



Chien-Sing LEE*

Citizenship:

Malaysian

Age: 55++

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: N-5930-2016	https://www.webofscience.com/wos/author/record/1346981 h-index: 10
SCOPUS	https://www.scopus.com/authid/detail.uri?authorid=57205431488 h-index: 14
Google Scholar	https://scholar.google.com/citations?user=wCRM7wsAAAAJ&hl=en h-index: 20
ORCID	https://orcid.org/0000-0002-4703-457X
DBLP	https://dblp.org/pid/45/5141.html

EMPLOYMENT

- | | |
|-----------------|--|
| 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- | ❑ Associate Professor, Department of Graphic Design and Multimedia, Faculty of Creative Industries, Universiti Tunku Abdul Rahman, Malaysia (permanent) |
| May 17, 2015 | ❑ 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 |
| Aug 15, 2011- | |
| July 31, 2013 | |
| June 23, 2008- | ❑ Associate Professor, Faculty of Information Technology*, Multimedia University (permanent) [<i>Faculty of Computing and Informatics as of 2010</i>] |
| Aug 2011 | |
| Dec 16, 2005- | ❑ Senior Lecturer, Faculty of Information Technology, Multimedia University (permanent) |
| July 2008 | |
| March 31, 1999- | ❑ Lecturer, Faculty of Information Technology, Multimedia University (permanent) |
| 2005 | |
| 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 (oral, reading and writing), 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

EDUCATION

PhD (Information Technology) (5th July 2005)

Title of dissertation Hypermedia interaction design: A cognitive constructivist approach (hybrid unsupervised learning)

Institution Multimedia University, Malaysia

Supervisor [Prof. Yashwant Prasad Singh](#)

- 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.
- 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) (30th 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) (28th 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.*

OVERSEAS TRAINING

2019, March 9-18	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

July 27, 2020	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) https://www.ireb.org/en/service/cpre-registry-list/15533/
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

TEACHING

Sunway University, Malaysia

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

Postgraduate (online distance learning)

2024 MET5033 Data Science Ethics (July-Aug)

Undergraduate

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- May 2015 Design Reflective Practice (graphic design), Design Research (graphic design), 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 in 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

PROFESSIONAL AFFILIATIONS

MEMBERSHIP

1. **Member**, ACM (Jan 13, 2023-Current). Membership number: 5847349, 9448195
2. **Member**, Design Society, Scotland (February 15, 2019-2020)
3. **Member**, IEEE Smart Cities Community (2017-Current)
4. **SIG Member**, Machine Intelligence Labs, University of Washington, USA. (2016-Current)
5. **Member**, IASAGlobal (IT Architecture) (2016-Current) [started in MMU 2009 but not a member then]
6. **Member**, Centre for Computing and Intelligent Systems, Universiti Tunku Abdul Rahman (2013-2015)
7. **Member**, International Learning Sciences Society (2009, 2016, 2018)
8. **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)
9. **IEEE Member** (2001-)(Membership number: 41466049), **Senior Member** (September 2007- Current).
10. **IEEE SMC Member**, 2013- ; **Committee member**, IEEE Systems, Man, Cybernetics, (M) (January 2014-Current), **Vice-Chair** (January 19, 2019-December 2020), **Executive committee** (2021-2022), **co-opted Executive committee** for DLP (Feb 2023-5)
11. **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-)

12. **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-)

INTERNATIONAL EXECUTIVE COMMITTEE

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]

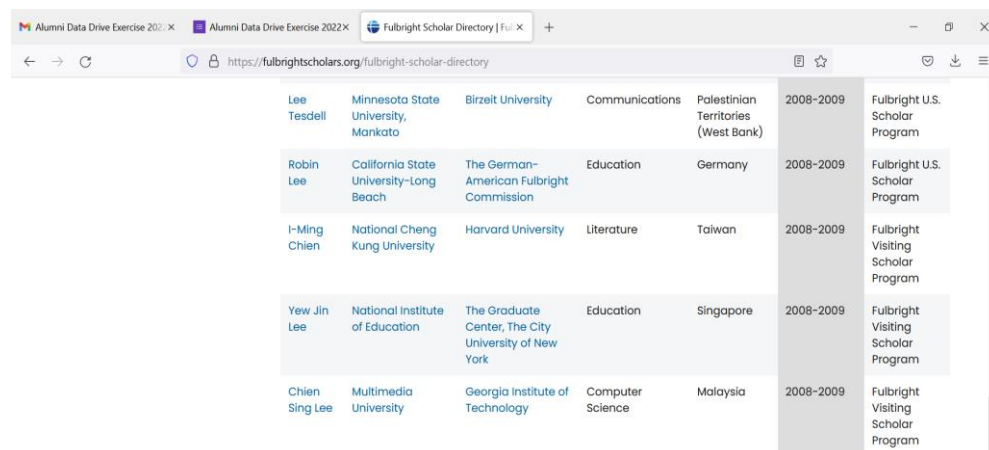
AWARDS/RECOGNITION

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

- ❑ Learnt from Prof. Janet L. Kolodner and her Learning Sciences lab, School of Interactive Computing, **Georgia Institute of Technology** [Feb-June 2009]: *Designed a US-Malaysian curriculum on sustainable development revolving around Atlanta's Beltline project and Kuala Lumpur City's 2020 Plan* (Prof. Kolodner retired in 2009/2010 and is now with Boston College, USA).
- ❑ Learnt from Prof. Ashok K. Goel and his DILAB, School of Interactive Computing, **Georgia Institute of Technology** [Feb-June 2009], on creativity scaffolds, and Structure, Behavior, Function, in relation to Intelligent Systems Design, and thereafter, the ICCE's WIPP.

- ❑ Learnt from Prof. Dr. Glenn David Blank, EECS Department, Lehigh **University** [Jan 2009]:
Designed the software design and obtained teacher feedback for Lehigh University's Science, Technology, Engineering and Mathematics (LVSTEM) project involving the proposed Enhanced Curriculum Data Center (he retired in 2009/2010)

AD SCIENTIFIC INDEX IN ENGINEERING & TECHNOLOGY | COMPUTER SCIENCE | SUNWAY UNIVERSITY [https://www.adscientificindex.com/scientist/lee-chien-sing/4474114]

Ranking	Score	Rank	Score	Rank
Total H	151	#108	#108	#108
Last 6 years H	132	#120	#120	#120
Last 10 years H	104	#150	#150	#150
Score (H)	45	#210	#210	#210
Last 6 years (H)	35	#250	#250	#250
Last 10 years (H)	25	#300	#300	#300
Score (I)	10	#400	#400	#400
Last 6 years (I)	5	#500	#500	#500
Last 10 years (I)	5	#500	#500	#500
Score (J)	10	#400	#400	#400
Last 6 years (J)	5	#500	#500	#500
Last 10 years (J)	5	#500	#500	#500
Score (K)	10	#400	#400	#400
Last 6 years (K)	5	#500	#500	#500
Last 10 years (K)	5	#500	#500	#500
Score (L)	10	#400	#400	#400
Last 6 years (L)	5	#500	#500	#500
Last 10 years (L)	5	#500	#500	#500
Score (M)	10	#400	#400	#400
Last 6 years (M)	5	#500	#500	#500
Last 10 years (M)	5	#500	#500	#500
Score (N)	10	#400	#400	#400
Last 6 years (N)	5	#500	#500	#500
Last 10 years (N)	5	#500	#500	#500
Score (O)	10	#400	#400	#400
Last 6 years (O)	5	#500	#500	#500
Last 10 years (O)	5	#500	#500	#500
Score (P)	10	#400	#400	#400
Last 6 years (P)	5	#500	#500	#500
Last 10 years (P)	5	#500	#500	#500
Score (Q)	10	#400	#400	#400
Last 6 years (Q)	5	#500	#500	#500
Last 10 years (Q)	5	#500	#500	#500
Score (R)	10	#400	#400	#400
Last 6 years (R)	5	#500	#500	#500
Last 10 years (R)	5	#500	#500	#500
Score (S)	10	#400	#400	#400
Last 6 years (S)	5	#500	#500	#500
Last 10 years (S)	5	#500	#500	#500
Score (T)	10	#400	#400	#400
Last 6 years (T)	5	#500	#500	#500
Last 10 years (T)	5	#500	#500	#500
Score (U)	10	#400	#400	#400
Last 6 years (U)	5	#500	#500	#500
Last 10 years (U)	5	#500	#500	#500
Score (V)	10	#400	#400	#400
Last 6 years (V)	5	#500	#500	#500
Last 10 years (V)	5	#500	#500	#500
Score (W)	10	#400	#400	#400
Last 6 years (W)	5	#500	#500	#500
Last 10 years (W)	5	#500	#500	#500
Score (X)	10	#400	#400	#400
Last 6 years (X)	5	#500	#500	#500
Last 10 years (X)	5	#500	#500	#500
Score (Y)	10	#400	#400	#400
Last 6 years (Y)	5	#500	#500	#500
Last 10 years (Y)	5	#500	#500	#500
Score (Z)	10	#400	#400	#400
Last 6 years (Z)	5	#500	#500	#500
Last 10 years (Z)	5	#500	#500	#500

Ranking	Score	Rank	Score	Rank
Total H	151	#108	#108	#108
Last 6 years H	132	#120	#120	#120
Last 10 years H	104	#150	#150	#150
Score (H)	45	#210	#210	#210
Last 6 years (H)	35	#250	#250	#250
Last 10 years (H)	25	#300	#300	#300
Score (I)	10	#400	#400	#400
Last 6 years (I)	5	#500	#500	#500
Last 10 years (I)	5	#500	#500	#500
Score (J)	10	#400	#400	#400
Last 6 years (J)	5	#500	#500	#500
Last 10 years (J)	5	#500	#500	#500
Score (K)	10	#400	#400	#400
Last 6 years (K)	5	#500	#500	#500
Last 10 years (K)	5	#500	#500	#500
Score (L)	10	#400	#400	#400
Last 6 years (L)	5	#500	#500	#500
Last 10 years (L)	5	#500	#500	#500
Score (M)	10	#400	#400	#400
Last 6 years (M)	5	#500	#500	#500
Last 10 years (M)	5	#500	#500	#500
Score (N)	10	#400	#400	#400
Last 6 years (N)	5	#500	#500	#500
Last 10 years (N)	5	#500	#500	#500
Score (O)	10	#400	#400	#400
Last 6 years (O)	5	#500	#500	#500
Last 10 years (O)	5	#500	#500	#500
Score (P)	10	#400	#400	#400
Last 6 years (P)	5	#500	#500	#500
Last 10 years (P)	5	#500	#500	#500
Score (Q)	10	#400	#400	#400
Last 6 years (Q)	5	#500	#500	#500
Last 10 years (Q)	5	#500	#500	#500
Score (R)	10	#400	#400	#400
Last 6 years (R)	5	#500	#500	#500
Last 10 years (R)	5	#500	#500	#500
Score (S)	10	#400	#400	#400
Last 6 years (S)	5	#500	#500	#500
Last 10 years (S)	5	#500	#500	#500
Score (T)	10	#400	#400	#400
Last 6 years (T)	5	#500	#500	#500
Last 10 years (T)	5	#500	#500	#500
Score (U)	10	#400	#400	#400
Last 6 years (U)	5	#500	#500	#500
Last 10 years (U)	5	#500	#500	#500
Score (V)	10	#400	#400	#400
Last 6 years (V)	5	#500	#500	#500
Last 10 years (V)	5	#500	#500	#500
Score (W)	10	#400	#400	#400
Last 6 years (W)	5	#500	#500	#500
Last 10 years (W)	5	#500	#500	#500
Score (X)	10	#400	#400	#400
Last 6 years (X)	5	#500	#500	#500
Last 10 years (X)	5	#500	#500	#500
Score (Y)	10	#400	#400	#400
Last 6 years (Y)	5	#500	#500	#500
Last 10 years (Y)	5	#500	#500	#500
Score (Z)	10	#400	#400	#400
Last 6 years (Z)	5	#500	#500	#500
Last 10 years (Z)	5	#500	#500	#500

INTERNATIONAL REVIEWER AWARD

Reviewer Excellence Award, *Educational Technology Research and Development*, November 3rd, 2021.

Reviewer Excellence Award, *Educational Technology Research and Development*, October 20th, 2020.

Best reviewer and Editorial Board membership, *International Conference on Frontiers of Mathematics and Artificial Intelligence*, July 27, 2020.

Best reviewer and Editorial Board membership, *International Conference on Mathematics and Artificial Intelligence*, December 24, 2019.

Reviewer Excellence Award, *Educational Technology Research and Development*, October 18th, 2019.

Reviewer Excellence Award, *Educational Technology Research and Development*, October 25th, 2018.

Outstanding Reviewer Award for *Computer Standards and Interfaces*, Elsevier 2017

Outstanding Contribution in Reviewing for *Knowledge based Systems*, Elsevier 2016

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

NATIONAL AWARD

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

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

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

ON-GOING

Sunway University (by coursework + research)

Sarawana Kumar 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)

Hui-Shan Wong (September 8-October 15, 2024)

PAST

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	PhD (IT)	Dr. Fang-Fang Chua	Designing an Adaptive Coach in Collaborative Learning Systems using Service-Oriented Architecture
2010	M. IT	Ms. Bahar Poursaeed	Student-initiated curriculum planning, visualization and assessment for ubiquitous environments: 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)	Dr. Ching-Chieh Kiu	An algorithmic framework for ontology mapping and merging
	M. IT	Ms. Hwee-Reei Chong	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 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

JOURNALS (SCI/SSCI)

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*, 14(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)*, 9(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*, 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*, 46 (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*, 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*, 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*, 23 (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*, 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*, 39(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*, 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*, 5 (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*, 24 (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*, 14 (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*, 23 (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*, 5 (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*, 27 (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*, 26 (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*, 26 (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, 82 (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, 22 (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, 25(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, 49 (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*, 9 (3), 2006, pp. 27-42 **[SSCI] Q1**

SCOPUS-INDEXED JOURNALS

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*, 2023, 16(3) 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*, 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*, 25(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*, 19(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, 3 (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*, 39(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*, 7 (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*, 3 (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*, 18 (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*, 5 (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*, 5 (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, 2007, 15, pp. 47-61.
38. **C. S. Lee** and A. H. L. Lim, "Layered and weighted methodology to workflow assessment," *International Journal of Electronic Business*, 5 (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*, 5 (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*, 3 (2), 2007, pp. 229-248. **[SSCI] Q3**
41. **C. S. Lee**, "Problem-solving in a constructivist environment", *Educational Technology and Society*, 2 (4), 1999, pp. 137- 149. **[SSCI] Q1**

INTERNATIONAL CONFERENCE PAPERS

CPCI-S/ISTP Conference Papers

1. **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, (to be published in *Frontiers in Artificial Intelligence and Applications, IOS*).

2. **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/ 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, IRB]
3. **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, IRB]
4. **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, IRB]
5. **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, IRB]
6. 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]
7. 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, IRB]
8. **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.
9. **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]
10. **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]
11. **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]

12. **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]
13. 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]
14. 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]
15. **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]
16. **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]
17. **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]
18. 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]
19. 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]
20. **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]
21. **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.
22. **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.
23. **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.
24. **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]

25. 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]
26. **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]
27. **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]
28. **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.
29. 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", 2015 *12th International Conference on Fuzzy Systems and Knowledge Discovery (FSKD 2015)*, held jointly with the 2015 *11th International Conference on Natural Computation (ICNC 2015)*, Zhangjiajie, China, August 15-17, 2015.
30. 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 (ICCSM)*, Langkawi, Malaysia, 7-8 May, 2015.
31. **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]
32. 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.
33. **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)
34. 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**)
35. **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.
36. 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.
37. 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.

38. 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]
39. 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.
40. 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.
41. 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.
42. 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.
43. 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.
44. **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]
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47. 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).
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49. **C. S. Lee**, "Designing engaging interaction with contextual patterns: A case study on an educational game," *Edutainment 2008*, LNCS 5093, Nanjing, Chin, June 25-27, 2008, pp. 361-370.
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EI/SCOPUS Conference Papers

61. 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 (in press)
62. 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, IRB]

63. **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.
64. 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]
65. **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.
66. **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.
67. **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)
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69. **C. S. Lee**, Y. O. Wong and H. Y. Gui, "Differentiating persuasive factors for tourism booking websites: Towards matrix factorization," *International Conference on Computational Science and Applications Workshops*, In O. Gervasi et al. (Eds.). July 4-7, 2022, pp. 1-8, IEEE. [Fulbright Visiting Scholar Fellowship, IRB]
70. **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, IRB]
71. **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]
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73. **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]
74. **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]

75. **C. S. Lee** and W. Yii, "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]
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77. **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]
78. **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.
79. **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.
80. 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.
81. **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.
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83. **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]
84. **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]
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86. **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]
87. 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.
88. 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.
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90. 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]
91. **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]
92. **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]
93. **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]
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97. **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.

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99. **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]
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101. **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.
102. 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.
103. 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]
104. **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.
105. **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.
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112. 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.
113. 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.
114. 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.
115. 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.
116. 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.
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Reputable International Conferences/Journals

124. **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
125. 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
126. **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.
127. 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]
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130. 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)
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133. 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.
134. 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.
135. 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.

136. 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.
137. B. Poursaeed and **C. S. Lee**, "Acceptance and effectiveness of student-initiated curriculum planning, visualization and assessment for mobile learning", *3rd International Conference on Mobile and Computer-Aided Learning*, Kassel University Press, Amman, Jordan, April 16-18, 2008.
138. **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.
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National Conferences

142. **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).
143. **C. S. Lee**, "E-learning: Whither are we: Learning grid, access and tools?" paper presented for the 2nd UNESCO workshop on *Issues of communication and information at International and regional levels*, Palace Beach & Spa, Mines Resort City, Selangor, November 8-12, 2006.
144. **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.
145. **C. S. Lee**, "The way forward: iHRD", *International Conference on ICT Business*, K-economy Centre, Melaka, October 4-6, 2004.
146. 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.
147. 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.
148. 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.
149. **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 (ICALET-2002)*, Universiti Malaysia Sabah, Kota Kinabalu, Malaysia, June 17-18, 2002, pp. 672-678.

150. **C. S. Lee** and Z. A. Manaf, "Collaboration in networked writing classrooms: Problems and issues, *RELC Seminar*, Singapore, April 19-21, 1999.
151. **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.

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.

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 10th 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.

INTERNATIONAL PROFESSIONAL CONTRIBUTIONS

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]

JOURNAL PAPER REVIEWER

1. **Peer executive reviewer**, *Information Processing and Management* IF 6.22
2. **Peer executive reviewer**, *Journal of Knowledge Management* IF 6.180
3. **Peer executive reviewer**, *Knowledge-based Systems* IF 5.921
4. **Peer executive reviewer**, *Applied Soft Computing* IF 5.472
5. **Peer executive reviewer**, *Computers & Education* IF 5.296
6. **Peer executive reviewer**, *International Journal of Human-Computer Interaction* IF 4.920
7. **Peer-executive reviewer**, *Neural Computing and Applications* IF 4.774
8. **Peer executive reviewer**, *Neuro-computing* IF 4.438
9. **Peer executive reviewer**, *Computers & Education Open* [Springer] IF 4.1
10. **Peer-executive reviewer**, *Heliyon* IF 4.00
11. **Peer-executive reviewer**, *Electronic Markets: The International Journal on Networked Business* IF 3.818
12. **Peer-executive reviewer**, *Frontiers in Psychology* IF 3.8
13. **Peer-executive reviewer**, *International Journal of Machine Learning and Cybernetics* IF 3.753
14. **Peer executive reviewer**, *IEEE Access* IF 3.745
15. **Peer executive reviewer**, *IEEE Intelligent Systems* IF 3.21
16. **Peer executive reviewer**, *Behavior and Information Technology* IF 3.08
17. **Peer executive reviewer**, *Frontiers in Computer Science | Human-Media Interaction* IF 2.6
18. **Peer executive reviewer**, *Transactions on Multimedia Computing Communications and Applications; SI: Big Data, Machine Learning and AI Technologies for Art* IF 2.25
19. **Peer executive reviewer**, *British Journal of Educational Technology* IF 2.951
20. **Peer-executive reviewer**, *Computer Standards & Interfaces* IF 2.809
21. **Peer executive reviewer**, Special issue on Game-based learning, *IEEE Transactions on Learning Technologies*. IF 2.714
22. **Peer executive reviewer**, *Information Systems* IF 2.466
23. **Peer executive reviewer**, *Educational Technology Research & Development* IF 2.303
24. **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
25. **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*
26. **Peer executive reviewer**, *Thinking Skills and Creativity* IF 2.06
27. **Peer executive reviewer**, *ACM Journal on Computing and Cultural Heritage* IF 2.047
28. **Peer executive reviewer**, *IETE Technical Review* IF 1.932
29. **Peer-executive reviewer**, *International Journal of Imaging and Systems Technology* IF 1.925
30. **Peer executive reviewer**, *IEEE Transactions on Education* IF 1.855
31. **Peer-executive reviewer**, *MethodsX* IF 1.84
32. **Peer executive reviewer**, *DISPLAY* IF 1.738
33. **Peer-executive reviewer**, *American Journal of Alzheimer's Disease and Other Dementias* IF 1.544
34. **Peer executive reviewer**, *Children and Youth Services Review* IF 1.521
35. **Peer executive reviewer**, *ASC Software Quality Journal* IF 1.460

36. **Peer-executive reviewer**, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, IF 1.386
37. **Peer-executive reviewer**, *Mathematical Biosciences and Engineering*, IF 1.285
38. **Peer-executive reviewer**, *The Asia-Pacific Education Researcher* IF 0.573
39. **Peer-executive reviewer**, *Turkish Online Journal of Educational Technology* IF 1.016
40. **Peer executive reviewer**, *Frontiers in Digital Health | Digital Health* [ESCI]
41. **Peer-executive reviewer**, *Journal of Computers in Education* [ESCI]
42. **Peer-executive reviewer**, *Computers in the Schools: Interdisciplinary Journal of Practice, Theory, and Applied Research* [ESCI]
43. **Peer-executive reviewer**, *International Journal of Web Information Systems* [SCOPUS]
44. **Peer-executive reviewer**, *International Journal on Web Engineering and Technology* [SCOPUS]
45. **Peer-executive reviewer**, *Computers & Education: Artificial Intelligence* [SCOPUS]
46. **Peer-executive reviewer**, *Journal of Autonomous Intelligence* [SCOPUS]
47. **Peer-executive reviewer**, *SN Computer Science* [SCOPUS]
48. **Peer-executive reviewer**, *Frontiers in Digital Health* [SCOPUS]
49. **Peer-executive reviewer**, *Analyzing Future Applications of AI, Sensors, and Robotics in Society*, IGI Global [Cabell]
50. **Peer-executive reviewer**, *Journal of Data Science and Intelligent Systems*
51. **Peer executive reviewer**, *Artificial Intelligence and Applications*
52. **Peer-executive reviewer**, *ACM Computers in Entertainment*
53. **Peer-executive reviewer**, *AI, Computer Science and Robotics Technology*
54. **Peer-executive reviewer**, *Industrial Internet of Things: An Introduction*, Bentham Science
55. **Peer executive reviewer**, *International Journal of Technology for Education and Learning*

EDITORIAL (JOURNAL/WORKSHOP SPECIAL ISSUE GUEST EDITOR)

1. **Special Issue Co-Guest Editor**, D. Zapata, I. Ghergulescu, A. S. Cabezuelo, I. Torre, C. S. Lee, "Generative AI in Education", *Frontiers on AI for Human Learning and Behavior Change*, 2024.
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**, 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.

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, 26th October – 1st November 2023 (Remotely)
3. **External Assessor** for Academic Promotion in Computer Science, King Abdulaziz University, Saudi Arabia, 23rd 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

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

THESIS EXAMINER

1. **PhD. Computer Science.** (2024). *Optimization of dimensionality reduction for unstructured data using machine learning algorithms.* Bharathiar University, India (examiner)
2. **PhD. Computer Science.** (2023). *Design and development of classification algorithm for autism spectrum disorder detection.* Bharathiar University, India (examiner)
3. **PhD. Computer Science** (2022). *Dimensionality reduction and automated feature extraction using multi-level approach in big data environment.* Bharathiar University, India. (examiner, wos).
4. **PhD. Science** (2018). *Enhancement of an enterprise business intelligence maturity model based on industrial Delphi study.* Universiti Tunku Abdul Rahman, Malaysia (examiner, wos).
5. **PhD. Engineering** (2017). *Maximising learning and performance in framework documentation using use case map.* Multimedia University, Malaysia. (examiner, wos).
6. **PhD Science** (2017). *Developing a business intelligence maturity model using an integration approach,* Universiti Tunku Abdul Rahman, Malaysia (examiner, wos).
7. **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)
8. **MSc in Information Systems.** (2016). *To investigate motivator & barriers of enterprise knowledge sharing behavior.* Sunway University, Malaysia. (examiner, proposal defense)
9. **PhD. Computer Science** (2015). *A unified framework for automated data mining – An agent-based perspective.* Bharathiar University, India. (examiner, wos).
10. **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, was).
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, was).
19. **PhD. Computer Science** (Software engineering). (2012). *On developing effectual algorithms for association rule discovery in transaction databases*. Anna University, India. (examiner, was).
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, was).
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, was).
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, was).
23. **PhD. (Computer Science)**. (2011). *Neural network approach for HIV/AIDS Regimen specification decision support system*. Mother Theresa Women's University, India. (examiner, was).
24. **M. Phil.** (2010). *Aligning learning with work practice by using Key Performance Indicator Framework*. University of Hong Kong, Hong Kong. (examiner, was).
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, was).
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, was).
27. **Masters (Computer Science)**. (2009). *Developing an online communication system for student affairs in e-learning environment*. University of Malaya, Malaysia. (examiner, was).
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, was).
29. **Masters (Computer Science)**. (2008). *A customized semantic term weighting scheme for document classification*. Malaysian University of Science and Technology, Malaysia. (examiner, was).

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.
-

(INVITED) SPEAKER

1. **Session chair and 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 60th 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://worldengineerindgday.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 5th 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

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 SESSION CHAIR

1. **Session Chair**, *International Conference on Frontiers of Artificial Intelligence and Statistics (CFAIS 2023)*.
2. **Session Chair**, *International Conference on Mathematics, Computation and Modeling*, Hangzhou, China, March 24, 2023.
3. **Session Co-Chair**, Human Factors and Intelligent Systems, *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 7-10, 2022.
4. **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.
5. **Session Chair**, Workshop on ICT Trends in Emerging Economies, *International Conference on Computers in Education*, November 22, 2021.
6. **Session Chair**, *International Workshop on Artificial Intelligence and Education*, Xi'an, China, November 19-21, 2021.
7. **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.
8. **Session Chair**, *International Conference on Computational Thinking Education*, August 20, 2020.
9. **Session Co-Chair**, Human Factors and Service Innovation and Management, *IEEE International Conference on Industrial and Management Engineering*, Macau, December 15-18, 2019.
10. **Session Chair**, 6th Smart City Symposium, IEEJ-IEEE SMC (M), October 16-17, 2018, Malaysia.
11. **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]
12. **Co-Session chair** (Decision Analysis & Methods), *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 9-12, 2015.
13. **Co-Session chair** (Engineering Education & Training), *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 9-12, 2015.
14. **Session Chair and Organizing Committee**, *IEEE Smart cities workshop*, Universiti Putra Malaysia, 2015, 2017, 2018.
15. **Session chair (Human Factors)**, *IEEE International Conference on Industrial and Management Engineering*, Kuala Lumpur, December 9-12, 2014.

CONFERENCE/WORKSHOP (CO) CHAIR/ORGANIZER

1. **Organizing Committee**, *International Conference on Smart Manufacturing Technology, Electrical Engineering, and Robotics*, Penang, Malaysia, August 16-18, 2024.

2. **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.
3. **Technical chair**, *IEEE International Conference on Sustainable Utilization and Development in Engineering and Technologies*, November 7-9, 2019, Penang, Malaysia.
4. **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.
5. **Co-chair**, Maker and STEM Education track, *Global Chinese Conference on Computers in Education*, South China Normal University, Guangzhou, May 26-29, 2018.
6. **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.
7. **Vice-Chair**, Workshop on ICT Trends in Emerging Economies, *International Conference on Computers in Education*, Singapore, November 26-27, 2012.
8. **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.
9. **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.
10. **Associate Editor**, Joint Proceedings of the Work-in-Progress Poster and Invited Young Researcher Symposium, *International Conference on Computers in Education*, Kuala Lumpur, Nov. 29-Dec. 3, 2010.

CONFERENCE/WORKSHOP PROGRAM COMMITTEE

1. Program Committee, *International Conference on Application of Cognitive Science and Artificial Intelligence*, December 2025.
2. Technical Program Committee, *International Conference on Intelligent Computing, Information, and Control Systems (ICICICS 2025)*, March 26-28, 2025, Balkumari, Lalitpur, Nepal.
3. Program Committee, *International Conference on Smart Data Intelligence*, Kongunadu College of Engineering and Technology, January 9-10, 2025.
4. Technical committee, *Artificial Intelligence and Cloud Computing Conference*, International Conference Center of Waseda University, Tokyo, Japan in December 14-16, 2024.
5. **Program Committee**, *Asia Conference on Cognitive Engineering and Intelligent Interaction*, December 14-16, 2024, Singapore.
6. **Program Committee**, *International Conference on Computer and Information Security*, August 2025.
7. **Program Committee**, *International Conference on Computer, Internet of Things and Smart City*, Zhuzhou, China, November, 2024.
8. **Program Committee**, *International Symposium on Intelligent Technology for Future Transportation*, Helsinki, Finland on October 19-20, 2024.
9. **Associate Editor, Program Committee**, *IEEE Systems, Man and Cybernetics Conference*, Kuching, Sarawak, 7 - 10 October, 2024.

10. **Technical Committee Member**, *International Conference on Inventive Research in Computing Applications*, Coimbatore, India, 21-23, August 2024.
11. Program Committee, *Smart Manufacturing Technology, Electrical Engineering, and Robotics*, Penang, Malaysia, August 10-15, 2024.
12. **Program Committee**, *International Conference on Management and Sustainable Environment*, Universitas Muhammadiyah Yogyakarta, Indonesia, 7-8 August, 2024.
13. **Program Committee**, *International Conference on Advanced Sensing and Intelligent Systems*, Kunming, China, June 22-23, 2024.
14. **Technical Program Committee**, *International Conference on Information Society and Smart City*, Shanghai, China, 15-16 June 2024.
15. **Technical Program Committee**, *International Conference on Sustainable Expert Systems*, Lekhnath, Nepal, 30-31 May, 2024.
16. **Technical Program Committee**, *International Conference on Algorithm, Automatic Control and Computer Engineering*, Kuala Lumpur, Malaysia, April 12-14, 2024.
17. **Technical Program Committee**, *International Conference on Artificial Intelligence in Human-Computer Interaction, Mathematics, Computation and Modeling*, Wuhan, China, October 27-29, 2023- Current.
18. **Program Committee**, *International Conference on Advanced Research in Technologies, Information, Innovation and Sustainability (ARTIIS 2023)*, October 21-23, comp2023-Current.
19. **Technical Committee**, *International Conference on Mechanical, Electric, and Industrial Engineering*, Sanya, China (May, 2023)
20. **Technical Committee**, *International Conference on Advanced Sensing and Intelligent Systems*, Kunming, China (April, 2023)
21. **Technical Committee**, *International Conference on Mathematics, Computation and Modeling*, will be Hangzhou, China (March, 2023 - Current).
22. **Technical Committee**, *International Conference on Information Systems and Computing Technology*, Guilin, China (December, 2022- Current)
23. **Technical Committee**, *International Conference on Digitalization and Management Innovation* November, Beijing, China (November, 2022- Current).
24. **Reviewer**, *International Conference on Machine Learning and Intelligent Systems*, (November, 2022-Current)
25. **Reviewer**, *ACM Interaction Design and Children Conference*, June 27-30, 2022, Braga, Portugal.
26. **Reviewer**, *ACM Designing Interactive Systems Conference*, June 13-17, 2022, Australia, (virtual).
27. **Program Committee**, *International Workshop on Artificial Intelligence and Education*, China (November, 2021- 2023)
28. **Program Committee**, *International Conference on Frontiers of Artificial Intelligence and Statistics* Hong Kong, China (December, 2020- Current)
29. **Technical Committee**, *International Conference on Frontiers of Mathematics and Artificial Intelligence*, (2019-Current), organized by Hong Kong Society of Robotics and Automation.
30. **Program Committee**, *International Conference on Cognitive Healthcare Systems*, RV Institute of Technology and Management, October 2021, Bangalore, India (2021- Current).

31. **Program Committee**, *International Conference on Advances in Computer-Human Interactions*, July 18-22, 2021, Nice, France.
32. **Program Committee**, *International Symposium on Project Management*, July 3-4, 2021, Beijing, China (2021-Current).
33. **Program Committee**, *IEEE International Conference on Artificial Intelligence and Computer Applications (ICAICA 2021)*, June, 20-21, Dalian, China. (2021- Current).
34. **Program Committee**, *International Conference on Human Computer Interaction Theory and Applications*, (2017- Current)
35. **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)
36. **Program Committee**, *Global Chinese Conference on Computers in Education*, (2012, 2013, 2014, 2020-Current).
37. **Program Committee**, *International Conference on Cognition and Exploratory Learning in Digital Age (CELDA)*, (2005- Current)
38. **Program Committee**, *Software Engineering Processes and Applications (SEPA) workshop*, (2020-2021), *International Symposium on Software Quality (ISSQ)* (2022 -2022), *General track* (2023-Current) *International Conference on Computational Science and Applications*.
39. **Program Committee**, *International Conference on Fuzzy Systems and Data Mining (FSDM)* (2020-Current)
40. **Program Committee**, *eLFA2020 (eLearning Forum Asia 2020)*.
41. **Program Committee**, *International Conference on Modern Management based on Big Data (MMBD2020)*.
42. **Program Committee**, *International Conference on Soft Computing and Machine Learning*, 2020.
43. **Program Committee**, *International Conference on Information and Communication Technology (ICoICT)*, 2019, 2020, 2023.
44. **Program Committee**, *International Conference on Soft Computing, Intelligent System and Information Technology*, 2020.
45. **Program Committee**, *International Conference on Computational Aspects of Network Science*, 2020.
46. **Program Committee**, *IEEE International Conference on Industrial and Management Engineering*, (2014-2016, 2020), Reviewer (2019).
47. **Reviewer**, *International Conference of the Learning Sciences* (2012, 2018, 2020).
48. **Reviewer**, *International Conference on Computer Supported Collaborative Learning*, 2015, 2019.
49. **Reviewer**, *IEEE International Symposium on Technology Management and Emerging Technologies*, Langkawi, December 18 – 20, 2018.
50. **Reviewer**, *International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery*, China. [IEEE Circuits Society] 2018, 2019

51. **Program Committee**, *International Conference on Computers in Education*, 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)
52. **Program Committee**, *International Conference on Soft Computing and Pattern Recognition*, Vellore, India December 19 - 21, 2016.
53. **Program Committee**, *International Conference on Computational Aspects of Social Network*, Vellore, India December 19 - 21, 2016.
54. **Program Committee**, *International Conference on Invention and Design* (organized by the Malaysian Invention and Design Society and University Malaysia Perlis), 2016.
55. **Program Committee**, *World Congress on Information and Communication Technologies* (2015),
56. **Reviewer**, *IEEE International Symposium on Mathematics Sciences and Computing Research*, Universiti Teknologi Mara, Perak, May 19-20, 2015.
57. **Program Committee member** of WICT14_ST_Bio-Inspired Techniques for Internet-of-Things (2014).
58. **Program Committee**, *IIAI International Conference on Learning Technologies and Learning Environments (IIAI-LTLE 2013)*, Matsue, Japan, August 31 to September 4, 2013.
59. **Program Committee**, *Taiwan Computer-Supported Collaborative and Personalized Learning (CSCL & CSPL) workshop*, National Chengchi University, March 29, 2013.
60. **Program Committee**, *Pacific-Rim International Conference on Artificial Intelligence*, Kuching, Malaysia, dates, September 5-7, 2012.
61. **Program Committee**, *IIAI International Conference on Learning Technologies and Learning Environments*, Fukuoka, Japan, Sept 20-22, 2012.
62. **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].
63. **Program Committee**, *International Conference on Semantic Technology and Information Retrieval*, Kuala Lumpur, June 28-29, 2011.
64. **Program Committee**, *IEEE International Conference on Advanced Learning Technologies (ICALT)* (2010-2016, 2022-Current)
65. **Program Committee**, *International Conference on Technology for Education*, Indian Institute of Technology, Bombay, India. (2010-2015).
66. **Program Committee**, *International Workshop on Enabling User Experience with Future Interactive Learning Systems (UXFUL 2010)*, Austria, September 16-17, 2010.
67. **Reviewer**, *International Conference on Information Security and Assurance*, Miyazaki, Japan, June 23-25, 2010.
68. **Program Committee**, *International Workshop on Social and Personal Computing for Web-Supported Learning Communities* (2009-2010).
69. **Program Committee**, *International Conference on Knowledge Management*, Hong Kong, China (2009-2010).

70. **Program Committee**, 2nd *IEEE International Conference on Digital Games and Intelligent Toys Based Education (DIGITEL 2008)*, November 17-19, 2008, Banff, Canada.
71. **Program Committee**, *International Workshop on Cognitive Aspects in Intelligent and Adaptive Web-based Educational Systems* (2007, 2008) in conjunction with ICCE 2007, 2008.
72. **Technical Committee**, 5th *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.
73. **Technical Program Committee**, *IEEE International Symposium on Multimedia*, Paradise Point Resort & Spa, San Diego, December 11-13, 2006.
74. **Program Committee**, *International Conference on Web-based Communities and Social Media*, (2013-).
75. **Program Committee**, *Web-based Communities Conference* (2005-2012)

The above are Professional contributions. National and University Contributions start from the next page.

NATIONAL CONTRIBUTIONS

MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION (MOSTI)

- 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 INVENTION AND DESIGN SOCIETY

- 2022-4 **Honorary Secretary** (18th 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

MALAYSIA BOARD OF TECHNOLOGISTS, (MBOT) MALAYSIA

- 2020-2023 **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

IEEE Systems, Man, Cybernetics (M)

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

Award co-chair, Program Committee, IEEE SMC 2024, Kuching, Sarawak

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

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-)

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

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

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-)

FULBRIGHT

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 60th anniversary (funded by MACEE maximum RM2, 500)

2022-
March,
2024 **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 21st Century*, 10-11 December, 2013, UTM, Selangor.

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

MIMOS

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

MINISTRY OF HIGHER EDUCATION

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 2nd 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 2nd Council and 3rd 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

- 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)

- 2002- Head, Content Development Task force, Japanese-Malaysian tele- education satellite project,
2007 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

- 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

- Feb 27, Internal review for School's 2024 Early Career Research grant.
2024
- Aug. 2, School Associate (advisor, assessor, moderator) for MQA's APELA for the Masters in Data
2023- 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. 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">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

FACULTY/SCHOOL/DEPARTMENT LEVEL

Sunway University

March 12, 2024	One of the assessors for postgraduate studentships/scholarships.
Feb. 22, 2024-	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 May 17, 2022	Organizer, invited talk by Prof. Eric Tsui, Hong Kong Polytechnic University.
2022- 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 – Current	<p>Internal examiner for departmental directed reading, postgraduate proposal defense, work of completion seminar and viva</p> <p>MSc. (Computer Science) (2024). Development of A Framework for Unplugged Computational Thinking Activities in Improving the Interest and Skills in Programming. (examiner, wcs).</p> <p>MSc. (Information Systems) (2023). Deepfake detection using an enhanced ensemble learning method (chair, proposal defense)</p> <p>MSc. (Computer Science) (2023). Development of a Framework for Unplugged Computational Thinking Activities in Improving the Interest and Skills in Programming. (examiner, proposal defense)</p> <p>PhD (Computing). (2023). Multi-agent Deep Reinforcement Learning for the Optimization of Global and Local Network Performances in Mobile Networks. (chair, wcs).</p> <p>PhD. (Computing) (2023). Small Sample Learning in Image Segmentation with Prior Knowledge. (chair, proposal defense)</p> <p>MSc. (Information Systems). (2022). Factors influencing the acceptance of blockchain: Real estate industry. (examiner, wos).</p> <p>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).</p> <p>MSc. (Computer Science) (2022). A data-centric Artificial Intelligence approach to identify significant factors towards student engagement. Sunway University, Malaysia (examiner, wos).</p> <p>PhD. (Computing) (2022). A reviewer evaluation system based on author & reviewer profiling to avoid possible paper retraction. Sunway University, Malaysia (examiner, wos).</p> <p>PhD. Computing. (2022). PolyAQG – An automated questions generation framework. Sunway University, Malaysia (examiner, wos)</p> <p>MSc. (Information Systems) (2022). Analysing Customer Experience (CX) intent using CXTM Framework. Sunway University, Malaysia (examiner, wos).</p> <p>PhD. (Computing) (2022). Harvesting knowledge from groupware with emphasis on tacit knowledge. Sunway University, Malaysia (Chair, wos).</p> <p>PhD. (Computing) (2021). Distributed learning-based energy-efficient operations in ultra-dense network. Sunway University, Malaysia (Chair, proposal defense)</p> <p>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)</p> <p>MSc. (Information Systems) (2021). Design and analysis of a Virtual Reality game to address issues in introductory programming learning. Sunway University, Malaysia (examiner, wos).</p> <p>MSc. (Information Systems) (2021). Experience first: Investigating smart wearable technology acceptance among elderly citizen. Sunway University, Malaysia (examiner, wos).</p> <p>PhD. Computer Science (2020). Automated Question Generation (AQG) using Logico-Semantic structures and ontologies. Sunway University, Malaysia (examiner, proposal defense)</p> <p>PhD. Computer Science (2020). Effectiveness of olfactory, audio and haptic in learning things for visually impaired in edutainment environments. Sunway University, Malaysia (examiner, wos).</p>

	MSc. (Information Systems) (2020). An extended expectation-confirmation model of continuance intention to use online food delivery services. Sunway University, Malaysia. (examiner, proposal defense)
	MSc. (Computer Science) (2018). Framework for rating value expressions. Sunway University, Malaysia. (Chair, wos).
	MSc. (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).
	MSc. (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 th , 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 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 Participant (Balanced Scorecard workshop) Participant (Performance Improvement Program 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 st Faculty of Information Technology Colloquium
2006-2007	Member of the Faculty Academic Planning Committee Program Coordinator, Bachelor of Multimedia (Software & Animation)

UNDERGRADUATE FINAL YEAR/CAPSTONE PROJECT SUPERVISION

Sunway University, Malaysia

April 2024-	On-going
April-Dec2023	<ul style="list-style-type: none"> • Google Assistant for e-learning, e-health, e-commerce • Perceptions towards Google Assistant • Metaverse for Art Museums • Games to teach Unity game development
March-Dec. 2022	<ul style="list-style-type: none"> • Multiplayer ExplorerAR game • AR interlinked e-commerce systems • Reflective learning systems • Reflective e-health systems • Games for autistic children • Mathematics games for school children • Minigames for e-commerce systems
Aug.-Dec. 2021	<ul style="list-style-type: none"> • Social CRM in B2C tourism (persuasion) • Personalized tourism through the use of video games (persuasion) • Personalized tourism: Upselling and cross-selling (persuasion) • PixaMap: Fun games using SQL (persuasion) • QuizMap games for seniors • Using RenPy to Assist Autistic Individuals with Stress Management • Fun games for autistic children • Personalized education
Aug. 2020- March 2021	<ul style="list-style-type: none"> • QR Monopoly fun game • Fun games for children with Autism (Mild) • Fun digital board game (Three Kingdoms) • Fun games for seniors with dementia (game and recommender) • Perception of Malaysians towards the government's covid-19 measures (Applied Statistics) • Perception of Malaysians towards the government's covid-19 measures (Economics/Information Science)
Aug. 2019- July 2020	<ul style="list-style-type: none"> • Travel planner • The impact of strategic and fast-paced video games on problem-solving skills • Challenges and implications of industrial revolution 4.0 to Malaysia • Effects of Google cardboard-AR maze games on learning • Perceptions towards neuroscience: A survey and implications
March-Dec. 2019	<ul style="list-style-type: none"> • Design and Development of an Augmented Reality-Gamified Fun and/or Rehabilitation Exercise Prototype • Location-aware recommender/reminder system

- Knowledge representation towards the generation of excitement in video games for retro first-person shooters (co-supervisor)
 - Fishbone-Pareto Chart as data mining tools
- Jan. 2019
Nov. 2018
- Augmented Reality-based e-commerce, Augmented Reality (AR) Puzzle Matching Game, Video game and Augmented technology for behavior change
 - Developing a community event sharing/hosting website to improve quality of life among Malaysia's senior citizens.
 - Developing personalized health customer relationship management system
 - A study of socio-cognitive-affective engagements and playfulness among older generation
- March 2018
- A synergistic KM approach to enhancing EC sustainability
- March-Dec. 2017
- Variants of a mobile bingo game, Web and mobile-based Augmented Reality to encourage exercise
 - Malaysia Smart City and Social Media Marketing: Perception and Implication to Community Participation for Transportation and Lifestyle
 - Enablers and barriers to social commerce (user communities/ support group): A KM Approach
 - Perception of Malaysian towards smart home technology
 - Influence of Augmented Reality on STEM
 - STE(A)M and its implications
 - Development of meta web crawler: Data search, Integration and Visualization
- Aug. 2016
- Gamification to enhance digital lifestyles, e-crafting
- March 2016
- Creating awareness of mobile hacking (Undergrad), Exergaming (Diploma)

Multimedia University, Malaysia

- 2011/2012
- Student profiling and career development portal, Web-service-based community-oriented student career development portal, Online event management system
- 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

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 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.