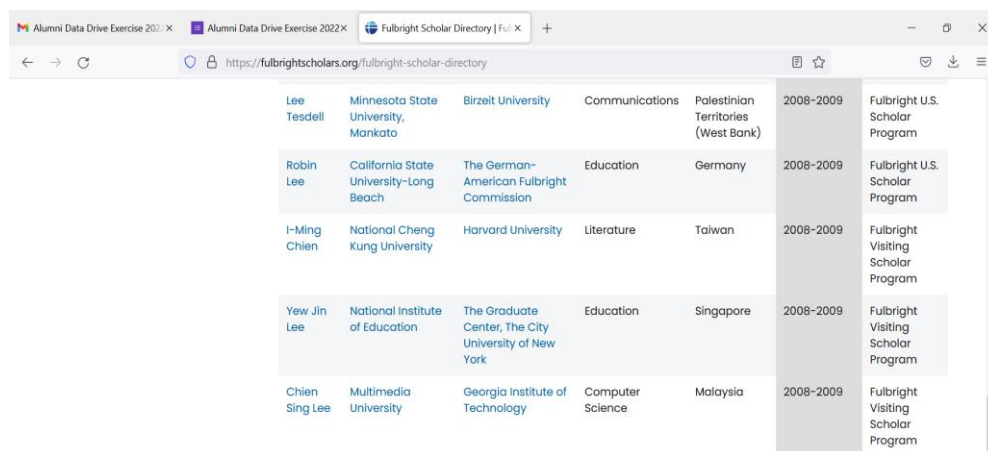
## AWARDS/RECOGNITION

### INTERNATIONAL FELLOWSHIP

2008/2009 **Fulbright Visiting Scholar Fellowship** in Computer Science (while on no pay sabbatical leave from Multimedia University)

Title: A Framework for Model-based Adaptation of Interaction Design for Emerging Interactive Media

- ❑ Awarded April 2008 <https://fulbrightscholars.org/fulbright-scholar-directory>



|                |                                        |                                                      |                  |                                     |           |                                    |
|----------------|----------------------------------------|------------------------------------------------------|------------------|-------------------------------------|-----------|------------------------------------|
| Lee Tescell    | Minnesota State University, Mankato    | Birzeit University                                   | Communications   | Palestinian Territories (West Bank) | 2008-2009 | Fulbright U.S. Scholar Program     |
| Robin Lee      | California State University-Long Beach | The German-American Fulbright Commission             | Education        | Germany                             | 2008-2009 | Fulbright U.S. Scholar Program     |
| I-Ming Chien   | National Cheng Kung University         | Harvard University                                   | Literature       | Taiwan                              | 2008-2009 | Fulbright Visiting Scholar Program |
| Yew Jin Lee    | National Institute of Education        | The Graduate Center, The City University of New York | Education        | Singapore                           | 2008-2009 | Fulbright Visiting Scholar Program |
| Chien Sing Lee | Multimedia University                  | Georgia Institute of Technology                      | Computer Science | Malaysia                            | 2008-2009 | Fulbright Visiting Scholar Program |



Excellence for Outstanding Reviewer Award for *VINE: Journal of Information and Knowledge Management Systems*, Emerald Literati Network 2013

#### NATIONAL AWARD

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1. Malaysian Invention and Design Society's long service appreciation judging award for the *International Invention, Innovation & Technology Exhibition*, May 27, 2022, KLCC.
2. Best 2019-2020 overall volunteer award, IEEE SMC (M), February 27, 2021.
3. 2009 **Ten Outstanding Young Malaysian** recipient (Scientific and technological development category) awarded November 7, 2009 by Junior Chamber International (Malaysia). [http://toym.my/2017/toym-honorees/\[English\]](http://toym.my/2017/toym-honorees/[English]), <http://www.5g.my/new/biztv/index.php?q=node/1527> [Chinese]

#### NATIONAL COMPETITIONS

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1. **Silver medal award** at the International Invention, Innovation and Technology Exhibition (ITEX) for *Student-initiated curriculum planning, visualization and assessment for mobile learning*, May 9, 2008, KLCC, Kuala Lumpur, Malaysia.
2. **Gold medal award** at the International Invention, Innovation and Technology Exhibition or ITEX for *OntoID authoring/knowledge management tool*, May 19, 2007, KLCC, Kuala Lumpur, Malaysia.
3. OntoID authoring/knowledge management tool, **finalist** in the 2006 and 2004 MSC APICTA awards, organized by Multimedia Development Corporation
4. Merlin agent-assisted collaborative concept map, **finalist** in the 2004 MSC APICTA awards, October 13, 2004 organized by Multimedia Development Corporation

#### UNIVERSITY AWARD

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1. Sunway University Rewarding Research Output (2019). INT-RRO-2019-49. Funded: RM 1, 994
2. Sunway University Rewarding Research Output (2018). INT-RRO-2019-49. Funded: RM 2, 000
3. Sunway University Rewarding Research Output (2017). INT-RRO-2017-123 RM 1, 800.00
4. Sunway University Rewarding Research Output (2016). INT-RRO-2016-057. RM 10,000.00 [not utilized]
5. Best academic staff award (IT discipline), Multimedia University (2006)

\*Sunway University discontinued the RRO after 2019

#### PATENT FILING

1. Patent filing: *A system to analyze, design, develop and evaluate engines for instructional and/or educational use* filed with MyIPO on June 30, 2006 (PI20063112).



## POSTGRADUATE SUPERVISION

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### ON-GOING

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#### Sunway University (by coursework + research)

Sarawana Kumar a/l Krishnasamy. PhD in Computing. [main supervisor]. *An implication analysis of generative AI chatbot's facilitation upon social sustainability in future workplace collaboration*. (started July 1, 2023)

#### Sunway University Masters of Data Science (online)

Pei-Lin Khoo (capstone 1, x 2025- y 2025)

Sharini a/p Sivadas Nanda (capstone 1, March 2025- April 2025, capstone 2 x to y)

Hui-Shan Wong (capstone 1 September 8-October 15, 2024, capstone 2 October – December 2024)

### PAST

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#### Sunway University (by coursework + research):

Tercia-Marie Tembo (Masters in Information Systems) [supervisor]: *Using 2D simulation applications to facilitate students to learn STEAM*, (2017-2018). From Zimbabwe, she left for the industry in Malaysia in the second year, and linked her country with the industry.

#### Graduate Institute of Network Learning Technologies, National Central University, Taiwan:

Supervised Tsing-Chun Ho, Ping-Chen Chen [Main supervisor] with Prof. Tak-Wai Chan, during their first year of studies in 2012-2013 under the Taiwan National Science Foundation grant. They graduated in 2014 with Prof. Tak-Wai Chan, and are successful in academia and industry.

#### Multimedia University (by research):

All except Dr. Sylvia Chin presented their work of completion seminar July 2011 in Multimedia University). I was the main supervisor for all the postgraduate students, except Dr. Santoso's PhD study, where I was co-supervisor, and Dr. Sylvia Chin's after I left MMU.

| Graduated | Degree   | PG Name                   | Title                                                                          |
|-----------|----------|---------------------------|--------------------------------------------------------------------------------|
| 2015      | PhD (IT) | Dr. Sylvia Ping-Ping Chin | A KM-e-learning framework for remote communities                               |
| 2015      | PhD (IT) | Dr. Amy Hui-Lan Lim       | Modeling business processes using data mining techniques                       |
| 2012      | PhD (IT) | Dr. Simon Boungh-Yew Lau  | Collaborative tag-based context-aware learning resource recommendation         |
|           | PhD (IT) | Dr. Gaik-Yee Chan         | ADAPSS framework to counter XML attacks in business intelligence applications. |
|           |          | Dr. Heru Agus Santoso     | Mediated schema ontology versioning to support deep Web integration            |

|              |                   |                                            |                                                                                                                                                                                                                                       |
|--------------|-------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | M. IT             | Mr. Mohammed Hossein Kadivar.              | Design, development and evaluation of an ontology-based e-learning data model                                                                                                                                                         |
|              |                   | Ms. Stefanie Xin-Yi Chong                  | Identity and interactivity in computer games to improve creative writing                                                                                                                                                              |
| 2010<br>2010 | PhD (IT)<br>M. IT | Dr. Fang-Fang Chua<br>Ms. Bahar Poursaeed  | Designing an Adaptive Coach in Collaborative Learning Systems using Service-Oriented Architecture<br>Student-initiated curriculum planning, visualization and assessment for ubiquitous environments:<br>Acceptance and Effectiveness |
| 2009         | PhD (IT)          | Dr. Su-Cheng Haw                           | Optimizing Query Processing in XML Native Databases: A Hybrid Approach                                                                                                                                                                |
| 2008         | M. IT             | Ms. Wei-Ching Lim                          | Hypermedia Navigation of Concept Spaces                                                                                                                                                                                               |
| 2007         | PhD (IT)<br>M. IT | Dr. Ching-Chieh Kiu<br>Ms. Hwee-Reei Chong | An algorithmic framework for ontology mapping & merging<br>Reuse in modeling instructional design                                                                                                                                     |
| 2006         | M. IT             | Mr. Chuen-Lee Kuan                         | Intelligent agent-based collaborative concept map learning                                                                                                                                                                            |
| 2004         | M. Sc.            | Ms. Siew-Woei Ling                         | Instructional design: A framework for designing Web-based courses                                                                                                                                                                     |

## GRANTS & COPYRIGHTS

1. **Co-investigator**, Investigating the effectiveness of a Requirements Engineering - Customer Satisfaction - Technology Acceptance Models-MADANI approach to personalization in a super app and its degree of adoption  
**GRTIN-ECR (02)-DADTP-04-024**  
Sunway University Early Research Grant Scheme, PI: Dr. Tan Tee Hean  
Funded RM 14, 700 (July 1, 2024-June 30, 2025)
2. **Principal/sole investigator**  
Sunway University Individual Research Grant Scheme [IRGS] (2021).  
**GRTIN-IRG-21-2021**  
Funded: RM 10, 000.00 [utilized only RM450 for the 2021 ICCE registration fee of an extended paper of a QR Monopoly capstone] (January 2021 – December 2021)
3. **Co-Investigator**, Let's Explore Arduino – A Hands-on Workshop for STEM Educators,  
*2021 Region-10 Workshop on TryEngineering and STEM*  
IEEE YP- IEEE (M)- IEEE CNAG Matching grant  
Funded: USD150 + USD 150 (RM1, 200)
4. **Co-investigator**, *Formation of Enhanced Explainability Deep Learning Model using Regulated Fuzzy-Rough Method for EEG-based Activity Recognition*  
Ministry of Education, Malaysia, Fundamental Research Grant Scheme  
[PI]: Universiti Teknikal Melaka (UTeM), Malaysia  
Funded: RM 98, 821 (November 2020-October 2022-30 April 2023) [utilized in UTeM]

5. **Co-investigator**, China's National Natural Science Foundation Grant **No. 71704160**.  
Assessment of Computational Thinking (CT) in Scratch Fractal Projects: Towards CT-HCI  
Scaffolds for Analogical-fractal Thinking, CSEDU (2019)  
Funded: Euro 455 from Euro 535 (Euro 80 discount from my reviewing CSEDU, HUCAPP papers' incentive)
  
6. **Co-investigator**, *Gamification-Effectiveness in promoting knowledge and emotion*.  
Multimedia University's internal grant **MMU/RMC/RI-MiniFund/FOM/2018/011**  
Funded: RM 5, 440 (January -May 2019) [utilized in MMU]
  
7. **Principal investigator**, *A media-model interaction design case study: Media richness and elaboration theories de(gamified)*  
Sunway University's Internal grant. **INT-2018-SST-DCIS-03**  
Funded: RM30, 000 (February 2018-December 2018) [not utilized]
  
8. **Principal investigator**, *A distributed socio-affective cognitive gamification model based on cognitive load and motivation theories for the enhancement of engagement among the elderly*.  
Ministry of Higher Education's Fundamental Research Grant Scheme.  
Funded: RM73, 200 (August 2016-December 2018) **FRGS/1/2016/ICT04/SYUC/01/1**
  
9. **Principal investigator**, *Bridging the socio-cognitive-HCI frameworks: A gamified media-model entrepreneurial case study*.  
Sunway University's Internal grant. **INT-FST-CIS-2016-01**  
Funded: RM26, 000 (February 2016-December 2016) [not utilized]
  
9. **Principal investigator**, *Developing creative thinking and affordances in Engineering Education using Student-designed Ontological Folksonomy: A Framework*  
Universiti Tunku Abdul Rahman's Research Fund **IPSR/RMC/UTARRF/2014-C1/L04**  
Funded: RM26, 000 (July 1, 2014-June 2015) [not utilized]
  
10. **Co-investigator**, *A Study of Self-Directed Learning Readiness of UTAR Animation Undergraduates*.  
Universiti Tunku Abdul Rahman's Research Fund  
Funded: RM2, 680 (July 1, 2014-June 2015)
  
11. **Co-investigator**, *A Fuzzy Association Rule-based Intrusion Detection and Prevention System for Web Service Applications [codes are copyrighted]*  
Ministry of Higher Education's Prototype Research Grant Scheme, Malaysia  
Funded: RM62, 600 (September 1, 2013-August 31, 2015)
  
12. **Member**, AIEF Resilient Children & Competent Teachers: A Refugee Community Partnership.  
2012 Fulbright Alumni Engagement Innovation Fund (AEIF),  
US Department of State  
Funded: USD25, 000 (August 2012-July 2013)
  
13. **Co-investigator**, *Design and development of a ubiquitous application for personalized learning enhanced using collaborative tags for social media-based recommendation*  
Universiti Tunku Abdul Rahman's Research Fund  
Funded: RM26, 000 (February 1, 2012-December 31, 2012)

14. **Principal investigator**, *Scaffolding creative thinking through question-posing and intelligent data visualization* (Mathematics Grades 1-3)  
Taiwan's National Science Foundation  
Funded: TWD1, 986, 000/RM299, 028 (December 1, 2011-August 16, 2013)
15. **Co-investigator**, *Multi-dimensional audio-visual features in search and mining towards video concept detection*  
Multimedia University's Graduate Research Assistant Scheme  
Funded: RM 43, 200 (July 15, 2010-July 15, 2012)
16. **Co-investigator**, *Scaffolding intrinsic motivation to primary students in order to excel in academic and personality growth*  
UNESCO Participation Programme Biennium 2011-2012 Educational Program  
Funded: RM 30, 000
17. **Co-investigator**, *Conceptual Modeling for XML Databases*  
Multimedia University's Graduate Research Assistant Scheme  
Funded: RM43, 200 (November 1, 2009–October 30, 2011)  
*[sw/codes are copyrighted]*
18. **Advisor**, *Poverty eradication among urban citizen through online and offline financial literacy educational program and common discussion forum platform between financial institutions and urban youth*  
UNESCO Participation Programme Biennium 2008-2009 Educational Program  
Funded: RM 80, 750 (September 1, 2009 – December 31, 2009).
19. **Co-investigator**, *Query Processing in Native XML Databases: A Hybrid Approach*  
Ministry of Science, Technology and Innovation's e-Science fund  
Funded: RM 30, 000 (October 1, 2007-March 31, 2009)  
*[sw/codes are copyrighted]*
20. **Principal investigator**, *Context-aware and dynamically evaluative authoring/knowledge management tool in service-oriented learning environments*  
Ministry of Science, Technology and Innovation's e-Science fund  
Funded: RM 62, 000 (September 1, 2007- February 28, 2009)  
Graduate Assistant: Rifat M. Halim  
*[sw/codes are copyrighted]*
21. **Co-investigator**, *Automated Ontology Mapping and Merging for Learning Object Reusability*  
Ministry of Science, Technology and Innovation's e-Science fund  
Funded: RM 81, 285 (December 1, 2006-June, 30 2008)  
*[sw/codes are copyrighted]*
22. **Principal investigator**, *3-D hypermedia structuring and navigation for e-learning purposes*  
Multimedia University's Research, Development and Innovation (RDI) grant scheme  
Funded: RM 25, 192 (January 1, 2005-December 31, 2005)  
Graduate Assistant: Wei-Ching Lim  
*[sw/codes are copyrighted]*

23. **Principal investigator, 3-D navigation of concept spaces for e-learning purposes**  
Multimedia University's Research, Development and Innovation (RDI) grant scheme  
Funded: RM 21, 296 (July 1, 2004-June 31, 2005)  
Graduate Assistant: Wei-Ching Lim  
*[sw/codes are copyrighted]*
24. **Principal investigator, OntoID authoring/knowledge management tool**  
Multimedia Development Corporation's Multimedia Super Corridor Research and Development Grant Scheme (MGS) grant scheme  
Funded: RM 1.8 million (January 1, 2004-March 31, 2006)  
Graduate Assistants: Hwee-Reei Chong, Norhana Abdul Maleh  
*[sw/codes are copyrighted]*
25. **Principal investigator, A Neuro-Fuzzy-CBR Adaptive Learning System**  
Ministry of Science, Technology and Innovation's Intensive Research Program Areas (IRPA) grant scheme  
Funded: RM 80, 345 (January 1, 2003-December 31, 2005)  
Graduate Assistant: Calvin Chuen-Lee Kuan  
*[sw/codes are copyrighted]*

## PUBLICATIONS

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### JOURNALS (SCI/SSCI)

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1. **C. S. Lee** and L. Y. Yew, "Enhancing customer satisfaction through open innovation communities: A comparison of knowledge management approaches," *Knowledge Management and e-Learning*, vol. 14, no. 1, 2022, pp. 81-102. **[ESCI] Q1** in Education | **Q2** in Management of Technology and Innovation [Fulbright Visiting Scholar Fellowship]
2. **C. S. Lee** and K. D. Wong, "Deriving a gamified learning-design framework towards sustainable community engagement and mashable innovations in Smart Cities: Preliminary findings," *International Journal of Knowledge and Systems Science (IJKSS)*, vol. 9, no. 1, 2018, pp. 1-22. **[ESCI] Q2**
3. G. Y. Chan, F. F. Chua and **C. S. Lee**, "Intrusion Detection and Prevention of Web Service Attacks for Software as a Service: Fuzzy Association Rules vs. Fuzzy Associative Patterns," *Journal of Intelligent and Fuzzy Systems*, vol. 31, 2016, pp. 749-764 **[SCI] Q1**
4. S. P. P. Chin, E. Tsui, and **C. S. Lee**, "Enhancing learning effectiveness by adopting a knowledge-based usability guideline," *VINE: Journal of Information and Knowledge Management Systems*, vol. 46, no. 1, 2016, pp. 123-152. **[ESCI] Q2**
5. G. Y. Chan, **C. S. Lee** and S. H. Heng, "Defending Against XML-related Attacks in E-commerce Applications with Predictive Fuzzy Associative Rules," *Applied Soft Computing*, vol. 24, 2014, pp. 142-157 **[SCI]. Q1**
6. G. Y. Chan, **C. S. Lee** and S. H. Heng, "Discovering Patterns and Increasing Sensitivity Analysis of XML-related Attacks", *Journal of Networks and Computer Applications*, vol. 36, 2013, pp. 829-842 **[SCI]. Q1**
7. S. B. Y. Lau, **C. S. Lee** and Y. P. Singh, "A Folksonomy-based Lightweight Resource Annotation Metadata Schema for Personalized Hypermedia Learning Resource Delivery", *Interactive Learning Environments*, vol. 23, no. 1, 2012, pp. 79-105 **[SSCI] Q1**

8. G. Y. Chan, **C. S. Lee** and S. H. Heng, "Policy-enhanced ANFIS model to counter SOAP-related attacks", *Knowledge-based Systems*, vol. 5, 2012, pp. 64–76. **[SCI] Q1**
9. A. H. L. Lim, **C. S. Lee**, and M. Raman, "Hybrid genetic algorithm and association rules for mining workflow best practices," *Expert Systems with Applications*, vol. 39, no. 12, 2012 pp. 10544-10551 **[SCI] Q1**
10. S. X. Y. Chong and **C. S. Lee**, "Storyworld: Developing a framework to improve creative writing", *Educational Technology Research & Development*, vol. 60, 2012. pp. 639–657 [Special issue on personalized learning] **[SSCI] Q1** [Multimedia University final year project]
11. **C. S. Lee**, "Scaffolding Systemic and Creative Thinking: A Hybrid Learning Sciences-Decision Support Approach," *e-Journal of Business Education and Scholarship in Teaching*, vol. 5, no. 1, 2011, pp. 47-58.
12. S. C. Haw and **C. S. Lee**, "Data storage practices and query processing in XML databases: A survey", *Knowledge-based Systems*, vol. 24, no. 8, 2011, pp. 1317-1340. **[SCI] Q1**
13. **C. S. Lee** and J. L. Kolodner, "Scaffolding students' development of creative design skills: A curriculum reference model", *Educational Technology & Society*, vol. 14, no. 1, 2011, pp. 3-15. **[SSCI]. Q1**
14. A. H. L. Lim and **C. S. Lee**, "Processing online analytics with classification and association rule mining", *Knowledge-based Systems*, vol. 23, no. 3, 2010, pp. 248-255. **[SCI]. Q1**
15. S. B. Y. Lau, and C. S. Lee, "Contextualizing e-learning services and content for computing course in higher education based on learning style and competency level," *International Journal of Learning Technology*, vol. 5, no. 3, 2010.
16. S. C. Haw, **C. S. Lee** and N. Mustapha, "Bridging XML and relational databases: Mapping choices and performance evaluation", *IETE Technical Review*, vol. 27, no. 4, 2010 pp. 308-317. **[SCI]. Q3**
17. S. C. Haw and **C. S. Lee**, "Node labelling schemes in XML query optimization: A survey and trends", *IETE Technical Review*, vol. 26, no. 2, 2009, pp. 89-101 **[SCI]. Q3**
18. S. C. Haw and **C. S. Lee**, "Efficient pre-processes for fast storage and query retrieval in native XML database," *IETE Technical Review*, vol. 26, no. 1, 2009, pp. 26-38. **[SCI]. Q3**
19. S. C. Haw and **C. S. Lee**, "Extending path summary and region encoding for efficient structural query processing in native XML databases," *Journal of Systems and Software*, Elsevier, vol. 82, no. 6, 2009, pp. 1025-1035. **[SCI]. Q1**
20. F. F. Chua and **C. S. Lee**, "Collaborative learning using service-oriented architecture-A framework design," *Knowledge-based Systems*, Special issue on Artificial Intelligence in Blended Learning, vol. 22, no. 4, 2009, pp. 271-274. **[SCI]. Q1**
21. S. C. Haw and **C. S. Lee**, "Twig X-Guide: An efficient twig pattern matching system extending DataGuide indexing and region encoding labeling", *Journal of Information Science and Engineering*, Academia Sinica, Taiwan, vol. 25, no. 2, 2009, pp. 603-617 **[SCI]. Q3**
22. **C. S. Lee**, "Diagnostic, predictive and compositional modeling with data mining in integrated learning environments," *Computers & Education*, Elsevier, vol. 49, no. 3, 2007, pp. 562-580. **[SSCI/SCIE] Q1**
23. C. C. Kiu and **C. S. Lee**, "Ontology mapping and merging through OntoDNA for learning object reusability", *Educational Technology & Society*, vol. 9, no. 3, 2006, pp. 27-42 **[SSCI] Q1**

## SCOPUS-INDEXED JOURNALS

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24. A. Z. Ahmad Yusri and **C. S. Lee**, "Investigating the perceptions of Malaysians, roles of Innovation Helixes and CRM models in Malaysia's COVID-19 Health and Economic Measures, comparative lessons learnt", *International Journal of Business Information Systems*, 2023, **Q2** Information Systems and Management **DOI:** 10.1504/IJBIS.2023.10055826
25. C. W. Sow, Y. H. Choo, A. K. Muda and **C. S. Lee**, "A Survey of Explainable Artificial Intelligence in Bio-signals Analysis", special issue, *Software Engineering in Emerging Technologies, Recent Advances in Computer Science and Communications*, vol. 16, no. 3, 2023, pp. 1-10. **[SCI/E] Q3 [UTeM's FRGS]**
26. **C. S. Lee**, N. Karjanto, D. E. Drew, A. M. Halim, "Perceptions towards sustainable transportation and recommendations: A survey case study in Jakarta, Indonesia," *International Journal of Computer Information Systems and Industrial Management Applications*, vol. 13, 2021, pp. 209-221. **Q4**
27. C. C. Kiu and **C. S. Lee**, "E-Commerce market trends: a case study in leveraging Web2.0 technologies to gain and improve competitive advantage," *International Journal of Business Information Systems*, vol. 25, no. 3, 2017, pp.373 – 392. **Q2**
28. S. P. P. Chin and **C. S. Lee**, "Innovative hint-scaffolded KM e-learning framework to increase meaningful learning and multi-dimensional thinking," *Design and Technology Education: An International Journal*, vol. 19, no. 3, 2014, pp. 43-70. **[SSCI] Q1**
29. S. B. Y. Lau and **C. S. Lee**, ""Methodology and System Design for Implementing Context-Adaptive Service-Oriented Web-based Learning," *International Journal of Mobile Learning and Organization (IJMLO)*, Inderscience, vol. 3, no. 2, 2009, pp. 164-183. **[SCI] Q2**
30. C. C. Kiu and **C. S. Lee**, "Interoperating ontologies of organizational memory through hybrid unsupervised data mining," *VINE: Journal of Information and Knowledge Management Systems*, vol. 39, no. 4, 2009, pp. 353-375. **[ESCI] Q2**
31. S. C. Haw and **C. S. Lee**, "Structural query optimization in native XML databases: A hybrid approach," *Journal of Applied Sciences*, vol. 7, no. 20, 2008, pp. 2934-2946. **[SCI] Q2**
32. A.H. L. Lim and **C. S. Lee**, "Integrated Model-Driven Business Evaluation Methodology for Strategic Planning," *International Journal on Business Information System*, vol. 3, no. 4, 2008, pp. 333-355. **[SSCI] Q2**
33. **C. S. Lee**, "Improving Learning Design practices through Strategic Integrated Evaluation," *International Journal of Continuing Engineering Education and Life-long Learning*, vol. 18, no. 1, 2008, pp. 139-153. **[SSCI] Q2**
34. S. C. Haw and **C. S. Lee**, "TwigX-Guide: Twig Query Pattern Matching for XML Trees", *American Journal of Applied Sciences*, vol. 5, no. 9, 2008, pp. 1212-1218. **[SCI] Q2**
35. S. C. Haw and **C. S. Lee**, "TwigINLAB: A Decomposition-Matching-Merging Approach to Improving XML Query Processing", *American Journal of Applied Sciences*, vol. 5, no. 9, 2008, pp. 1199-1205. **[SCI] Q3**
36. N. Ab. Maleh, and **C. S. Lee**, "Design considerations in mobile educational games," *Journal of E-Learning and Knowledge Society*.
37. S. C. Haw and **C. S. Lee**, "INLAB: Improving XML Path Query Optimization," *Journal of Applied Computer Science. Poland*, vol. 15, 2007, pp. 47-61.

38. **C. S. Lee** and A. H. L. Lim, "Layered and weighted methodology to workflow assessment," *International Journal of Electronic Business*, vol. 5, no. 4, 2007, pp. 380-400. **[SSCI] Q3**
39. S. C. Haw and **C. S. Lee**, "Stack-based pattern matching algorithm for XML Query Processing," *Journal of Digital Information Management*, vol. 5, no. 3, 2007, pp. 167-175. **[SCI] Q4**
40. F. F. Chua and **C. S. Lee**, "The effect of learning goals and modeling on virtual collaborations: A case study on agent-assisted collaborative concept map", *International Journal of Web Based Communities*, vol. 3, no. 2, 2007, pp. 229-248. **[SSCI] Q3**
41. **C. S. Lee**, and C. C. Kiu, "Concept-based hybrid graphical-neural approach for ontological interoperability," *WSEAS Transactions on Information Science and Applications*, vol. 2, no. 6, 2005, pp. 761-770. **[SCOPUS] Q4 [e-Science]**
42. **C. S. Lee**, and C. L. Kuan, "Intelligent Scaffolds for Collaborative Concept Mapping," *WSEAS Transactions on Information Science and Applications*, vol. 2, no. 8, 2005, pp. 1157-1166. **[SCOPUS] Q4 [IRPA]**
43. C. S. Lee and Y. P. Singh, "A neural-linear approach to student modeling for the OntoID authoring tool," *WSEAS Transactions on Computers*, vol. 4, no. 10, 2005, pp. 1399-1408 **[SCOPUS] Q3 in 2014, EBSCO**
44. **C. S. Lee**, "Problem-solving in a constructivist environment", *Educational Technology and Society*, vol. 2, no. 4, 1999, pp. 137- 149. **[SSCI] Q1**

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## INTERNATIONAL CONFERENCE PAPERS

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### CPCI-S/ISTP Conference Papers

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1. W. J. Phang and **C. S. Lee**, "Leveraging Gamification in E-Commerce for Climate Change: A Persuasive TAM Approach," *International Conference on Computational Science and Applications, Workshops*, Osvaldo Gervasi et. al. (Eds.), LNCS vol. 15896, pp. 1-17, Springer Nature Switzerland, June 30-July 3, 2025, Turkiye. [Sunway University]
2. C. S. Lee, "Simplifying strategic frugal innovation and sustainability formulation and evaluation: An SDG-Maslowian approach: A review and proposed framework," *International Conference on Computational Science and Applications, Workshops*, Osvaldo Gervasi et. al. (Eds.), Part X, LNCS vol. 15895, pp.1-18, Springer Nature Switzerland, June 30-July 3, 2025, Turkiye. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
3. **C. S. Lee** and A. Z. Ding, "Improving tertiary students' mental health via gamified extensible e-commerce-well-being minigames (eco)systems: A preliminary case study," *International Conference on Digitalization and Management Innovation*, July 7-9, 2025, Hong Kong. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
4. **C. S. Lee**, and L. S. L. Yeap, "Testing anchors, user experience and usability in Immersive Augmented Reality Kindergarten Games," *International Conference on Computational Science and Applications, Workshop 67*, Osvaldo Gervasi et. al. (Eds.) LNCS vol. 14825, Springer Nature, Hanoi, Vietnam, July 1-4, 2024, pp 154-167. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
5. **C. S. Lee**, "An exploration towards sustainable metaverse systems for e-learning by student designers: A meta-analysis", *International Conference on Computational Science and Applications, Workshop 8*, Osvaldo



Gervasi et. al. (Eds.) LNCS vol. 14111, Part VIII, Springer Nature, Athens, Greece, July 3-6, 2023, pp. 511–530. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]

6. **C. S. Lee** and K. D. Wong, "Towards self-adaptive/reflective co-managed open generativity to augment absorptive-multiplicative-relational capabilities/capacities," IEEE International Conference on Industrial Engineering and Engineering Management, Kuala Lumpur, Malaysia, December 8-9, 2022, pp. 52-56. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
7. H. A. Santoso, S. C. Haw, and **C. S. Lee**, "Mediating Schema Ontology for Linked Open Data Cloud Integration Using Bottom-up Schema Mapping," International Conference on Computer, Information Technology and Intelligent Computing, Kuala Lumpur, Malaysia, July 25-27, 2022, pp. 369-391. [Indonesian grant]
8. C. Y. Lim, and **C. S. Lee**, "Game-based e-tourism-e-health using SQL," International Conference on Computational Science and Applications, Smart Tourism workshop, In O. Gervasi, B. Murgante, S. Misra, A. M. A. C. Rocha, C. Garau, (Eds.), LNCS vol. 13381, Part V, Chapter 17, July 4-7, 2022, Springer Nature, Cham, pp. 222-235. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
9. **C. S. Lee**, P. Y. Tan and H. W. Wong, "Design and development of Augmented and Virtual Reality Hand and Upper Limb Rehabilitation Prototypes," International Conference on Intelligent Software Methodologies, Tools, and Techniques, Kitakyushu, Japan, September 22-24, 2020, (published in Frontiers in Artificial Intelligence and Applications, IOS Publishing), pp. 234-245.
10. **C. S. Lee**, K. D. Wong, "Investigating Innovative Practices during COVID-19 Movement Control Order: Lessons Learnt from 4 examples," International Symposium on Software Engineering Processes and Applications, workshop of the International Conference on Computational Science and Applications, O. Gervasi et al. (Eds.), LNCS vol. 12254, Part VI, Chapter 64, Springer Nature, University of Cagliari, Italy, July 1-4, 2020, pp. 1–13. [Fulbright Visiting Scholar Fellowship]
11. **C. S. Lee**, L. Y. Yew, P. L. Chew, Y. K. Chee, Y. T. Hiew, J.P. Wong, "Information Science-Knowledge Management-HCI-Project Management-CRM Models-Software Processes: Implications to e-commerce open design and co-design," International Symposium on Software Engineering Processes and Applications, workshop of the International Conference on Computational Science and Applications, LNCS vol. 12254, Part VI, Chapter 57, O. Gervasi et al. (Eds.), Springer Nature, University of Cagliari, Italy, July 1-4, 2020, pp. 1-15. [Fulbright Visiting Scholar Fellowship]
12. **C. S. Lee**, "In search of an optimizer matrix for affordance design," IEEE International Conference on Industrial Engineering and Engineering Management, Macau, December 15–18, 2019, pp. 669-673. [Fulbright Visiting Scholar Fellowship]
13. **C. S. Lee**, A. Tiong, N. W. L. Tang, K. H. Yap, "Data-driven "market basket"-pricing and personalized health information services using Salesforce's model-driven systems service design," IEEE International Conference on Industrial Engineering and Engineering Management, Macau, December 15–18, 2019, pp. 576-580. [Mr. Tiong/Salesforce]
14. S. T. Yong, P. Gates, A. Chan, **C. S. Lee**, R. Matthews and K. M. Tiong, "Exploring the feasibility of computer games in mathematics education," IEEE International Symposium on Haptic, Audio and Visual Environments and Games, Sunway University, Malaysia, October 3-4, 2019, pp. 1-6. [University of Nottingham grant]
15. T. M. T. Tembo and **C. S. Lee**, "Effectiveness of Debugging-Design in 2D Simulations to Facilitate STEAM Learning," Workshop on Playfulness in teaching-learning STEAM, International Conference on Computers in Education, Manila, Philippines, November 26-30, 2018, [Sunway University Postgraduate grant]

16. **C. S. Lee** and K. D. Wong, "Design - computational thinking, transfer and flavors of reuse: Scaffolds to Information and Data Science for sustainable systems in Smart Cities," IEEE International Conference on Information Reuse and Integration, IEEE Computer Society, Salt Lake City, Utah, July 7-9, 2018, pp. 225-228. [Fulbright Visiting Scholar Fellowship]
17. **C. S. Lee** and K. D. Wong, "Design thinking and semiotics to increase socio-cognitive-affective engagement: an inclusive design human factors case study," IEEE International Conference on Industrial Engineering and Engineering Management, Singapore, December 10-13, 2017, pp. 264 - 268. [Fulbright Visiting Scholar Fellowship]
18. **C. S. Lee** and K. D. Wong, "Developing community-based engagement in smart cities: A design-computational thinking approach," IEEE International Conference on Industrial Engineering and Engineering Management, Singapore, December 10-13, 2017, pp. 832 - 836. [Sunway University Rewarding Research Output grant, FRGS]
19. Y. J. Chin, W. N. Lim, and **C. S. Lee**, "Mobile game for the elderly: bundled bingo game," IEEE TENCON, November 5-8, 2017, Penang, Malaysia. [FRGS]
20. W. Y. Foo, W. N. Lim and **C. S. Lee**, "Drawing guessing game for the elderly," IEEE TENCON, Penang, Malaysia. November 5-8, 2017, [FRGS]
21. **C. S. Lee**, S. W. L. Chan, S. Y. Guy, "Socially-enhanced variants of mobile bingo game: Towards personalized cognitive and social engagement among seniors," IEEE International Conference on Soft Computing, Intelligent System and Information Technology Bali, Indonesia, September 26-29, 2017 [FRGS]
22. **C. S. Lee**, J. J. Foo, V. Jeya Sangar, P. Y. Chan, W. K. Hor, E. K. Chan, "A Knowledge Management -extended Gamified Customer Relationship Management System," IEEE International Conference on Soft Computing, Intelligent System and Information Technology, Bali, Indonesia, September 26-29, 2017.
23. **C. S. Lee** and S. H. S. Low, "Developing interest to share and craft based on the Technology Acceptance Model," International Conference on Computational Thinking Education, Hong Kong, July 13-15, 2017.
24. **C. S. Lee**, J. W. Wong, P. Y. Ee, "Gamified Mathematics practice: Designing with e-commerce and computational concepts," International Conference on Computational Thinking Education, Hong Kong, July 13-15, 2017.
25. **C. S. Lee** and K. D. Wong, "An entrepreneurial narrative media-model framework for knowledge building and open co-design," SAI Computing, London, UK, July 18-20, 2017, pp. 1169 - 1175. [IEEE-Springer Nature Research] [Sunway University annual]
26. C. K. Wong and **C. S. Lee**, "A better understanding of gamification to improve digital lifestyles," IEEE International Conference on Virtual Systems and Multimedia, Sunway University, Kuala Lumpur, Malaysia October 17-21, 2016. [Sunway internal grant]
27. **C. S. Lee**, "Fostering social and entrepreneurial innovation in learning through design: Where are we now?" Pre-workshop on Computer-Based Learning Environments for Deep Learning in Inquiry and Problem-Solving Contexts, in conjunction with International Conference of the Learning Sciences, Singapore, June 24-26, 2016. [Sunway University publication reward]
28. **C. S. Lee** and K. D. Wong, "E-commerce Web design engineering: Towards discovery of innovational opportunities," IEEE International Conference on Advanced Learning Technologies, Austin, Texas, July 25-28, 2016, pp. 404 - 406. [Sunway University annual]

29. **C. S. Lee**, K. D. Wong and Simon B. Y. Lau, "Scaffolds and design factors to increase creative outcomes in teaching Software Design and Testing," IEEE International Conference on Industrial Engineering and Engineering Management, Singapore, December 9-12, 2015, pp. 451 – 454.
30. G. Y. Chan, **C. S. Lee** and S. H. Heng, "Efficiency of Fuzzy Association Rules vs. Fuzzy Associative Patterns in Defending against Web Service Attacks", International Conference on Fuzzy Systems and Knowledge Discovery (FSKD 2015), held jointly with the International Conference on Natural Computation (ICNC 2015), Zhangjiajie, China, August 15-17, 2015.
31. S. B. Y. Lau and **C. S. Lee**, "Social Media Resource Recommendation with k-Nearest Neighbor-based Collaborative Tagging and Opinion Mining", International Conference on Computer Science and Computational Mathematics (ICCSCM), Langkawi, Malaysia, 7-8 May, 2015.
32. **C. S. Lee** and K. D. Wong, "Developing transfer of learning through reflective framing and design thinking: An Engineering-Games Design approach," IEEE International Conference on Industrial and Management Engineering, Kuala Lumpur, December 9-12, 2014, pp. 496-500. [Universiti Tunku Abdul Rahman annual]
33. Kiu, C. C. and **C. S. Lee**, "Readiness of Malaysian E-Commerce Companies to Harness Web2.0's Competitive Advantage: An Engineering Management Approach," IEEE International Conference on Industrial and Management Engineering, Kuala Lumpur, December 9-12, 2014, pp.1046-1050.
34. **C. S. Lee** and K. D. Wong, "Designing framing and reflective scaffolds to develop design thinking and transfer of learning: Theorizing for pre-school," IEEE International Conference on Advanced Learning Technologies, Methods and Tools for Fostering Creative Learning track, Athens, Greece, July 7-10, 2014, pp. 80-81 (registration fee partly paid for by second author)
35. G. Y. Chan, **C. S. Lee** and S. H. Heng, "PeANFIS-FARM Framework in Defending against Web Service Attacks," International Workshop on Cloud Computing and Information Security (CCIS 2013), Shanghai, China, 2013, pp. 108-112 (**best paper award**)
36. **C. S. Lee** and K. D. Wong, "The Role of Framing in Scaffolding Near and Far Transfer: A Case Study", IEEE International Conference on Advanced Learning Technologies, Beijing, China, July 15-18, 2013, pp. 401-402.
37. S. B. Y. Lau and **C. S. Lee**, "Enhancing Collaborative Filtering of Learning Resources with Semantically-Enhanced Social Tags", IEEE International Conference on Advanced Learning Technologies, Rome, Italy, July 4-6, 2012, pp. 281-285.
38. S. W. Ling, **C. S. Lee**, K. M. Chuah and A. C. Koo, "Discovering the Type of Motivation and Corresponding Regulatory Processes That Drives Asynchronous Online Discussion Activities," International Conference on Management and Education Innovation. International Economics Development Research Center (IEDRC). May 5-6, 2012, Kuala Lumpur, Malaysia.
39. S. M. Chin, S. C. Haw and **C. S. Lee**, "X-CM: Extending entity-relationship conceptual modeling for XML databases", IEEE International Conference on Software Technology and Engineering Kuala Lumpur, Malaysia, August 12-14, 2011, pp. 59-63. [MMU grant]
40. H. A. Santoso, S. C. Haw and **C. S. Lee**, "Software Reuse: MDA-based ontology development to support data access over legacy application", International Conference on Software Engineering and Computer Systems (Part 3), Springer-Verlag, Universiti Malaysia Pahang, Malaysia, June 27-29, 2011, pp. 130-142.
41. F. F. Chua and **C. S. Lee**, "A Framework for Intelligent Tutoring in Collaborative Learning Systems using Service-oriented Architecture", International Conference on Computational Science and Its Applications (Part 5), Cantander, Spain, Springer-Verlag, June 20-23, 2011, pp. 471-484.

42. R. J. Ssemmanda, **C. S. Lee** and L. K. Soon, "Web-mining university-based search portal", International Conference on Telecommunication Technology and Applications, Sydney, Australia, May 2-4, 2011, pp. 150-155.
43. M. C. Leow, **C. S. Lee** and L. Y. K. Wang, "The need for a new game in learning", International Conference on Computer Games, Multimedia & Allied Technology, Singapore Management University, Singapore, April 6-7, 2010, pp. 74-80.
44. H. A. Santoso, S. C. Haw and **C. S. Lee**, "Change detection in ontology versioning: A bottom-up approach by incorporating ontology metadata vocabulary", Communications in Computer and Information Science, Springer, Jeju Island, Korea, December 13-15, 2010, 118, pp. 37-46.
45. **C. S. Lee** and G. D. Blank, "Reference curricular structures and pedagogical flexibility in encouraging reflective practice in technology-enhanced learning", IEEE International Conference on Advanced Learning Technologies, Riga, Latvia, July 14-18, 2009, pp. 546-550. [funded by Fulbright Visiting Scholar Fellowship, written and presented in Lehigh University to the teachers and Faculty, while on no pay leave from MMU]
46. S. C. Haw and **C. S. Lee**, "INLAB2: Fast native XML storage and query retrieval," IEEE International Conference on Intelligent Systems and Knowledge Engineering (ISKE), Xiamen, China, November 17-18, 2008, pp. 44-49.
47. R. M. Halim and **C. S. Lee**, "A conceptual framework for competency-based Web intelligent learning," International Symposium on Information Technology (ITSIM), IEEE Computer Society Press, Kuala Lumpur, Malaysia, August 26-29, 2008, Vol. 2, pp. 1-7. [MOSTI's e-Science fund]
48. F. F. Chua and **C. S. Lee**, "Designing an intelligent coach for a collaborative concept-mapping learning environment," International Workshop on Blended Learning, LNCS 5328, Jinhua, China, August 20-22, 2008, pp. 74-82 (collocated with ICWL2008).
49. S. B. Y. Lau, C. Pham-Nguyen, **C. S. Lee**, S. Garlatti, "Semantic web service adaptation model for a pervasive learning scenario," IEEE Conference on Innovative Technologies in Intelligent Systems and Industrial Applications, IEEE Computer Society Press, July 12-13, 2008, pp. 98-103. [French grant]
50. **C. S. Lee**, "Designing engaging interaction with contextual patterns: A case study on an educational game," Edutainment 2008, LNCS 5093, Nanjing, China, June 25-27, 2008, pp. 361-370.
51. C. C. Kiu and **C. S. Lee**, "Ontological knowledge management through hybrid unsupervised clustering techniques", 10<sup>th</sup> Asia-Pacific Web Conference, LNCS, Shenyang, China, April 26-28, 2008, pp. 499-510. [MOSTI's e-Science grant]
52. S. C. Haw and **C. S. Lee**, "Evolution of structural path indexing techniques in XML databases: A survey and open discussion," IEEE International Conference on Advanced Communication Technology, Phoenix Park, Korea, February 17-20, 2008, pp. 2054-2059. [MOSTI's e-Science grant]
53. C.C. Kiu and **C. S. Lee**, "Learning objects reusability and retrieval through ontological sharing: A hybrid unsupervised data mining approach," IEEE International Conference on Advanced Learning Technologies (ICALT 2007), IEEE Computer Society Press, Niigata, Japan, July 18-20, 2007, pp. 548-550. [MOSTI's e-Science grant]
54. H. R. Chong and **C. S. Lee**, "Context-aware reuse in modeling instructional design and assembly of learning objects", IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing, IEEE Context-aware and ubiquitous learning workshop, IEEE Computer Society Press, Taichung, Taiwan, June 2006, 2, pp. 110-117. [MDeC's MGS grant]

55. W. C. Lim and **C. S. Lee**, "Knowledge discovery through composited visualization, navigation and retrieval", *Discovery Science*, LNAI Vol. 3735 (Ed. Achim Hoffmann, Hiroshi Motoda, and Tobias Scheffer), Springer-Verlag, Singapore, October 8-11, 2005, pp. 376-378. [MMU's RDI grant]
56. C. C. Kiu and **C. S. Lee**, "Discovering ontological semantics for reuse and sharing of learning objects in a contextual learning environment", *IEEE International Conference on Advanced Learning Technologies (ICALT 2005)*, Kaohsiung, Taiwan, July 5-8, 2005, pp. 368-370. [MOSTI's e-Science grant]
57. **C. S. Lee** and Y. P. Singh, "Student modeling using principal component analysis of SOM clusters," *IEEE International Conference on Advanced Learning Technologies (ICALT 2004)*, IEEE Computer Society Press, Joensuu, Finland, August 30-September 1, 2004, pp. 480-484. [MOSTI's IRPA grant]
58. **C. S. Lee**, "Reuse in modeling instructional design", *World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media 2004)*, AACE, Lugano, Switzerland, June 21-26, 2004, pp. 1422-1429.
59. C. L. Kuan, **C. S. Lee** and C. K. Ho. "Agent-assisted collaborative concept map", *IEEE International Conference on Advanced Learning Technologies*, Athens, Greece, July 9-11, 2003, pp. 282-283. [MOSTI's IRPA grant]
60. **C. S. Lee** and Y. P. Singh, "A case-based agent framework for adaptive learning", *IEEE International Conference on Advanced Learning Technologies*, T. Okamoto, R. Hartley, Kinshuk and J. P. Klus (eds.), IEEE Computer Society Press, Madison, Wisconsin, USA, August 6-8, 2001, pp. 235-238.
61. S.W. Ling, C. W. Khong and **C. S. Lee**, "An evolving instructional design framework for designing Web-based courses: A case study in Malaysia", *IEEE International Conference on Advanced Learning Technologies*, August 6-8, 2001, Madison, WI, pp. 443-444.

\*The Fulbright Visiting Scholar Fellowship grant was disbursed in 2009, but the remaining amount was not used until the stated years.

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#### **EI/SCOPUS Conference Papers**

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62. **C. S. Lee**, and Y. Q. Lim, "Perceptions towards Mood-based Recommendations, Challenges and Gamification in ARthibitX on User Experience and Satisfaction," *International Conference on Digitalization and Management Innovation*, October 25-27, 2024, Beijing, China, pp. 367-378. (published in *Frontiers in Artificial Intelligence and Applications*, A.J. Tallón-Ballesteros (Ed)), IOS. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
63. **C. S. Lee**, K. Y. Prak Chuap, and M. S. H. Neo, "Requirements Elicitation from Two Preliminary Design-Thinking-Computational thinking Surveys," *International Conference on Modern Management based on Big Data* (published in *Frontiers in Artificial Intelligence and Applications*, N. Guarino, P. Hitzler, J. N. Kok, J. Liu, R. L. de Mántaras, R. Mizoguchi, M. Musen, S. K. Pal, N. Zhong (Eds.), October 25-27, 2024, Beijing, China, IOS, vol. 387, pp. 181-192. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
64. S. Krishnasamy, and **C. S. Lee**, "AI chatbots in the office: Unveiling the social impacts on future workplace harmony," *IEEE International Conference on ICT for Smart Society*, Indonesia, September 4-5, 2024, pp. 1-6.
65. H. X. A. Ho, and **C. S. Lee**, "Effectiveness of the design of a gamified Voice-Assisted Chatbot system in aiding modelling, and personalized guidance for learning basic OOP", *Computational Thinking Education-STEM*, Asia Pacific Society for Computers in Education (ISSN 2664-5661), Beijing, China, May 28-30, 2024, pp. 33-38. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]

66. **C. S. Lee**, Y. H. Eu, J. X. L. Chai, W. L. Chai, H. X. A. Ho, J. Y. Tan, M. H. H. Morsim, J. T. Aye, and E. Y. Siew, "Innovation Helixes, metaverse and AI assistance in promoting circular design, in waste management: A conceptual HCI study", IEEE International Conference on Software, Knowledge, Information Management and Applications, Kuala Lumpur, Malaysia, December 8-10, 2023. (extended from the ICCSA 2023 paper), pp. 99-106. [partially funded by Sunway University]
67. **C. S. Lee**, "Developing a knowledge-requirements engineering framework towards transformative (eco)systems/metaverses/ecologies," IEEE International Conference on Intelligent Systems and Knowledge Engineering, Fuzhou, Fujian, China, November 17-19, 2023, pp. 1-8. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
68. K. Y. A/P Prak Chuap and **C. S. Lee**, "Perceptions towards Big Data Innovations: A Malaysian Preliminary Sample Survey," IEEE International Conference on Software, Knowledge, Information Management and Applications, Kuala Lumpur, Malaysia, December 8-10, 2023. [accepted but withdrawn due to lack of funds]
69. **C. S. Lee**, J. Y. Lee, "E-commerce factors that motivate consumers' purchasing decisions: A cross-regional study and local attractors and sustainers for personalization," IEEE International Conference on Information and Communication Technology, Melaka, Malaysia, August 23-24, 2023, pp. 388-393. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
70. **C. S. Lee**, Y. H. Eu, J. X. L. Chai, W. L. Chai, H. X. A. Ho, J. Y. Tan, M. H. H. Morsim, J. T. Aye, E. Y. Siew, "Innovation Helixes, metaverse and AI assistance in promoting circular design, in waste management: A conceptual HCI study", International Conference on Computational Science and Applications Workshops, In O. Gervasi et al. (Eds.). July 3-6, 2023. (presented but not published) [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
71. **C. S. Lee** and W. L. Kok, "Color-gameplay, global-local processing tradeoffs: Towards personalized/generative HCI playfulness." IEEE International Workshop on Artificial Intelligence and Education, Xiamen, China, November 11-13, 2022, pp. 15-21. [best session presenter award for Wui Lee] [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
72. **C. S. Lee**, Y. O. Wong and H. Y. Gui, "Differentiating persuasive factors for tourism booking websites: Towards matrix factorization," IEEE International Conference on Computational Science and Applications Workshops, In O. Gervasi et al. (Eds.). July 4-7, 2022, pp. 1-8, [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
73. **C. S. Lee** and K. D. Wong, "Comparing computational thinking in Scratch and non-Scratch Web design projects: A preliminary meta-analysis study," International Conference on Computers in Education, Thailand, November 22-26, 2021, Volume II, pp. 457-462. [Fulbright Visiting Scholar Fellowship, Malaysian IRB]
74. **C. S. Lee** and K. W. Lee, "The effectiveness of object-oriented-QR Monopoly in enhancing ice-breaking and education UX: A preliminary study," International Conference on Computers in Education, Thailand, November 22-26, 2021, Volume II, pp. 403-409. [RM441.30 from Sunway University Individual Research Grant Scheme]
75. **C. S. Lee** and J. N. Yatim, "Perception of parents towards fun puzzle games in helping mild autistic children improve their computational thinking skills," International Conference on Computers in Education, Thailand, November 22-26, 2021, Volume II, pp. 503-508. [Fulbright Visiting Scholar Fellowship]
76. **C. S. Lee**, S. J. Chua and M. H. Kok, "Perceptions towards MySejahtera, e-Penjana: Implications to educating the public," International Workshop on Artificial Intelligence and Education, IEEE, Xi'an, China, November 19-21, 2021, pp. 74-79. [Fulbright Visiting Scholar Fellowship]

77. **C. S. Lee**, C. H. Ng, J. S. Lee, K. X. Ngo, S. M. Teh, A. M. Ikraam, C. Y. Lim and S. S. Pandey, "Model-based customer-relationship management system and strategic board game: Analogical training," International Workshop on Artificial Intelligence and Education, IEEE, Xi'an, China, November 19-21, 2021, pp. 69-73. [Fulbright Visiting Scholar Fellowship]
78. **C. S. Lee** and W. Yui, "Lean rehabilitative-predictive recommender games for dementia seniors: A case study", International Conference on Computational Science and Applications, In O. Gervasi et al. (Eds.), LNCS 12951, Part III, pp. 411-428, Italy, September 13-16, 2021, pp. 411-428. [Fulbright Visiting Scholar Fellowship]
79. **C. S. Lee**, and R. K. Kaur d/o C. J. Singh, "Factors facilitating socio-cognitive-affective engagements and playfulness among Malaysian seniors: A case study towards link recommender design," International Symposium on Tools and Techniques on Software Development, workshop of the International Conference on Computational Science and Applications, IEEE, O. Gervasi et al. (Eds.), Italy, September 13 – 16, 2021, pp. 204-210. [Fulbright Visiting Scholar Fellowship]
80. **C. S. Lee**, "Optimization, associative networks and gamification: Lessons learnt and implications," IEEE R10 Humanitarian Technologies Conference, December 1-3, 2020, Kuching, Malaysia, pp. 1-6. [Fulbright Visiting Scholar Fellowship]
81. **C. S. Lee**, N. Vegan, M. B. Nair, J. E. H. Ooi, "Interest-driven creation, computational thinking and storytelling in learning Python," International Conference on Computers in Education, November 23-27, 2020, vol. 1, pp. 147-152.
82. **C. S. Lee**, and Y. L. Ling, "Comparing effects of brain-training and role-playing games on problem-solving speed," workshop on Curating examples of the use of analogies in STEAM, International Conference on Computers in Education, Vietnam, November 23-27, 2020, Vol. 2, pp. 607-616.
83. Z. T. Cheng and **C. S. Lee**, "Augmented Reality Maze Game with Google Cardboard for Child Edutainment," workshop on Curating examples of the use of analogies in STEAM, International Conference on Computers in Education, Vietnam, November 23-27, 2020, 2, pp. 617-626.
84. **C. S. Lee**, F. A. Gachi, "Word Cloud, Pareto and Fishbone: Towards less computation-intensive project management," Workshop on Curating examples of the use of analogies in STEAM, International Conference on Computers in Education, November 23-27, 2020, 2, pp. 635-642.
85. **C. S. Lee**, R. J. B. Yap, M. M. R. Gazbur, W. H. Chan and J. J. Yeow, "Design, feedback and repurposing human-computer interaction for a social anxiety therapy system," IEEE International Conference on Sustainable Utilization and Development in Engineering and Technologies, November 7-9, 2019, Penang, Malaysia, pp. 17-22. [Sunway publication reward]
86. **C. S. Lee**, "Augmenting knowledge bases, optimization, associative networks and gamification: Possible implications," IEEE International Conference on Sustainable Utilization and Development in Engineering and Technologies, November 7-9, 2019, Penang, Malaysia. [withdrawn]
87. **C. S. Lee** and J. H. Hughes, "Refocusing on cognitive load design through a meta-analysis on learnability, goal-based intentions and extensibility towards personalized cognitive-social-affective engagement among seniors," International Conference on Intelligent Software Methodologies, Tools, and Techniques (SOMET19), September 23-25, 2019, Kuching, Sarawak, Malaysia, (published in Frontiers in Artificial Intelligence and Applications, Volume 318: Advancing Technology Industrialization Through Intelligent Software Methodologies, Tools and Techniques, pp. 456 – 469, IOS Publishing). [Sunway publication reward, Fulbright Visiting Scholar Fellowship]

88. **C. S. Lee** and B. Jiang, "Assessment of Computational Thinking (CT) in Scratch fractal projects: Towards CT-HCI scaffolds for analogical-fractal thinking," International Conference on Computer-Supported Education, Crete, Greece May 2-4, 2019, pp. 192-199 [partially funded by National Nature Science Foundation of China No.71704160, partially, CSEDU review incentive].
89. **C. S. Lee**, "Design to encourage reframing, fractal and analogical thinking through ubiquitous interdisciplinary digital transformations," International Conference on Advances in Computer Entertainment Technology, University of Montana, USA, December 10-12, 2018. [withdrawn]
90. T. Q. Mok, W. M. Mau, C. W. K. Wong, K. W. Koay, M. J. Cheng, and **C. S. Lee**, "Learning logic, search and cracking through a number guessing game," Workshop on Playfulness in teaching-learning STEAM, International Conference on Computers in Education, November 26-30, 2018, Manila, Philippines.
91. K. K. Wong, B. C. Y. Goh, S. L. Shum, S. J. Lim, Y. J. Kan and **C. S. Lee**, "Adaptable Chinese Language Learning Card Game," Workshop on Playfulness in teaching-learning STEAM, International Conference on Computers in Education, November 26-30, 2018, Manila, Philippines.
92. **C. S. Lee**, S. Y. Guy and S. W. L. Chan, "Towards personalized cognitive-social-affective engagement among active seniors: A case study on UX and inclusive design," Workshop on Playfulness in teaching-learning STEAM, International Conference on Computers in Education, November 26-30, 2018, Manila, Philippines.
93. T. M. T. Tembo and **C. S. Lee**, "Using 2D Simulation Applications to Motivate Students to Learn STEAM", Workshop on Promoting cognitive access, processes and knowledge building towards deeper learning and creativity, International Conference on Computers in Education, December 4-8, 2017, Christchurch, New Zealand. [Sunway University postgraduate support]
94. **C. S. Lee**, "Exploring possibilities for synergizing embodied, embedded and extended cognition: Implications to STEM Education", Workshop on Promoting cognitive access, processes and knowledge building towards deeper learning and creativity, International Conference on Computers in Education, December 4-8, 2017, Christchurch, New Zealand. [Fulbright Visiting Scholar Fellowship]
95. **C. S. Lee** and J. V. Lee, "Investigating design factors/scaffolds to improve knowledge building and creative outcomes in Robotics and Automation," International Conference on Teaching and Learning, Tunku Abdul Rahman University College, Malaysia, October 15-18, 2016. [accepted but withdrawn, [submitted to IPSR/RMC/UTARRF/2014-C1/L04]
96. **C. S. Lee** and K. D. Wong, "Developing a disposition for social innovations: An affective-socio-cognitive co-design model," International Conference on Cognition and Exploratory Learning in Digital Age, October 24-26, 2015, Ireland, pp. 180-186. [research designed and completed while a Faculty at Universiti Tunku Abdul Rahman]
97. **C. S. Lee** and K. D. Wong, "Design thinking and metacognitive reflective scaffolds: A graphic design-industrial design transfer case study," International Conference on Cognition and Exploratory Learning in Digital Age, October 24-26, 2015, Ireland, pp. 173-179. [research designed and completed while a Faculty at Universiti Tunku Abdul Rahman]
98. **C. S. Lee** and S. B. Y. Lau, "Investigating design factors/scaffolds to improve knowledge building and creative outcomes in Software Design and Testing," International Conference on Technology Education, Hong Kong Polytechnic University, January 3-5, 2015. [submitted to IPSR/RMC/UTARRF/2014-C1/L04]
99. **C. S. Lee**, P. P. Chen, T. C. Ho, T. W. Chan, "Inculcating Mathematical Thinking through Epistemic Agency, International Conference on Computers in Education, Bali, Indonesia, November 18-22, 2013, pp. 933-938.



100. **C. S. Lee**, T. C. Ho, P. C. Chen, T. W. Chan, K. D. Wong, "The role of epistemic agency and progressive inquiry in inculcating Mathematical Thinking", ICT Trends in Emerging Economies, in conjunction with International Conference on Computers in Education, Bali, Indonesia, November 18-22, 2013, pp. 258-265.
101. **C. S. Lee**, C. C. Ho, P. C. Chen and T. W. Chan, "Teacher's perception towards the design of a humanity-based classroom focusing on inculcating mathematical thinking", Global Chinese Conference on Computers in Education, Beijing, China, May 27-31, 2013.
102. **C. S. Lee**, "Examples of collaborative use of gaps in students' perceptions of creativity to design learning activities and assessments", International Workshop on ICT Trends in Emerging Economies, in conjunction with International Conference on Computers in Education, Singapore, November 26-30, 2012. [carried out in a Malaysian school in collaboration with a Malaysian school teacher in 2011]
103. **C. S. Lee**, "Reuse of pedagogical strategies across different mathematics topics based on ontological and pedagogical schema", Global Chinese Conference on Computers in Education, May 28-June 1, 2012, Kenting, Taiwan.
104. **C. S. Lee**, "Inculcating creative use of technology to enrich learning", Global Chinese Conference on Computers in Education, May 28-June 1, 2012, Kenting, Taiwan.
105. S. P. P. Chin and **C. S. Lee**, "Human factors engineering and design of learning pedagogies in a KM framework", International Conference on Computers in Education, Chiangmai, Thailand, November 28-December 2, 2011.
106. Y. L. Wong and **C. S. Lee**, "Creative storytelling: Enhanced through social media and intelligent recommendation", ACM Creativity & Cognition Conference, November 3-6, 2011, pp. 399-400. (Multimedia University final year project completed in Multimedia University prior to joining NCU@TW) [Fulbright Visiting Scholar Fellowship, NCU@TW conference leave]
107. **C. S. Lee**, "Towards creative reasoning: Scaffolding systems thinking and decision-making", International Conference on Computers in Education, Kuala Lumpur, Malaysia, November 29-December 3, 2010, pp. 655-662.
108. **C. S. Lee**, "Fluid structures and behavior in inculcating creative characteristics", International Conference on Computers in Education, Kuala Lumpur, Malaysia, November 29-December 3, 2010, pp. 785-787.
109. S. X. Y. Chong, **C. S. Lee** and J. Abdullah, "Creative writing: A study investigating factors influencing creativity in writing and their outcomes", International Conference on Computers in Education, Kuala Lumpur, Malaysia, November 29-December 3, 2010, pp. 580-582.
110. M. H. Kadivar and **C. S. Lee**, "Evaluate an ontology-based e-Learning data model using the TAM model," International Conference on Computers in Education, Kuala Lumpur, Malaysia, November 29-December 3, 2010, pp. 325-327.
111. B. Poursaeed and **C. S. Lee**, "Self-initiated curriculum planning, visualization and assessment in improving problem-solving skills and increasing meaningful learning: A comparison between mobile and ubiquitous learning", International Conference on Technology for Education, IEEE Computer Society Press, Indian Institute of Technology, Mumbai, India, July 1-3, 2010, pp. 109-115.
112. S. C. Haw, **C. S. Lee** and H. L. Tong, "Effective XML data storage and distributed query retrieval system", IEEE International Conference on Future Computer and Communication, Wuhan, China, May 21-24, 2010, 3, pp. 104-108.

113. **C. S. Lee**, "Scaffolding everyday creativity: A spiral cascaded development approach," World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, HI, USA, June 22-26, 2009, pp. 770-775. [funded by Fulbright Visiting Scholar Fellowship, written and presented in Georgia Tech, while on no pay leave from MMU]
114. B. Poursaeed, **C. S. Lee**, L. P. Teo, "Student-initiated curriculum planning, visualization and assessment for mobile learning", IADIS International Conference on Mobile Learning, Barcelona, Spain, February 26-28, 2009, pp. 285-290.
115. S. T. Yong and **C. S. Lee**, "Effective educational computer games (CG): A structured equation modeling approach," International Conference on Computers in Education, Hong Kong, October 27-31, 2008, pp. 967-968.
116. S. B. Y. Lau and **C. S. Lee**, "Context-aware reference model: Architecture and implications for adaptation of learning activities," Mobility '07, ACM, Singapore, September 10-12, 2007, pp. 623-627.
117. W. C. Lim and **C. S. Lee**, "An FCA tool for integrating topic map and concept lattices: Extending application interoperability on the Semantic Web," International Conference on Formal Concept Analysis, Clermont-Ferrand, France, Springer, February 12-16, 2007, pp. 79-95.
118. A. C. Koo, **C. S. Lee** and W. P. Chin, "Key factors for successful online collaborative learning: Experiences from Malaysian secondary schools, World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media), AACE, Montreal, Canada, June 27-July 2, 2005, pp. 2031-2038.
119. S. X. Y. Chong and **C. S. Lee**, "Learning by gaming: Using local fables to teach English through games", International Conference and Industry Symposium on Computer Games, Animation, Multimedia, IPTV, Edutainment and Security, Singapore, April 28-30, 2008.
120. **C. S. Lee** and H. R. Chong, "Automated eclectic instructional design: Design factors", WSEAS International Conference on Distance Learning and Web Engineering", Corfu Island, Greece, August 23-25, 2005, pp. 122-127. [Multimedia Super Corridor Grant Scheme]
121. C. C. Kiu and **C. S. Lee**, "OntoDNA: ontology alignment results for OAEI 2007", Proceedings of the 2nd International Workshop on Ontology Matching (OM-2007), Busan, Korea, November 11, 2007. [MOSTI's e-Science grant]
122. C. C. Kiu and **C. S. Lee**, "A data mining approach for managing shared ontological knowledge," IEEE International Conference on Advanced Learning Technologies (ICALT 2006), IEEE Computer Society Press, Kerkrade, Netherlands, July 5-7 2006, pp. 16-18. [MOSTI's e-Science grant]
123. **C. S. Lee** and W. C. Lim, "Ontology-based 3-dimensional visualization of composited concepts", World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media), AACE, Montreal, Canada, June 27-July 2, 2005, pp. 3953-3960. [MMU's RDI grant]
124. **C. S. Lee**, "Shared cognitive space: An enabling tool for conceptual frameworks", International Conference on Computers in Education, IEEE Computer Society Press, Auckland, New Zealand, December 3-6, 2002, pp. 813-817.
125. A. Easiah, W. L. Hau, S. Ruthiran, and **C. S. Lee**, "Online educational community system", International Conference on Computers in Education/SchoolNet2001, Chul-Hwan Lee et. al (eds), Inchon National University of Education, Seoul, Korea, November 12-15, 2001, pp. 1758-1759.
126. **C. S. Lee**, "A distance learning framework: Cognitive interfaces and concept spaces", International Conference on Computers in Education/SchoolNet2001, Chul-Hwan Lee et. al (eds), Inchon National University of Education, Seoul, Korea, November 12-15, 2001, pp. 1794-1795.

### Reputable international conferences/journals

127. **C. S. Lee**, "A Comparison of Computational Thinking Approaches in HCI-SEO Design: Implications to Teaching and Learning STE(A)M," 2020 International Conference on Computational Thinking Education, August 19-21, 2020 [by MIT and The Hong Kong Education University] ISSN 2664-5661
128. N. H. Y. Phuan, **C. S. Lee** and E. H. Ooi, "CT-based Collaborative Storytelling for Learning Programming Concepts in Python," 2020 International Conference on Computational Thinking Education, August 19-21, 2020 [by MIT and The Hong Kong Education University] ISSN2664-5661
129. **C. S. Lee** and E. H. Ooi, "Identifying design factors to encourage reframing, reuse through granular coding-analogical thinking-storytelling," International Conference on Engineering Technology, July 6-7, 2019/International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.1.3, 2020, pp. 64-70.
130. E. J. N. Bong and **C. S. Lee**, "Factors facilitating community engagement to improve seniors' quality of life in Malaysia: A case study on JoinIt," International Conference on Engineering Technology/, July 6-7, 2019/International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.1.3, 2020, pp. 71-77. [FRGS, Sunway University publication reward]
131. H. W. Wong and **C. S. Lee**, "Leap Motion-enhanced Augmented Reality video games to encourage more wrist exercise and intergenerational engagement," International Conference on Engineering Technology, July 6-7, 2019/International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.1.3, 2020, pp. 78-82. [FRGS, Sunway University publication reward]
132. R. K. Kaur a/p C. J. Singh and **C. S. Lee**, "Factors facilitating socio-cognitive-affective engagements and playfulness among Malaysian seniors: A case study", International Conference on Engineering Technology, July 6-7, 2019. [FRGS] (presented at ICET 2019 but not published)
133. L. Y. Yew and **C. S. Lee**, "Resource-knowledge-mixed Knowledge Management approaches to enhancing e-Commerce sustainability: A comparative case study", International Conference on Engineering Technology, July 6-7, 2019. [FRGS] (presented at ICET 2019 but not published)
134. **C. S. Lee**, "Scaffolding systemic and creative thinking: A hybrid learning sciences-decision support approach," e-Journal of Business Education & Scholarship of Teaching, 5(1), 2011, pp: 47 - 58.
135. **C. S. Lee**, and H. R. Chong, "Synergistic Design Considerations for Continuing Education: Refocusing on Instructional Design," WSEAS Transactions on Engineering Education, vol. 2, no. 4, 2005, pp. 294-301. [EBSCO]
136. S. P. P. Chin, **C. S. Lee** and A. W. Yeo, "A KM-e-learning framework for remote communities", Global Learn Asia Pacific 2010--Global Conference on Learning and Technology, AACE, Malaysia, May 17-20, 2010, pp. 3777-3781.
137. B. Balakrishnan, S. W. Ling, S. B. Y. Lau, **C. S. Lee**, H. S. Y. Song and C. P. Ooi, "Financial education for urban youth: The first step to poverty eradication", Global Learn Asia Pacific 2010--Global Conference on Learning and Technology, AACE, Malaysia, May 17-20, 2010, pp. 645-651.
138. S. B. Y. Lau and **C. S. Lee**, "Bridging the gap of semantic service description with tagging approach for pervasive web-based learning", Workshop on Advances in Intelligent Computing, Kuala Lumpur, Malaysia, December 7-8, 2009, pp. 32-36.

139. S. X. Y. Chong and **C. S. Lee**, "Requirements engineering in the design of collaborative computer games for young learners", Symposium on Information and Communications Technology, Kuala Lumpur, Malaysia, December 7-8, 2009, pp. 84-89.
140. H. S. Y. Song and **C. S. Lee**, "A case study on fun and usability in learning through play: Implications to the design principles of children's computer games", International Conference and Industry Symposium on Computer Games, Animation, Multimedia, IPTV, Edutainment and Security, Singapore, April 28-30, 2008.
141. B. Poursaeed and **C. S. Lee**, "Acceptance and effectiveness of student-initiated curriculum planning, visualization and assessment for mobile learning", 3<sup>rd</sup> International Conference on Mobile and Computer-Aided Learning, Kassel University Press, Amman, Jordan, April 16-18, 2008.
142. **C. S. Lee**, "The use of 3-D models in authoring tools to enhance the cognitive instructional design process," International Conference on Multimedia and Information and Communication Technologies, Badajoz, Spain, December 3-6, 2003, Vol. 3, pp. 1814-1818.
143. C. L. Kuan, **C. S. Lee** and C. K. Ho, "Merlin Collaborative Concept Map: A case study", International Conference on Multimedia and Information and Communication Technologies, Badajoz, Spain, December 3-6, 2003, Vol. 2, pp. 869-872.
144. **C. S. Lee**, Y. P. Singh and C. L. Ngo, "Student modeling using SOM for adaptive hypermedia learning", International Conference on Multimedia and Information and Communication Technologies, Badajoz, Spain, December 3-6, 2003, pp. 1814-1818.
145. **C. S. Lee** and Y. P. Singh, "Interaction design: A systemic review", International Conference on Internet and Multimedia Systems and Applications, B. Furht (ed.), IASTED, Las Vegas, Nevada, USA, November 19-23, 2000, pp. 361-367.

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#### National Conferences

146. **C. S. Lee**, "Empowering youth through ICT and entrepreneurship," E-community colloquium, Chancellery, National Malaysian University, February 8, 2007 (submitted to the Ministry of Higher Education and Ministry of Women, Family and Community Development).
147. **C. S. Lee**, "E-learning: Whither are we: Learning grid, access and tools?" paper presented for the 2<sup>nd</sup> UNESCO workshop on Issues of communication and information at International and regional levels, Palace Beach & Spa, Mines Resort City, Selangor, November 8-12, 2006.
148. **C. S. Lee**, "Automated instructional design in teaching of English tenses," International Seminar on Multimedia Adventures in Language Learning, Sunway Lagoon Resort Hotel, Malaysia, August 21-22, 2006.
149. **C. S. Lee**, "The way forward: iHRD", International Conference on ICT Business, K-economy Centre, Melaka, October 4-6, 2004.
150. H. R. Chong, **C. S. Lee**, C. K. Ho and N. Ab. Maleh, "Automated instructional design: Empowering the instructor", International Conference on ICT Business, K-economy Centre, Melaka, October 4-6, 2004.
151. C. C. Kiu and **C. S. Lee**, "Discovering ontological semantics using FCA and SOM," MMU International Symposium on Information and Communication Technologies, Putrajaya, October 7-8, 2004.
152. N. Ab. Maleh, **C. S. Lee**, C. K. Ho and H.R. Chong, "Automated instructional design and reusability: A modular approach," MMU International Symposium on Information and Communication Technologies, Putrajaya, October 7-8, 2004.

153. **C. S. Lee**, Y. P. Singh and C. L. Ngo, "A connectionist-based adaptive learning system", International Conference on Artificial Intelligence in Engineering and Technology (ICAIET-2002), Universiti Malaysia Sabah, Kota Kinabalu, Malaysia, June 17-18, 2002, pp. 672-678.
154. **C. S. Lee** and Z. A. Manaf, "Collaboration in networked writing classrooms: Problems and issues, RELC Seminar, Singapore, April 19-21, 1999.
155. **C. S. Lee** and Z. A. Manaf, "Collaboration in networked classrooms: A virtual classroom contest", Proceedings of the International Conference on Multimedia and Information Technology, UNITEN, Bangi, September 29-October 1, 1998.

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### Book Chapters

1. **C. S. Lee** and P. Y. Chan, "Mathematics Learning: Perceptions towards the Design of a Website based on a Fun Computational Thinking-based Knowledge Management Framework," Eds. S. C. Kong (Hong Kong Education University) and H. Abelson (MIT), Computational Thinking Education, Springer Nature, Singapore, 2019.
2. **C. S. Lee**, "Inculcating sustainable research and development in Malaysia: Whither are we?" Fulbright Chronicles: American experiences, Malaysian perspectives. University Malaya Press, 2010.
3. **C. S. Lee**, "Ontological sharing, granular visualization, and reusability of learning objects", Learning Objects Book Series, Informing Science, October 2006.

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### Magazine/Newsletter

1. C. S. Lee, "Lenses to the metaverse, sustainability and ESG", *MINDS Newsletter* (October issue), 2022.
2. C. S. Lee, *Reconnecting and fun: Spoiled for choice*. D'Happy Club's 10<sup>th</sup> Anniversary's magazine. October 13, 2018.
3. C. S. Lee, Making a difference. Changing society's views towards senior citizens. *Blaze. The Sunway University Magazine*. Issue 43, December 2017.

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## INTERNATIONAL PROFESSIONAL CONTRIBUTIONS

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### EDITORIAL BOARD MEMBER

1. **Review Editor**, *Frontiers in Artificial Intelligence for Human Learning and Behavior Change* (October 2018-Current) [SCOPUS]
2. **Editorial Review Board Member**, *VINE (The Journal of Information and Knowledge Management Systems)*, Emerald. [SCOPUS]] (August 2014 –Current) [Scopus, ESCI]
3. **Editorial Board Member**, *Research and Practice in Technology Enhanced Learning*, Asia-Pacific Society for Computers in Education (2011-Current) [SCOPUS]
4. **Editorial Board Member**, *International Journal on Knowledge Management and E-learning* (2008-Current) [Scopus, ESCI]
5. **Associate Editor**, *International Journal of Computer Information Systems and Industrial Management Applications* [SCOPUS] (March 2019-2021)

6. **Editorial Review Board Member**, *International Journal of Cognitive Informatics and Natural Intelligence* (IJCINI) [Scopus, ESCI] (March 2019-March 2020)
7. **Editorial Review Board Member**, *Journal of Modeling and Optimization* (December 2018-2019)
8. **Editorial Board Member**, *International Journal of Web-based Communities*, Inderscience Publishers (2005-2017) [Scopus]

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#### EDITORIAL (JOURNAL/WORKSHOP SPECIAL ISSUE GUEST EDITOR)

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1. **Special Issue Co-Guest Editor**, D. Zapata, I. Torre, **C. S. Lee**, A. S. Cabezuelo, I. Ghergulescu and P. Libbrecht, "Generative AI in Education", Special Issue of *Frontiers on AI for Human Learning and Behavior Change*, 2024, 7: 1532896.
2. **Conference Workshop Co-Editor**, D. E. Drew, M. L. Tenhunen, M. M. Wang, **C. S. Lee**, S. B. Y. Lau, "New Directions in Pedagogy: Design, Playfulness, and STEAM", Workshop on Playfulness in teaching-learning STEAM, *International Conference on Computers in Education*, November 26-30, 2018, Manila, Philippines.
3. **Special Issue Co-Guest Editor**, **C. S. Lee**, Ma. Mercedes T. Rodrigo, Baohui Zhang, Situating Transfer through the Design of Adaptable Curricula, Methodologies and Technologies, *Research and Practice in Teaching and Learning*, 2014.
4. **Conference Workshop Co-Editor**, S. L. Wong, A. F. M. Ayub, M. Lukman and **C. S. Lee**, Exploring Educational Transformation through ICT in Emerging Developing Countries within the Asia-Pacific Region, Tan, S.C. et al. (Eds.) (2013). *Workshop Proceedings of the 21st International Conference on Computers in Education*, Bali, Indonesia, November 18-22, 2013.
5. **Special Issue Co-Guest Editor**, C. S. Lee, J. C. Yang, J. Secretan, C. Sylla, P. Branco, "Supporting, Managing, & Sustaining Creativity and Cognition through Technology", *Knowledge Management and E-learning*, 4(2), 2012, pp. 129-133. (*J. Secretan was with Korrelate, USA*)
6. **Special Issue Co-Guest Editor**, C. S. Lee, J. L. Kolodner and A. K. Goel, "Creative Design: Scaffolding creative reasoning and meaningful learning", *Educational Technology & Society*, 14(1), 2011, pp. 1-2.
7. **Special Issue Co-Guest Editor**, C. S. Lee, R. Koper, P. Kommers and J. G. Hedberg, "Reference Models for Forming Organizational or Collaborative Pedagogical Best Practices," *International Journal of Continuing Engineering Education and Life-long Learning*, 18(1), 2008, pp. 1-5.

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#### JOURNAL PAPER REVIEWER

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1. **Peer executive reviewer**, *Artificial Intelligence Review*, IF 10.7
2. **Peer executive reviewer**, *Computers in Human Behavior*, IF 9.0
3. **Peer executive reviewer**, *Information Processing and Management* IF 6.22
4. **Peer executive reviewer**, *Journal of Knowledge Management* IF 6.180
5. **Peer executive reviewer**, *Knowledge-based Systems* IF 5.921
6. **Peer executive reviewer**, *Applied Soft Computing* IF 5.472
7. **Peer executive reviewer**, *Computers & Education* IF 5.296
8. **Peer executive reviewer**, *International Journal of Human-Computer Studies* IF 5.3 Interaction IF 4.920
9. **Peer-executive reviewer**, *Neural Computing and Applications* IF 4.774
10. **Peer-executive reviewer**, *International Journal of Artificial Intelligence in Education* IF 4.7
11. **Peer executive reviewer**, *Neuro-computing* IF 4.438

12. **Peer-executive reviewer**, *Cognitive Computation* IF 4.3
13. **Peer-executive reviewer**, *Computers & Education Open* [Springer] IF 4.1
14. **Peer-executive reviewer**, *Frontiers in Aging Neuroscience's Neurocognitive Aging and Behavior* IF 4.1
15. **Peer-executive reviewer**, *Heliyon* IF 4.00
16. **Peer-executive reviewer**, *Electronic Markets: The International Journal on Networked Business* IF 3.818
17. **Peer-executive reviewer**, *Frontiers in Psychology* IF 3.8
18. **Peer-executive reviewer**, *Scientific Report* IF 3.8
19. **Peer-executive reviewer**, *International Journal of Machine Learning and Cybernetics* IF 3.753
20. **Peer-executive reviewer**, *IEEE Access* IF 3.745
21. **Peer-executive reviewer**, *Humanities & Social Sciences Communications* IF 3.7
22. **Peer-executive reviewer**, *IEEE Intelligent Systems* IF 3.21
23. **Peer-executive reviewer**, *Behavior and Information Technology* IF 3.08
24. **Peer-executive reviewer**, *Frontiers in Computer Science / Human-Media Interaction* IF 2.6
25. **Peer-executive reviewer**, *Transactions on Multimedia Computing Communications and Applications; SI: Big Data, Machine Learning and AI Technologies for Art* IF 2.25
26. **Peer-executive reviewer**, *British Journal of Educational Technology* IF 2.951
27. **Peer-executive reviewer**, *Computer Standards & Interfaces* IF 2.809
28. **Peer-executive reviewer**, Special issue on Game-based learning, *IEEE Transactions on Learning Technologies*. IF 2.714
29. **Peer-executive reviewer**, *BMC Psychology* IF 2.7
30. **Peer-executive reviewer**, *BMC Medical Education* IF 2.7
31. **Peer-executive reviewer**, *Information Systems* IF 2.466
32. **Peer-executive reviewer**, *Design Science* IF 2.4
33. **Peer-executive reviewer**, *Educational Technology Research & Development* IF 2.303
34. **Peer-executive reviewer**, Special issue of *International Journal on Computational Intelligence Systems* on Advanced Computational Intelligence for E-Commerce and Digital Economy IF 2.259
35. **Peer-executive reviewer**, *Educational Technology & Society* IF 2.086, and special issues on *Knowledge visualization for learning and knowledge management* and *Innovative technologies for the seamless integration of formal and informal learning*
36. **Peer-executive reviewer**, *Thinking Skills and Creativity* IF 2.06
37. **Peer-executive reviewer**, *ACM Journal on Computing and Cultural Heritage* IF 2.047
38. **Peer-executive reviewer**, *IETE Technical Review* IF 1.932
39. **Peer-executive reviewer**, *International Journal of Imaging and Systems Technology* IF 1.925
40. **Peer-executive reviewer**, *IEEE Transactions on Education* IF 1.855
41. **Peer-executive reviewer**, *MethodsX* IF 1.84
42. **Peer-executive reviewer**, *DISPLAY* IF 1.738
43. **Peer-executive reviewer**, *American Journal of Alzheimer's Disease and Other Dementias* IF 1.544
44. **Peer-executive reviewer**, *Children and Youth Services Review* IF 1.521
45. **Peer-executive reviewer**, *ASC Software Quality Journal* IF 1.460
46. **Peer-executive reviewer**, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, IF 1.386
47. **Peer-executive reviewer**, *Mathematical Biosciences and Engineering*, IF 1.285
48. **Peer-executive reviewer**, *The Asia-Pacific Education Researcher* IF 0.573
49. **Peer-executive reviewer**, *Turkish Online Journal of Educational Technology* IF 1.016
50. **Peer-executive reviewer**, *JMIR Rehabilitation and Assistive Technologies Q1 in Rehabilitation*

51. **Peer executive reviewer**, *Frontiers in Digital Health / Digital Health* [ESCI]
52. **Peer-executive reviewer**, *Journal of Computers in Education* [ESCI]
53. **Peer-executive reviewer**, *Computers in the Schools: Interdisciplinary Journal of Practice, Theory, and Applied Research* [ESCI]
54. **Peer-executive reviewer**, *International Journal of Web Information Systems* [SCOPUS]
55. **Peer-executive reviewer**, *International Journal on Web Engineering and Technology* [SCOPUS]
56. **Peer-executive reviewer**, *Computers & Education: Artificial Intelligence* [SCOPUS]
57. **Peer-executive reviewer**, *Journal of Autonomous Intelligence* [SCOPUS]
58. **Peer-executive reviewer**, *SN Computer Science* [SCOPUS]
59. **Peer-executive reviewer**, *Recent Advances in Computer Science and Communications* [SCOPUS] Q3
60. **Peer-executive reviewer**, *Analyzing Future Applications of AI, Sensors, and Robotics in Society*, IGI Global [Cabell]
61. **Peer-executive reviewer**, *Journal of Data Science and Intelligent Systems*
62. **Peer executive reviewer**, *Artificial Intelligence and Applications*
63. **Peer-executive reviewer**, *ACM Computers in Entertainment*
64. **Peer-executive reviewer**, *AI, Computer Science and Robotics Technology*
65. **Peer-executive reviewer**, *Industrial Internet of Things: An Introduction*, Bentham Science
66. **Peer executive reviewer**, *International Journal of Technology for Education and Learning*

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#### JOURNAL/CONFERENCE INTERNATIONAL ADVISORY BOARD

1. **Advisory Board**, International Journal of Informatics and Web Engineering, MMU Press (2022- )
2. **Jury/International Advisory Board**, IET *International Conference on Sustainable Energy and Intelligent Systems (SEISCON' 2012)*, Dr. Vivekenanda Institutions, India, August 22-24, 2012.
3. **International Advisory Board**, IET *International Conference on Sustainable Energy and Intelligent Systems (SEISCON' 2011)*, Dr. M.G.R. Educational and Research Institute-University, Chennai, India, July 20-22, 2011.
4. **Advisory Panel** for International Conference on Managing Next Generation Software Applications, Karunya University, Coimbatore, Tamilnadu, India, December 5-6, 2008.

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#### PANELIST/ASSESSOR/MODERATOR

1. **Moderator** for Data Storytelling and Analytics, Masters in Business Data Science (ODL), Cyberjaya University, Selangor, Malaysia.
2. **External Assessor** for Academic Promotion in Computing, Multimedia University, 26 Oct – Nov. 2023
3. **External Assessor** for Academic Promotion in Computer Science, King Abdulaziz University, Saudi Arabia, 23<sup>rd</sup> July, 2019 (Remotely)
4. **Reviewer** for a Vidi grant application on creativity (invited by the Netherlands Organization for Scientific Research (NWO)), January 2018. (Remotely)
5. **Panelist**, “Addressing real issues and concerns in mobile learning in higher education: Institutional and Educator's perspectives: A Symposium”, Multimedia University, 20th May 2014. (funded by the Australian Digital Futures Initiative)



6. **Panelist**, “Systems that care: Learning companion and Service-oriented Architecture”, Artificial Intelligence in Education track, Computer-Supported Collaborative Learning & Artificial Intelligence in Education Workshop, Longtan, Taoyuan County, Taiwan, April 13-14, 2012.
7. **Invited Expert**, Survey on Policy Formulation, Prime Minister’s Special Innovation Unit-Malaysian Invention and Design Society, May 22, 2011.
8. **Invited Expert**, Briefing and Closed Consultation on Legal Innovation Framework, Special Innovation Unit, Prime Minister’s Department, October 14, 2010, Putra World Trade Centre.
9. Represented the Dean of the Faculty of Information Technology, Multimedia University as **Expert** to the National Key Results Area Labs, under the purview of the Performance Management and Delivery Unit, Prime Minister’s Department, MAS Academy, June 30, 2010.

## JUDGING

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1. **Judge**, Beijing Youth Science Creation Competition, March 25-30, 2025 (representing MINDS)
2. **Judge**, Multimedia University Journal Article Writing Competition. (Journal of Informatics and Web Engineering) 2023-Current (virtual)
3. **Judge**, Malaysia's Project Innovation & eXploration in Computer Science Education and Learning 2023 (PIXEL 2023), 6-8 July, 2023. (virtual)
4. **Judge**, IGNITE 2023-Current, Malaysian Invention and Design Society (virtual)**Judge**, Universiti Sains
5. **Judge**, Sunway-Monash-PetroSains Gerontology Challenge (April-May, August 2018).
6. **Judge**, IEEE TEMS (M) final year project (2019-2021)
7. **Judge**, Best Student Paper award committee, Session chair, International Conference on Computers in Education, Kuala Lumpur, November 29-December 3, 2010.
8. **Judge**, International Invention, Innovation and Technology Exhibition (May, 2010- Current)

## THESIS EXAMINER

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1. **PhD. Information Systems.** (2024). *Factors Influencing the Adoption of Blockchain Technology in Malaysia's Healthcare Industry: A Meta-Analytic Structural Equation Modelling on UTAUT*. Sunway University (was examiner)
2. **PhD. Computer Science.** (2024). *Optimization of dimensionality reduction for unstructured data using machine learning algorithms*. Bharathiar University, India (examiner)
3. **PhD. Computer Science.** (2023). *Design and development of classification algorithm for autism spectrum disorder detection*. Bharathiar University, India (examiner)
4. **PhD. Computer Science** (2022). *Dimensionality reduction and automated feature extraction using multi-level approach in big data environment*. Bharathiar University, India. (examiner, was).
5. **PhD. Science** (2018). *Enhancement of an enterprise business intelligence maturity model based on industrial Delphi study*. Universiti Tunku Abdul Rahman, Malaysia (examiner, was).
6. **PhD. Engineering** (2017). *Maximising learning and performance in framework documentation using use case map*. Multimedia University, Malaysia. (examiner, was).

7. **PhD Science** (2017). *Developing a business intelligence maturity model using an integration approach*, Universiti Tunku Abdul Rahman, Malaysia (examiner, wos).
8. **PhD. Computer Science** (2016). *Ideation learning to enhance intelligent agent e-brainstorming using neural network*. Sri Ramakrishna College of Arts and Science for Women, Bharathiar University, India. (examiner, wos)
9. **MSc in Information Systems.** (2016). *To investigate motivator & barriers of enterprise knowledge sharing behavior*. Sunway University, Malaysia. (examiner, proposal defense)
10. **PhD. Computer Science** (2015). *A unified framework for automated data mining – An agent-based perspective*. Bharathiar University, India. (examiner, wos).
11. **PhD. Computer Science** (2014). *Agent-based mechanisms for maintaining cached consistency in mobile environment*. Bharathiar University, India. (examiner, wos).
10. **Masters Management Information Systems** (2014). *An empirical investigation of university students' acceptance towards a learning management system based on a Technology Acceptance Model*. Universiti Tunku Abdul Rahman, Malaysia. [ project: by coursework]
11. **PhD. Computer Science** (2014). *An interactive plano framework for feature mining on indexing - a graph feature approach*. Bharathiar University, India. (examiner, wos).
12. **PhD. Computer Science** (2014). *A unified framework for automated data mining – An agent-based perspective*. Bharathiar University, India. (examiner, wos).
13. **M. Communications** (2014). *Effectiveness of e-learning: Interactive communication satisfaction among university students*. Universiti Tunku Abdul Rahman, Malaysia. (examiner, wos).
14. **PhD. Computer Science** (2013). *Approaches to enhance apriori algorithm for discovering association rules in large databases*. Bharatiar University, India. (examiner, wos).
15. **M. Information Systems** (2013). *The development and usability evaluation of an independent learner courseware for web-based learning environment*. Universiti Tunku Abdul Rahman, Malaysia. (examiner, wos).
16. **PhD. Computer Science** (2013). *Cluster detection and multidimensional visualization of automated data mining using intelligent agents*. Bharatiar University, India. (examiner, wos).
17. **PhD. Computer Science** (2013). *The development of a unified theoretical framework for data mining using a composite functions approach*. University of Technology, Mauritius. (examiner, wos).
18. **M. Engineering** (2012). *Activity and system design of computer-based peer tutoring for enhancing Mathematical communication ability of elementary students*, Graduate Institute of Network Learning Technology. National Central University, Taiwan. (examiner, wos).
19. **PhD. Computer Science** (Software engineering). (2012). *On developing effectual algorithms for association rule discovery in transaction databases*. Anna University, India. (examiner, wos).
20. **M. Information Systems** (2012). *Creating a blended learning environment through the use of an interactive multimedia e-book for teaching-learning Chinese as a second language at tertiary level*. Universiti Tunku Abdul Rahman, Malaysia. (examiner, wos).
21. **M. Sc. Information Systems** (2011). *A methodology for authoring IMS Learning design from authentic learning examples in a mobile context*. Athabasca University, Canada. (examiner, wos).

22. **PhD. (Computer Science)** (Software engineering). (2011). *Knowledge-rules analysis and specification mechanism for usability patterns of object-oriented productline software*. Anna University, India. (examiner, wos).
23. **PhD. (Computer Science)**. (2011). *Neural network approach for HIV/AIDS Regimen specification decision support system*. Mother Theresa Women's University, India. (examiner, wos).
24. **M. Phil.** (2010). *Aligning learning with work practice by using Key Performance Indicator Framework*. University of Hong Kong, Hong Kong. (examiner, wos).
25. **PhD. (Computer Science)**. (2010). *Adaptive hybrid methods for attribute selection based on aggregation of information gain, Clustering and Correlation Methods*. Bharathiar University, India. (examiner, wos).
26. **M. Phil. (Computer Science)**. (2009). *Assessing the role of granularity upon decision tree complexity and accuracy in predicting nursing home deficiencies*. University of Nottingham, Malaysia. (examiner, wos).
27. **Masters (Computer Science)**. (2009). *Developing an online communication system for student affairs in e-learning environment*. University of Malaya, Malaysia. (examiner, wos).
28. **PhD. (Computer Science and Engineering)**. (2009). *An efficient distributed and parallel data mining approach for improved response time with dynamic remote memory utilization using intelligent agents*. Karunya University, India. (examiner, wos).
29. **Masters (Computer Science)**. (2008). *A customized semantic term weighting scheme for document classification*. Malaysian University of Science and Technology, Malaysia. (examiner, wos).

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#### **(INVITED) SPEAKER**

1. **Presenter**, International MACEE Melaka State-Led Conference (IMMELC) 2023: Re-discussing Teaching & Learning and Promoting Sustainability in Education," November 4, 2023 in conjunction with MACEE's 60<sup>th</sup> anniversary. (virtual)
2. **Invited speaker**, *National Conference on Contribution to National Development by Malaysian Women Scientists*, Malaysian Invention and Design Society (MINDS), March 5, 2022 [Online], also streamed at UNESCO's website in view of World Engineering Day for Sustainable Development <https://worldengineeringday.net/global events/> in celebration of International Women's Day. (virtual)
3. **Invited keynote speaker**, International Conference on Computing, Information Technology and Intelligent Computing (CITIC 2021), *Digital Futures International Congress (DIFCON 2021)*, June 23, 2021, Multimedia University, Malaysia.
4. **Speaker**, *Reuse as the bridge to STE(AM) integration: Examples*, TeachTech (Tertiary), EduTechAsia, November 6, 2019, Singapore.
5. **Speaker**, STEM and Technology Development for Socio-Cognitive-Affective Engagement: Social Innovation for the Elderly, *PetrosainsAfterHours: Grandpa and Alexa: How Today's Everyday Tech is for 8 to 80*, April 5<sup>th</sup> 2018, PetroSains, Malaysia.
6. **Invited speaker**, "Creativity and its Many Facets", *Imagine the Future of Education* Lecture Series, in conjunction with Taiwan's centenary celebrations, Chiang Kai Shek Memorial Hall, Taiwan, November 20, 2011.

7. **Invited speaker**, “Creating pizzazz! with pedagogies and technologies”, Teaching and Learning seminar series, Monash (Sunway campus), May 31, 2011. (Academic staff members from Monash (Sunway campus) who present at these seminar series are winners of the Pro-Vice Chancellor Award for Excellence in Teaching and Research).
8. **On-line guest seminar**, “Learning design, standards and performance evaluation”, Hong Kong Polytechnic University’s Industrial Systems Engineering 5607 course, February 23, 2011.
9. **Invited speaker**, “Reference modeling creativity: What’s important?” Graduate Institute of Networked Learning Technologies, National Central University, Taiwan, January 5, 2011.
10. **Theme-based invited speaker**, “Instructional design and creativity: “I do” or “Till death do we meet?”, Technology, Education and Pedagogy track in the *International Conference on Computers in Education*, Kuala Lumpur, November 29-December 3, 2010.
11. **On-line guest seminar**, “Learning design, standards and performance evaluation,” Hong Kong Polytechnic University’s Industrial Systems Engineering 5607 course, March 10, 2009.
12. **Guest colloquium lecture**, “Deriving and facilitating best teaching and learning practices: A knowledge management framework,” Lehigh University, Pennsylvania, USA, January 15, 2009.
13. **Invited speaker**, “Learning grids, access and tools: A Malaysian perspective”, - Represented Multimedia University to present a country paper on *E-learning and E-learning technologies*, Hyderabad, India under the India-ASEAN Cooperation Funding, November 6-7, 2006.

#### CONFERENCE MENTORING

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1. **Doctoral student mentor**, *Global Chinese Conference on Computers in Education*, September 11, 2021.
2. **Co-chair**, 1:1 mentoring, *International Conference on Computers in Education*, Chiangmai, Thailand, November 28-December 2, 2011.
3. **Mentor**, Doctoral Student Consortium, *International Conference on Computers in Education*, (2010).

#### CONFERENCE/WORKSHOP ASSOCIATE EDITOR/(CO) CHAIR/ORGANIZER/

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1. **Associate Editor** (Cybernetics), *IEEE International Conference on Systems, Man and Cybernetics*, Vienna, Austria, October 5-8, 2025.
2. **Award-co-Chair, Associate Editor and Organizing Committee**, *IEEE International Conference on Systems, Man and Cybernetics*, Kuching, Sarawak, October 7–10, 2024.
3. **Organizing committee**, *International Conference on Smart Manufacturing Technology, Electrical Engineering, and Robotics*, Penang, Malaysia, August 16-18, 2024.
4. **Conference workshop**, “Curating examples of the use of analogies in STEAM,” *International Conference on Computers in Education International Conference on Computers in Education*, November 23-27, 2020.
5. **Technical chair**, *IEEE International Conference on Sustainable Utilization and Development in Engineering and Technologies*, November 7-9, 2019, Penang, Malaysia.
6. **Chair**, workshop on “Playfulness in the teaching and learning of STE(A)M”, *International Conference on Computers in Education*, Manila, Philippines, November 26-27, 2018.

7. **Co-chair**, Maker and STEM Education track, *Global Chinese Conference on Computers in Education*, South China Normal University, Guangzhou, May 26-29, 2018.
8. **Chair**, Workshop on "Promoting cognitive access, processes and knowledge building towards deeper learning and creativity," *International Conference on Computers in Education*, New Zealand, December 4-8, 2017.
9. **Vice-Chair**, Workshop on ICT Trends in Emerging Economies, *International Conference on Computers in Education*, Singapore, November 26-27, 2012.
10. **Workshop Chair, Session Chair, Best Poster/Presentation Award committee**, *International Conference on Creativity & Cognition*, Georgia Institute of Technology, Atlanta, GA, USA, November 3-6, 2011.
11. **Co-chair, with Prof. Ashok K. Goel, Work in Progress Posters**, Technology, Pedagogy and Education, *International Conference on Computers in Education*, Kuala Lumpur, November 29-December 3, 2010.
12. **Associate Editor**, Joint Proceedings of the Work-in-Progress Poster and Invited Young Researcher Symposium, *International Conference on Computers in Education*, Kuala Lumpur, November. 29-December. 3, 2010.

#### CONFERENCE SESSION CHAIR

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1. **Session Chair**, Session 10: STEM Education, *International Conference on Computer Science and Technologies in Education*, April 18-20, 2025, Wuhan, China.
2. **Session Chair**, Session 9: Machine Vision and Virtual Technology Applications, *International Conference on Artificial Intelligence and Cloud Computing Conference*, December 14-16, 2024, Tokyo, Japan.
3. **Session Chair**, International MACEE Melaka State-Led Conference (IMMELC) 2023: Re-discussing Teaching & Learning and Promoting Sustainability in Education," November 4, 2023 in conjunction with MACEE's 60th anniversary. (virtual)
4. **Session Chair**, *International Conference on Frontiers of Artificial Intelligence and Statistics*, August 8-10, 2023.
5. **Session Chair**, *International Conference on Mathematics, Computation and Modeling*, Hangzhou, China, March 24, 2023.
6. **Session Co-Chair**, Human Factors and Intelligent Systems, *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 7-10, 2022.
7. **Session Chair**, *International Conference on Frontiers of Artificial Intelligence and Statistics (CFAIS 2021)*, Beijing, China, December 1-3 and co-located conference on Big Data, December 3-5, 2021.
8. **Session Chair**, Workshop on ICT Trends in Emerging Economies, *International Conference on Computers in Education*, November 22, 2021.
9. **Session Chair**, *International Workshop on Artificial Intelligence and Education*, Xi'an, China, November 19-21, 2021.
10. **Session Chair**, Applied Software Tools, Techniques and Related Software Engineering Models track, *International Conference on Intelligent Software Methodologies, Tools and Techniques*, September 22-24, 2020.
11. **Session Chair**, *International Conference on Computational Thinking Education*, August 20, 2020.

12. **Session Co-Chair**, Human Factors and Service Innovation and Management, *IEEE International Conference on Industrial and Management Engineering*, Macau, December 15-18, 2019.
13. **Session Chair**, 6<sup>th</sup> Smart City Symposium, IEEEJ-IEEE SMC (M), October 16-17, 2018, Malaysia.
14. **Session Chair**, *International Conference on Computational Thinking*, July 13-15, 2017, Hong Kong. [organized by Education University of Hong Kong, Massachusetts Institute of Technology and City University of Hong Kong]
15. **Co-Session chair** (Decision Analysis & Methods), *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 9-12, 2015.
16. **Co-Session chair** (Engineering Education & Training), *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 9-12, 2015.
17. **Session Chair and Organizing Committee**, *IEEE Smart cities workshop*, Universiti Putra Malaysia, 2015, 2017, 2018.
18. **Session chair (Human Factors)**, *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 9-12, 2014.

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#### CONFERENCE/WORKSHOP PROGRAM COMMITTEE

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1. **Program Committee**, *International Conference on Artificial Intelligence and Human-Computer Interaction (ArtinHCI)*, Kunming, China (2024-Current).
2. **Program Committee**, *International Conference on Advanced Research in Technologies, Information, Innovation and Sustainability (ARTIIS 2023)* (2023-Current).
3. **Technical Committee**, *International Conference on Digitalization and Management Innovation* November, Beijing, China (November 2022- Current).
4. **Program Committee**, *International Conference on Human Computer Interaction Theory and Applications*, (2017-Current)
5. **Program Committee**, *International Conference on Computer Supported Education*, (2013-Current), Special session on *Educational Knowledge Management* (2023, 2024), Special session on *Special Session on Computational and Mathematical Thinking through Problem Solving* (2024)
6. **Program Committee**, Software Engineering Processes and Applications (SEPA) workshop, (2020-2021), International Symposium on Software Quality (ISSQ) (2022 -2022), (2023-Current) *International Conference on Computational Science and Applications*.
7. **Program Committee**, *IEEE International Conference on Advanced Learning Technologies (ICALT)* (2010-2016, 2022-Current)
8. **Program Committee**, *International Workshop on Artificial Intelligence and Education*, China (November, 2021- Current)
9. **Program Committee**, *International Conference on Computers in Education*, Artificial Intelligence track (2025), Advanced Learning Technologies, Orem, UT, USA (2023), Learning Analytics, Platforms and Infrastructure (2016-8), Advanced Learning Technologies (ALT), Open Educational Resources, and Standards (2015), Open Standards and Advanced Learning Technologies track (2013), Artificial Intelligence in Education track (2012), Digital Game and Digital Toy Enhanced Learning and Society (GTEL&S) (2009, 2012-2013)

10. **Program Committee**, *International Conference on Cognition and Exploratory Learning in Digital Age (CELDA)*, (2005- Current)
11. **Technical Program Committee**, *IEEE TEMSCON-ASPAC*, Bangkok (2025)
12. **Reviewer**, *International Conference on Machine Learning and Intelligent Systems*, (November 2022-2024)
13. **Technical Program Committee**, *International Conference on Application of Cognitive Science and Artificial Intelligence*, December 2025.
14. **Technical Program Committee**, *International Conference on Computer Technology and Information Science*, Ordos, China, May 27-29, 2025.
15. **Technical Program Committee**, *International Conference on Computer Science and Technologies in Education*, Wuhan, China, April 18-20, 2025.
16. **Technical Program Committee**, *IEEE International Conference on Intelligent Computing, Information, and Control Systems*, March 26-28, 2025, Balkumari, Lalitpur, Nepal.
17. **Program Committee**, *International Conference on Smart Data Intelligence*, Kongunadu College of Engineering and Technology, India, January 9-10, 2025.
18. **Technical Program Committee**, *Artificial Intelligence and Cloud Computing Conference*, International Conference Center of Waseda University, Tokyo, Japan, December 14-16, 2024.
19. **Program Committee**, *Asia Conference on Cognitive Engineering and Intelligent Interaction*, December 14-16, 2024, Singapore.
20. **Program Committee**, *International Conference on Computer and Information Security*, August 2025.
21. **Program Committee**, *International Conference on Computer, Internet of Things and Smart City*, Zhuzhou, China, November, 2024.
22. **Program Committee**, *International Symposium on Intelligent Technology for Future Transportation*, Helsinki, Finland on October 19-20, 2024.
23. **Technical Committee Member**, *International Conference on Inventive Research in Computing Applications*, Coimbatore, India, 21-23, August 2024.
24. **Program Committee**, *Smart Manufacturing Technology, Electrical Engineering, and Robotics*, Penang, Malaysia, August 10-15, 2024.
25. **Program Committee**, *International Conference on Management and Sustainable Environment*, Universitas Muhammadiyah Yogyakarta, Indonesia, 7-8 August, 2024.
26. **Technical Program Committee**, *International Conference on Information Society and Smart City*, Shanghai, China, 15-16 June 2024.
27. **Technical Program Committee**, *International Conference on Sustainable Expert Systems*, Lekhnath, Nepal, 30-31 May, 2024.
28. **Technical Program Committee**, *International Conference on Algorithm, Automatic Control and Computer Engineering*, Kuala Lumpur, Malaysia, April 12-14, 2024.
29. **Technical Program Committee**, *International Conference on Artificial Intelligence in Human-Computer Interaction, Mathematics, Computation and Modeling*, Wuhan, China, (2023).
30. **Technical Committee**, *International Conference on Mechanical, Electric, and Industrial Engineering*, Sanya, China (May 2023)



31. **Technical Committee**, *International Conference on Advanced Sensing and Intelligent Systems*, Kunming, China (April 2023)
32. **Technical Committee**, *International Conference on Mathematics, Computation and Modeling*, will be Hangzhou, China (March 2023).
33. **Technical Committee**, *International Conference on Information Systems and Computing Technology*, Guilin, China (December 2022)
34. **Reviewer**, *ACM Interaction Design and Children Conference*, June 27-30, 2022, Braga, Portugal.
35. **Reviewer**, *ACM Designing Interactive Systems Conference*, June 13-17, 2022, Australia.
36. **Program Committee**, *International Conference on Frontiers of Artificial Intelligence and Statistics*, Hong Kong, China (December 2020- 2022)
37. **Technical Committee**, *International Conference on Frontiers of Mathematics and Artificial Intelligence*, organized by Hong Kong Society of Robotics and Automation (2019-2022).
38. **Program Committee**, *International Conference on Cognitive Healthcare Systems*, RV Institute of Technology and Management, October 2021, Bangalore, India (2021).
39. **Program Committee**, *International Conference on Advances in Computer-Human Interactions*, July 18-22, 2021, Nice, France.
40. **Program Committee**, *International Symposium on Project Management*, July 3-4, 2021, Beijing, China (2021-2022).
41. **Program Committee**, *IEEE International Conference on Artificial Intelligence and Computer Applications (ICAICA 2021)*, June 20-21, Dalian, China. (2021).
42. **Program Committee**, *Global Chinese Conference on Computers in Education*, (2012, 2013, 2014, 2020-2022).
43. **Program Committee**, *International Conference on Fuzzy Systems and Data Mining (FSDM)* (2020-2022)
44. **Program Committee**, *eLFA2020 (eLearning Forum Asia 2020)*.
45. **Program Committee**, *International Conference on Modern Management based on Big Data (MMBD2020)*.
46. **Program Committee**, *International Conference on Soft Computing and Machine Learning*, 2020.
47. **Program Committee**, *International Conference on Information and Communication Technology (ICoICT)*, 2019, 2020, 2023.
48. **Program Committee**, *International Conference on Soft Computing, Intelligent System and Information Technology*, 2020.
49. **Program Committee**, *International Conference on Computational Aspects of Network Science*, 2020.
50. **Program Committee**, *IEEE International Conference on Industrial and Management Engineering*, (2014-2016, 2020), Reviewer (2019).
51. **Reviewer**, *International Conference of the Learning Sciences* (2012, 2018, 2020).
52. **Reviewer**, *International Conference on Computer Supported Collaborative Learning*, 2015, 2019.
53. **Reviewer**, *IEEE International Symposium on Technology Management and Emerging Technologies*, Langkawi, December 18 – 20, 2018.



54. **Reviewer**, *International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery*, China. 2018, 2019
55. **Program Committee**, *International Conference on Soft Computing and Pattern Recognition*, Vellore, India December 19 - 21, 2016.
56. **Program Committee**, *International Conference on Computational Aspects of Social Network*, Vellore, India December 19 - 21, 2016.
57. **Program Committee**, *International Conference on Invention and Design* (organized by the Malaysian Invention and Design Society and University Malaysia Perlis), 2016.
58. **Program Committee**, *World Congress on Information and Communication Technologies* (2015),
59. **Reviewer**, *IEEE International Symposium on Mathematics Sciences and Computing Research*, Universiti Teknologi Mara, Perak, May 19-20, 2015.
60. **Program Committee member** of WICT14\_ST\_Bio-Inspired Techniques for Internet-of-Things (2014).
61. **Program Committee**, *IIAI International Conference on Learning Technologies and Learning Environments (IIAI-LTLE 2013)*, Matsue, Japan, August 31 to September 4, 2013.
62. **Program Committee**, *Taiwan Computer-Supported Collaborative and Personalized Learning (CSCL & CSPL) workshop*, National Chengchi University, March 29, 2013.
63. **Program Committee**, *Pacific-Rim International Conference on Artificial Intelligence*, Kuching, Malaysia, dates, September 5-7, 2012.
64. **Program Committee**, *IIAI International Conference on Learning Technologies and Learning Environments*, Fukuoka, Japan, Sept 20-22, 2012.
65. **Program Committee**, Workshop on Blended Learning in Higher Education & the Workplace: Tools, Practices & Experiences, *Malaysian Joint Conference on Artificial Intelligence (MJCAI)*, July 18-19, 2011, Kuala Lumpur, Malaysia. [collaboration between Hong Kong Polytechnic University and MIMOS, Malaysia].
66. **Program Committee**, *International Conference on Semantic Technology and Information Retrieval*, Kuala Lumpur, June 28-29, 2011.
67. **Program Committee**, *International Conference on Technology for Education*, Indian Institute of Technology, Bombay, India. (2010-2015).
68. **Program Committee**, *International Workshop on Enabling User Experience with Future Interactive Learning Systems (UXFUL 2010)*, Austria, September 16-17, 2010.
69. **Reviewer**, *International Conference on Information Security and Assurance*, Miyazaki, Japan, June 23-25, 2010.
70. **Program Committee**, *International Workshop on Social and Personal Computing for Web-Supported Learning Communities* (2009-2010).
71. **Program Committee**, *International Conference on Knowledge Management*, Hong Kong, China (2009-2010).
72. **Program Committee**, 2<sup>nd</sup> *IEEE International Conference on Digital Games and Intelligent Toys Based Education (DIGITEL 2008)*, November 17-19, 2008, Banff, Canada.
73. **Program Committee**, *International Workshop on Cognitive Aspects in Intelligent and Adaptive Web-based Educational Systems* (2007, 2008) in conjunction with ICCE 2007, 2008.

- 74. **Technical Committee**, *5<sup>th</sup> Chapter Conference on Advances in Cybernetic Systems* 2006, IEEE Systems, Man & Cybernetics UK and Republic of Ireland Chapter, September 7-8, 2006, Sheffield Hallam University, UK.
- 75. **Technical Program Committee**, *IEEE International Symposium on Multimedia*, Paradise Point Resort & Spa, San Diego, December 11-13, 2006.
- 76. **Program Committee**, *International Conference on Web-based Communities and Social Media*, (2013- ).
- 77. **Program Committee**, *Web-based Communities Conference* (2005-2012)

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| The above are Professional contributions. National and University Contributions start from the next page. |
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## NATIONAL CONTRIBUTIONS

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### MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION (MOSTI)

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- 2024-6 **Member of the Panel of Assessors**, e-Dana R & D grant, Jan 1, 2024-31 December, 2026.
- 2023 **Participant**, Strengthening the management of funds workshop. Putrajaya. Aug 7-8, 2023.
- 2021-3 **Member of the Panel of Assessors**, e-Dana R & D grant, Jan, 2021-31 December, 2023.
- 2009 **Expert/participant**, *'Workshop to review National Research, Development & Commercialization (R&D&C) funding'*, Academy of Sciences Malaysia, November 4, 2009 (organized by the Malaysian Academy of Sciences as appointed by the Ministry of Science, Innovation and Technology)
- Panelist/Assessor**, *Innovative Public-Private Sector Collaborative Research Award Session*, August 18-19, 2009.
- Expert/participant**, post- *'Workshop to review National Research, Development & Commercialization (R&D&C) funding'*, Palace of the Golden Horses, May 29-31, 2009 (organized by the Malaysian Academy of Sciences as appointed by the MOSTI) [contributed via e-mail]
- 2008 **Panelist/Assessor**, *Innovative Public-Private Sector Collaborative Research Award Session*, Putrajaya International Convention Center, August 27, 2008.

### MALAYSIA BOARD OF TECHNOLOGISTS, (MBOT) MALAYSIA

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- 2020-2026 **Member** of the Panel of Assessors, Technology and Technical Accreditation Council, (Jan 1 2020-31 December 2021, received November 24, 2019),  
renewed 24/12/2021-01/01/2024, renewed 1/4/2024-31/3/2026.  
Membership number: 0179  
Assessed SARJANA MUDA TEKNOLOGI MAKLUMAT DENGAN KEPUJIAN (MBOT/FA/IT/0/ 02/ 0047)  
UNIVERSITI TERBUKA MALAYSIA [Full accreditation]: November 28-29, 2023

### IEEE

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#### IEEE Systems Council

Exco (18/1/2025- )

#### IEEE Consultants Network Affinity Group (M)

**Founding committee/Committee member**, IEEE Consultants Network Affinity Group (November 2016-December 2018, Coopted Research Consultant (2019-2021), member (2022- )

#### IEEE Technology Management Society (M)

**Co-founder/Vice-chair** IEEE Technology Management Council (M) (February 2014- February 2015), **Committee member**, IEEE Technology Management Society (M) (February 2015-Feb 2022), **Auditor** (Feb 2023-2024), **Exco** (2025-)

Co-coordinator, Judge, 2019-2021 IEEE TEMS (M) track final year project competition.

Judge, Sunway-Monash-PetroSains Gerontology Challenge (April-May, August 2018).

## IEEE Systems, Man, Cybernetics (M)

**Member**, 2013- ; **Committee member**, IEEE Systems, Man, Cybernetics, (M) (January 2014-Current), **Vice-Chair** (January 19, 2019-December 2020), **Exco** (2021-2022), **co-opted Executive committee** for DLP (Feb 2023- )

**Award co-chair, Program Committee**, International Conference of Systems, Man and Cybernetics 2024, Kuching, Sarawak

**Judge**, 2018, 2019, 2020, 2021, 2022 IEEE (M) capstone project competition

## KHAZANAH RESEARCH INSTITUTE

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2024 Participant in Panel Discussions, December 10, 2024 at KRI

## FULBRIGHT

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2025 **Exco**, Fulbright Alumni Association of Malaysia

2024 One of the **reviewers** for a US-Malaysian Student Fulbright application, representing the Fulbright Alumni Association of Malaysia.

**Panel of interviewers** for the prestigious Fulbright Global Undergraduate Exchange Program (Global UGRAD) 22-24 Jan, , representing the Fulbright Alumni Association of Malaysia.

2022-3 **Steering Committee**, MACEE's 60th anniversary preparations, **Organizing committee member** of the MACEE Melaka-led mini conference on teaching and learning, in conjunction with MACEE's 60<sup>th</sup> anniversary (funded by MACEE maximum RM2, 500)

2022-4 **Honorary Auditor**, Fulbright Alumni Association of Malaysia

2014-8 **Honorary Treasurer**, Fulbright Alumni Association of Malaysia

2013 **Scientific Committee**, Fulbright Alumni Association of Malaysia-Perdana School of Policy, Science and Innovation, *International Conference on Innovations in Health and Wellness in the 21<sup>st</sup> Century*, December 10-11, 2013, UTM, Selangor.

2010-1 **Honorary secretary**, Fulbright Alumni Association of Malaysia

## MALAYSIA INVENTION AND DESIGN SOCIETY

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2025 **Exco**

2022-4 **Honorary Secretary** (18<sup>th</sup> June 2022-2024), **Editorial Committee**, Malaysian Invention and Design Society newsletter (2022- )

2010- **Judge**, International Invention, Innovation and Technology Exhibition

2015-6 **Chief Judge**, Art and Creativity Exhibition

## **MIMOS**

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- 2014      **Expert**/participant, representing Universiti Tunku Abdul Rahman to the Development of a National Blueprint on Internet of Things, May 14-15, 2014.

## **MINISTRY OF HIGHER EDUCATION**

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- 2008      **Expert**/observer to the *Malaysian-Indian Quality Assurance Framework on Developing and Assessing Multimedia Learning Materials*, November 1, 2008. Best Western Sri Pacific (formerly Pan Pacific), KL

## **UNESCO**

- 2006      Invited speaker to the 2<sup>nd</sup> UNESCO workshop: Issues for Communication and Information at International and Regional levels, Ministry of Information, Mines Palace Beach & Spa, Nov. 8-12, 2006.  
Represented MMU for the 2<sup>nd</sup> Council and 3<sup>rd</sup> Pre-Council UNESCO workshop on Malaysia's stand regarding International and Regional Communication and Information Issues, India.

## **ASEAN CENTER OF EXCELLENCE (COE) ON E-LEARNING**

- 2006      Represented MMU to present a country paper on E-learning and E-learning technologies, November 6-7, 2006, Hyderabad, India under the India-ASEAN Cooperation Funding  
2005      Part of the organizing committee for the ASEAN Seminar on e-learning, under the Ministry of Foreign Affairs and Ministry of Science, Technology and Innovation, 2005.

## **ASIAN E-UNIVERSITY ROUNDTABLE**

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- 2005      Represented MMU for the ACD Roundtable on Concept and Establishment of Asia e-University organized by Open University, Malaysia in collaboration with the Malaysian Ministry of Foreign Affairs and Ministry of Higher Education, 2005.

## **JAPANESE MALAYSIAN GOVERNMENT'S TELE-EDUCATION SATELLITE PROJECT, THE NETWORKED MULTIMEDIA EDUCATION SYSTEM (NMES)**

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- 2002-      Head, Content Development Task force, Japanese-Malaysian tele- education satellite  
2007      project, Networked Multimedia Education System
- Explored ways to improve teaching and learning using the JICA system

## **STANDARDS AND INDUSTRIAL RESEARCH INSTITUTE OF MALAYSIA'S INFORMATION, TELECOMMUNICATIONS & MULTIMEDIA TECHNICAL COMMITTEE ON E-LEARNING GRID**

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- 2007      Contributed as an expert to TC8 ISC G Workshop on 3-year ISC G Workplan (2008-2010), December 15-16, 2007, Puteri Resort, Melaka.
- 2002      Discussed development of Malaysian e-learning standard

## SERVICE TO THE UNIVERSITY (INTERNALLY RELATED)

### UNIVERSITY LEVEL

#### Sunway University

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2025               | Internal reviewer for School's Early Career Research grant                                                                                                                                                                                                                                                                                                                                                                                         |
| 2025               | Internal reviewer for School's Accelerator grant                                                                                                                                                                                                                                                                                                                                                                                                   |
| Feb 27, 2024       | Internal reviewer for School's Early Career Research grant.                                                                                                                                                                                                                                                                                                                                                                                        |
| Aug. 2, 2023-      | School Associate (advisor, assessor, moderator) for MQA's APELA for the Masters in Data Science ODL program                                                                                                                                                                                                                                                                                                                                        |
| June 27, 2023      | Co-organized Prof. Saeid Nahavandi's talk on <i>Emerging Haptically-Enabled Systems</i> with Taylor's University and Monash University (M)                                                                                                                                                                                                                                                                                                         |
| May 27, 2021       | Organizer, invited talk by Prof. Eric Tsui, Hong Kong Polytechnic University and panel discussion by Prof. Prof. Dr.-Ing. Habil. Norbert Gronau (University of Potsdam, Germany) and Prof. Alan Kin Tak Lau (Swinburne University of Technology, Australia) and Dr. Robest Yong (Innovation Ambassador, Yayasan Inovasi Malaysia), IEEE TEMS (M)-Sunway University, May 27, 2021.                                                                  |
| Nov. 28-29, 2019   | Internal Auditor for MQA Programme Accreditation - Masters in Visual Communication and Media Studies                                                                                                                                                                                                                                                                                                                                               |
| Aug. 2018-Jan 2019 | Submitted the FRGS-funded healthcare systems and extended healthcare systems for socio-cognitive-affective-physical engagement for seniors as part of SGD3 to the Jeffrey Sachs Centre for Sustainable Development and to Sunway iLabs.<br><br>Led two other researchers from the department for an interview with PetroScience's <i>Learning Bytes</i> podcast on Gerontology challenges, as offshoot from the Fundamental Research Grant Scheme. |
| March-Apr. 2018    | Introduced CEO of icycle/Terra Phoenix, an MMU startup on waste management, Assoc. Prof. Dr. Tan Ching Seong to Director of Sunway iLabs, Dr. Matt van Leuwen and to Jeffrey Sachs Centre on Sustainable Development's Prof. Leong Choon Heng. This led to bigger collaborative projects between Sunway Group and Dr. Tan's startup.                                                                                                               |
| 2017-2018          | Started the collaboration with Salesforce through the courses Customer Relationship Management and Customer Relationship Application Development (Salesforce's ADM201 and DEV201), internship with Salesforce's industry partners and B. Information Systems (Hons) students sitting for Salesforce's Professional Certification Exam.                                                                                                             |
| Aug.-Oct. 2016     | Reviewer, Sunway University's internal grant                                                                                                                                                                                                                                                                                                                                                                                                       |

- 2016 Facilitated discussions with Imagineering Institute, Iskandar, Malaysia, leading to the signing of a Memorandum of Understanding between Imagineering Institute and Sunway University, Malaysia.
- Jan. 2015-  
Dec. 2017 Program Chair, B. Sc. (Hons) Information Systems, Department of Computing and Information Systems, Sunway University, Malaysia.
- Oct. 2015 –  
2016 Helped to draft a new program synergizing Faculty of Arts and Faculty of Science

#### **Universiti Tunku Abdul Rahman (UTAR)**

- 2015 Faculty R & D Committee
- Feb. 2014 Reviewer, UTAR Research Fund
- Jan. 2014 University Standing Committee on Online Teaching and Learning

#### **Multimedia University**

- March  
2011-Aug.  
2011 Deputy Director, Centre for Teaching and Learning
- Refined the current academic evaluation criteria and integrate with outcome-based evaluation
  - Designed a proactive monitoring and remedial system
  - Designed a career development information system
- Jan. 2011-  
Aug. 2011 Internal reviewer, Malaysian Ministry of Higher Education's Exploratory Research Grant Scheme
- March  
2010-Aug.  
2011 Alternate Viva-voce Chair, Multimedia University
- Internal reviewer, Ministry of Science Technology and Innovation's Fundamental Research Grant Scheme
- Internal reviewer, MMU's special funding for Social Science Research
- Aug. 2008-  
Aug. 2011 Chairperson, Special Interest Group on Interoperable and Distributed Web Technologies and Human Factors Engineering
- Apr 2008 -  
Aug. 2011 Chairperson, MMU's promotion criteria committee (IT cluster)
- Aug. 2007  
-Aug. 2008 Chairperson, Center for the Learning Sciences, Multimedia University
- 2005-2007 Member of the University's Education Innovation Committee
- Monitored utilization of the University's Learning Management System and suggest improvements in teaching and learning

2002-2005 Head, Content Development Task force, Japanese-Malaysian tele-education satellite project, Networked Multimedia Education System

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**FACULTY/SCHOOL/DEPARTMENT LEVEL**

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**Sunway University**

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|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| July 4, 2025                | Co-organized Academic Writing Workshop Series for Computer Science by Bon View Press, led by Deputy Dean (R & D)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| May 9, 2025                 | Co-organized invited talk by IEEE (M) Chair, Ir. Dr. Bernard Lim, with IEEE TEMS (M) and IEEE SYS (M) [virtual]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| March 12, 2024-<br>Current  | One of the assessors for postgraduate studentships/scholarships.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Feb. 22, 2024-<br>Current   | Program Committee, B. Sc. (Hons) Software Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| July 6, 2023                | Organized Intro to BITAF talk: IT and IS alignment by Ms. Alecia Heng, Vice-President IASA, Chief Business Architect, ATD Solutions to MAN3154 Information Systems Management and Strategy students                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| May 4, 2023                 | Organized Intro to BITAF talk: Communications and Requirements by Ms. Alecia Heng, Vice-President IASA, Chief Business Architect, ATD Solutions to BIS2102 Information Systems Analysis and Design students                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| May 2, 2023<br>May 17, 2022 | Organizer, invited talk by Prof. Eric Tsui, Hong Kong Polytechnic University.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2022-<br>Current            | School teaching and learning committee, School appeals/malpractice/mitigating circumstances panel committee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Sept. 11, 2021              | Coordinated/invited Dr. Robest Yong, representing Yayasan Inovasi Malaysia, as invited speaker to IEEE CNAG (M).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2016 –<br>Current           | <p>Internal examiner for departmental directed reading, postgraduate proposal defense, work of completion seminar and viva</p> <p>M. Computer Science. (2025). A Long Short-Term Memory Model with an Attention Mechanism for Intrusion Detection. (chair, proposal defense).</p> <p>PhD (Computing). (2025). Factors Influencing the Adoption of Blockchain Technology in Malaysia's Healthcare Industry: A Meta-Analytic Structural Equation Modelling on UTAUT (examiner, wcs)</p> <p>PhD (Computing) (2025). Adopting Artificial Intelligence In Higher Education: Challenges, Opportunities, And Ethical Considerations (examiner, proposal defense)</p> <p>M. Computer Science (2024). Development of A Framework for Unplugged Computational Thinking Activities in Improving the Interest and Skills in Programming. (examiner, wcs).</p> <p>M. Information Systems (2023). Deepfake detection using an enhanced ensemble learning method (chair, proposal defense)</p> <p>M. Computer Science (2023). Development of a Framework for Unplugged Computational Thinking Activities in Improving the Interest and Skills in Programming. (examiner, proposal defense)</p> |



PhD (Computing). (2023). Multi-agent Deep Reinforcement Learning for the Optimization of Global and Local Network Performances in Mobile Networks. (chair, wcs).

PhD. (Computing) (2023). Small Sample Learning in Image Segmentation with Prior Knowledge. (chair, proposal defense)

M. Information Systems. (2022). Factors influencing the acceptance of blockchain: Real estate industry. (examiner, wos).

PhD. (Computing) (2022). An enhanced integration of cyber-analytics Capability Maturity Model (CCMM) for building ICT security infrastructure in Malaysia. Sunway University, Malaysia (Chair, proposal defense).

M. Computer Science (2022). A data-centric Artificial Intelligence approach to identify significant factors towards student engagement. Sunway University, Malaysia (examiner, wos).

PhD. (Computing) (2022). A reviewer evaluation system based on author & reviewer profiling to avoid possible paper retraction. Sunway University, Malaysia (examiner, wos).

PhD. Computing. (2022). PolyAQG – An automated questions generation framework. Sunway University, Malaysia (examiner, wos)

M. Information Systems. (2022). Analysing Customer Experience (CX) intent using CXTM Framework. Sunway University, Malaysia (examiner, wos).

PhD. (Computing) (2022). Harvesting knowledge from groupware with emphasis on tacit knowledge. Sunway University, Malaysia (Chair, wos).

PhD. (Computing) (2021). Distributed learning-based energy-efficient operations in ultra-dense network. Sunway University, Malaysia (Chair, proposal defense)

PhD. (Computing) (2021). Behavioral Intention to Use Pervasive Technology in Higher Education: An Integration Model of TAM and TTF. Sunway University, Malaysia (examiner, proposal defense)

M. Information Systems (2021). Design and analysis of a Virtual Reality game to address issues in introductory programming learning. Sunway University, Malaysia (examiner, wos).

M. Information Systems. (2021). Experience first: Investigating smart wearable technology acceptance among elderly citizen. Sunway University, Malaysia (examiner, wos).

PhD. Computer Science (2020). Automated Question Generation (AQG) using Logico-Semantic structures and ontologies. Sunway University, Malaysia (examiner, proposal defense)

PhD. Computer Science (2020). Effectiveness of olfactory, audio and haptic in learning things for visually impaired in edutainment environments. Sunway University, Malaysia (examiner, wos).

M. Information Systems (2020). An extended expectation-confirmation model of continuance intention to use online food delivery services. Sunway University, Malaysia. (examiner, proposal defense)

M. Computer Science (2018). Framework for rating value expressions. Sunway University, Malaysia. (Chair, wos).

M. Information Systems (2019). The influence of privacy-enhanced technologies (PETS) adoption on work Processes. Sunway University, Malaysia. (examiner, wos).

PhD. (Computing) (2018). Odour search and spiral/zigzag tracking algorithm using drone technology. Sunway University, Malaysia. (Chair, wos).

PhD. (Computing) (2016). Emotion recognition using facial expression for remote learning environment. Sunway University, Malaysia. (examiner, work of completion seminar).

M. Computer Science (2015). An investigation into calculating the pressure and the force feed-back for tele-haptic applications. Sunway University, Malaysia (chair, proposal defense)

Oct. 30, 2022 Organized talk by Mr. Adrian Tiong, Manager, Salesforce APAC Talent Alliance Manager, to the HCI August 2022 students.

Nov.-Dec. 2021 Member, internship taskforce

|                              |                                                                                                                                                                                                                                                                                                     |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| June 25 <sup>th</sup> , 2021 | Organized talks by the Mobile Application Development Association, Malaysia, encompassing Ambition Pte. Ltd., and Agmo Studio.                                                                                                                                                                      |
| March 2021-Dec. 2022         | Program Leader, B. (Hons) Information Systems, B. (Hons) Mobile Computing with Entrepreneurship and Diploma in Information Technology.                                                                                                                                                              |
| June 12, 2020                | Co-organizer, <i>New ways of learning at PolyU in the COVID-19 era</i> , Prof. Eric Tsui, Hong Kong Polytechnic University, IEEE TEMS (M) webinar.                                                                                                                                                  |
| Jan-Dec. 2020                | Credit-exemption assessor for ITC1014 Business Computing                                                                                                                                                                                                                                            |
| Dec. 9, 2019                 | Coordinated discussions by Intel Penang with the Department of Computing and Information Systems, Sunway University.                                                                                                                                                                                |
| Nov. 11, 2019                | Invited Prof. Peng Shuhong, Visiting Professor from Huizhou University, China to give a talk on his research to the Project Management class and discussed possibilities of using his remote sensing technologies for Sunway University's smart parking, then recommended him to Prof. Yau Kok Lim. |
| Nov. 4, 2019                 | Organized talk by Project Management Institute's (M) representative                                                                                                                                                                                                                                 |
| Oct. 15, 2019                | Contributed to introduction and phasing of Alibaba GET course into SU's syllabi as open elective across programs                                                                                                                                                                                    |
| Sept.-Oct., 2018             | Organized 2 talks by Petronas experts on IT Trends and Strategy and Project and Portfolio management                                                                                                                                                                                                |
| March-May 2018               | Co-organized Salesforce professional exam for the B. Information Systems students.                                                                                                                                                                                                                  |
| Dec 2017                     | Suggested opening Salesforce's ADM201/CRM to other departments to make it viable, as mentioned in the 2018 February submission to Lancaster University's Annual Teaching Report.                                                                                                                    |
| March 19, 2017               | Co-organized talks by Prof. Eric Tsui, Hong Kong Polytechnic University, Mr. Andy Ho (Salesforce), Ms. Alexia Ho (ATD Solutions/IASA), co-organized talk and visit by and to MIMOS.                                                                                                                 |
| April 19, 2016               | Co-organized talk by Prof. Eric Tsui, HK Polytechnic University, HK on <i>Re-wiring our brain in the Cloud: Opportunities and Challenges in the Big Data era</i> .                                                                                                                                  |
| Oct. 26, 2015                | Co-organized talk by Tan Sri Prof. Emeritus Academician Augustine Ong and Prof. Stephen Ong on <i>Advice to Inventors</i> and <i>From Idea2IPO</i> , [co-organized with IEEE SMC (M)].                                                                                                              |
| Sept. 22, 2015               | Co-organized talk by Prof. Adrian David Cheok, Professor of Pervasive Computing, City University London, and Mr. Christopher Chew, on Multisensory Future of the Internet and MOSTI grants [co-organized with IEEE TEMS (M)].                                                                       |
| Sept. 2-3, 2015              | Led two researchers from the Department of Computing and Information Systems in the <i>IEEE Smart Cities Workshop</i> , co-organized by IEEE SMC (M), Session Chair.                                                                                                                                |

### **Universiti Tunku Abdul Rahman, Malaysia (UTAR)**

|               |                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------|
| March 2014    | Panel, Postgraduate Workshop, partly contributed to the design of the PhD (Arts and Design) proposal |
| Oct 2013-2015 | Faculty R & D and Postgraduate Committee, Designed the Masters of Arts (Arts and Design) proposal    |

### **National Central University, Taiwan**

|                     |                                                                                                                                                                                                                        |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aug. 2011-June 2013 | Panel, Masters and PhD Qualifying Exam, National Central University<br><br>Committee Member, Revision of Qualifying Examination Papers, Graduate Institute of Network Learning Technology, National Central University |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### **Multimedia University**

|                      |                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------|
| Feb. 2010-Aug. 2011  | Member, Faculty Staff Assessment Committee                                                                              |
| Jan. 2010-Aug. 2011  | Committee Member, Masters of Computer Science/Masters of IT                                                             |
| Dec. 2009-Aug. 2011  | MMU's Faculty of Information Technology's Examination Panel                                                             |
| Sept. 2008-Aug. 2011 | Faculty liaison to the university's strategic planning committee<br>Participant (Balanced Scorecard workshop)           |
| Oct. 6, 2010         | Facilitator, "Effective & Responsible Postgraduate Supervision" Forum                                                   |
| Sept 28, 2010        | Facilitator, Hands-on Journal Publication Workshop                                                                      |
| July 30, 2010        | Session chair, 1 <sup>st</sup> Faculty of Information Technology Colloquium                                             |
| 2006-2007            | Member of the Faculty Academic Planning Committee<br>Program Coordinator, Bachelor of Multimedia (Software & Animation) |

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## **UNDERGRADUATE FINAL YEAR/CAPSTONE PROJECT SUPERVISION**

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### **Sunway University, Malaysia**

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|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| April 2024-     | On-going                                                                                                                                                                                                                                   |
| April-Dec2023   | <ul style="list-style-type: none"><li>• Google Assistant for e-learning, e-health, e-commerce</li><li>• Perceptions towards Google Assistant</li><li>• Metaverse for Art Museums</li><li>• Games to teach Unity game development</li></ul> |
| March-Dec. 2022 | <ul style="list-style-type: none"><li>• Multiplayer ExplorerAR game</li><li>• AR interlinked e-commerce systems</li><li>• Reflective learning systems</li><li>• Reflective e-health systems</li></ul>                                      |

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|                      | <ul style="list-style-type: none"> <li>• Games for autistic children</li> <li>• Mathematics games for school children</li> <li>• Minigames for e-commerce systems</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Aug.-Dec. 2021       | <ul style="list-style-type: none"> <li>• Social CRM in B2C tourism (persuasion)</li> <li>• Personalized tourism through the use of video games (persuasion)</li> <li>• Personalized tourism: Upselling and cross-selling (persuasion)</li> <li>• PixoMap: Fun games using SQL (persuasion)</li> <li>• QuizMap games for seniors</li> <li>• Using RenPy to Assist Autistic Individuals with Stress Management</li> <li>• Fun games for autistic children</li> <li>• Personalized education</li> </ul>                                                                                                                                                       |
| Aug. 2020-March 2021 | <ul style="list-style-type: none"> <li>• QR Monopoly fun game</li> <li>• Fun games for children with Autism (Mild)</li> <li>• Fun digital board game (Three Kingdoms)</li> <li>• Fun games for seniors with dementia (game and recommender)</li> <li>• Perception of Malaysians towards the government's covid-19 measures (Applied Statistics)</li> <li>• Perception of Malaysians towards the government's covid-19 measures (Economics/Information Science)</li> </ul>                                                                                                                                                                                  |
| Aug. 2019-July 2020  | <ul style="list-style-type: none"> <li>• Travel planner</li> <li>• The impact of strategic and fast-paced video games on problem-solving skills</li> <li>• Challenges and implications of industrial revolution 4.0 to Malaysia</li> <li>• Effects of Google cardboard-AR maze games on learning</li> <li>• Perceptions towards neuroscience: A survey and implications</li> </ul>                                                                                                                                                                                                                                                                         |
| March-Dec. 2019      | <ul style="list-style-type: none"> <li>• Design and Development of an Augmented Reality-Gamified Fun and/or Rehabilitation Exercise Prototype</li> <li>• Location-aware recommender/reminder system</li> <li>• Knowledge representation towards the generation of excitement in video games for retro first-person shooters (co-supervisor)</li> </ul>                                                                                                                                                                                                                                                                                                     |
| Jan. 2019            | <ul style="list-style-type: none"> <li>• Fishbone-Pareto Chart as data mining tools</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Nov. 2018            | <ul style="list-style-type: none"> <li>• Augmented Reality-based e-commerce, Augmented Reality (AR) Puzzle Matching Game, Video game and Augmented technology for behavior change</li> <li>• Developing a community event sharing/hosting website to improve quality of life among Malaysia's senior citizens.</li> <li>• Developing personalized health customer relationship management system</li> <li>• A study of socio-cognitive-affective engagements and playfulness among older generation</li> </ul>                                                                                                                                             |
| March 2018           | <ul style="list-style-type: none"> <li>• A synergistic KM approach to enhancing EC sustainability</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| March-Dec. 2017      | <ul style="list-style-type: none"> <li>• Variants of a mobile bingo game, Web and mobile-based Augmented Reality to encourage exercise</li> <li>• Malaysia Smart City and Social Media Marketing: Perception and Implication to Community Participation for Transportation and Lifestyle</li> <li>• Enablers and barriers to social commerce (user communities/ support group): A KM Approach</li> <li>• Perception of Malaysian towards smart home technology</li> <li>• Influence of Augmented Reality on STEM</li> <li>• STE(A)M and its implications</li> <li>• Development of meta web crawler: Data search, Integration and Visualization</li> </ul> |
| Aug. 2016            | <ul style="list-style-type: none"> <li>• Gamification to enhance digital lifestyles, e-crafting</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| March 2016           | <ul style="list-style-type: none"> <li>• Creating awareness of mobile hacking (Undergrad), Exergaming (Diploma)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

### **Multimedia University, Malaysia**

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|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2011/2012 | Student profiling and career development portal, Web-service-based community-oriented student career development portal, Online event management system |
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| 2010/2011 | Automated tagging integrated with OLAP for CRMS, Generic Online Analytical Processing Tool, Web-mining based University Search Portal, Intelligent collaborative e-storytelling |
| 2009/2010 | Web-based divisional BSC strategy map and scorecard                                                                                                                             |
| 2007/2008 | Interactive e-learning for sustainable development                                                                                                                              |
| 2006/2007 | Mobile tourist assistant II, Games-based learning II, Job succession planning for HRM, Dynamic assembly of multimedia contents on the mobile phone                              |
| 2005/2006 | Tourist assistant for mobile phones, Learning through games                                                                                                                     |
| 2004/2005 | Advisory system for design of interfaces in authoring tools, Mobile e-learning                                                                                                  |
| 2003/2004 | Virtual lab for e-learning, Online entertainment services on cellular phone                                                                                                     |
| 2002/2003 | Teleworking support service, E-medical portal                                                                                                                                   |
| 2001/2002 | Personalized authoring tool for intermediate and expert users, Interactive help for authoring tools, Knowledge management systems for software dev. companies                   |

## COMMUNITY SERVICE

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1. Jan-March 2023 Coordinated department's MU4 2422 Community service course
2. December, 2022 Organizing committee, Global MINDS Camp, Pusat Sains Negara, Bukit Kiara.
3. Aug-Dec. 2022 Coordinated department's MU4 2422 Community service course
4. June 2022 Helped the Alzheimer's Disease Foundation of Malaysia to analyze data on a dementia-friendly shopping mall survey
5. Jan 2020 Coordinated department's MU4 2422 Community service course
6. Oct 13, 2018 D' Happy Club's community carnival: Technologies for seniors.
7. 2016-2018 Helped the Alzheimer's Disease Foundation of Malaysia with crafts and games, picture cards (for possible Fulbright AEIF grant).
8. March-July 2017 Food truck system [ISAD]
9. March-July 2016 Community-family-police notification/alert system [ISAD]
10. 2009-**Current** All assignments and capstone/final year projects, are community service-oriented in line with e-commerce sustainability, design thinking and computational thinking
11. Nov 13-14, 2010 Click! Camp: Alumni Community Development Program on *Teaching English to school children*, organized by the US Embassy, Cherating, Pahang, Malaysia.
12. June 2009 Helped out with Atlanta's Project Open Hand during Fulbright stint in Georgia Tech.