

CURRICULUM VITAE

Siang Yew CHONG

Department of Computer Science and Engineering
 College of Engineering
 Southern University of Science and Technology
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November 26, 2022
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 ORCID: 0000-0002-0040-6575

EDUCATION

- 09/2013–07/2015 **Postgraduate Certificate in Higher Education (PGCHE)**, University of Nottingham, UK (inducted as **Fellow, The Higher Education Academy**, PR086668)
- 09/2003–07/2007 **PhD in Computer Science**: PhD Thesis on *Generalization and Diversity in Co-evolutionary Learning*, University of Birmingham, UK, supervised by Professor Xin Yao and Professor Peter Tino. Examiners: Professor Simon Lucas, Professor Jeremy Wyatt, and Dr. Steve Vickers (Chair).
- 11/2002–06/2004 **MEngSc in Engineering (by research)**, Masters Thesis on *Training Neural Networks Using Evolutionary Computational Techniques*, Multimedia University, Malaysia, supervised by Dr. Jonathon David White and Dr. Heng Siong Lim. Thesis Examiners: Dr. David Bruce Fogel and Professor Xin Yao.
- 05/1999–07/2002 **BEng (Hons) Electronics**, Majoring in Telecommunications, Multimedia University, Malaysia, First Class Honors (CGPA 3.92/4.00).

WORKING EXPERIENCE

- 04/2022– **Research Associate Professor** (23/08/2022–), **Honorary Research Associate Professor** (01/04–22/08/2022), Department of Computer Science and Engineering, Southern University of Science and Technology, China (under High Level Talents (Category A)).
- 10/2019–12/2019 **Expert Evaluator**, European Commission, Horizon 2020 **Marie Skłodowska-Curie Actions**.
- 2018–2020 **Collaborator**, Mobile Apps with Software Engineering Group Project students, School of Environmental and Geographical Sciences (2018–) and MHub (2019–).
- 02/2016–01/2018 **Marie Skłodowska-Curie Actions Fellow**, School of Computer Science, University of Birmingham, UK.
- 2014–03/2022 **Associate Professor**, School of Computer Science, University of Nottingham Malaysia (study leave 02/2016–01/2018).
- 2012–2013 **External Collaborator**, Universiti Malaya and Proton.
- 09/2007– **Honorary Research Fellow**, School of Computer Science, University of Birmingham, UK.
- 14–17/09/2009 **Academic Visitor**, Intelligent Systems Centre (IntelliSys), Nanyang Technological University, Singapore.
- 07–08/2009 **Long-Term Academic Visitor** (of Professor Xin Yao), School of Computer Science, University of Birmingham, UK.
- 2008–2013 **Assistant Professor**, School of Computer Science, University of Nottingham Malaysia (Co-convenor of Algorithmic Problem Solving with Emeritus Professor Roland Backhouse, University of Nottingham, UK).
- 2007–2008 **Research Associate**, The Centre of Excellence for Research in Computational Intelligence and Applications (CERCIA), School of Computer Science, University of Birmingham, UK.

- 2003–2006 **Tutor** (of Professor Ata Kaban) and **Demonstrator**, School of Computer Science, University of Birmingham, UK.
- 2002–2003 **Tutor**, Faculty of Engineering and Technology, Multimedia University, Malaysia.
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PRIZES, AWARDS, AND SCHOLARSHIPS

- 2022– **Research Associate Professorship** (Full-Time Research), Department of Computer Science and Engineering, Southern University of Science and Technology, China (under High Level Talents (Category A)).
- 2016–2018 **Marie Skłodowska-Curie Individual Fellowship**, Horizon 2020, European Commission.
- 2011 **Competitions Winner**, Ms. Pac-Man vs Ghost Team, IEEE Congress on Evolutionary Computation (with Year 3 student HB Low).
- 2010 **IEEE Transactions on Evolutionary Computation Outstanding Paper Award**, IEEE Computational Intelligence Society.
Best Paper Award, The 24th European Conference on Modelling and Simulation (ECMS 2010).
- 2009 **Outstanding PhD Dissertation Award**, IEEE Computational Intelligence Society.
- 2007 **Early Career Fellowship**, Leverhulme Trust.
- 2003-2006 **International Research Studentship**, School of Computer Science, University of Birmingham, UK.
- 2003 **IEEE Student Travel Grant**, IEEE Congress on Evolutionary Computation, IEEE Computational Intelligence Society.
- 2002–2004 **MEngSc Full Tuition Scholarship**, Multimedia University, Malaysia.
- 1999–2001 **BEng Full Scholarship**, Ministry of Education, Malaysia.
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PUBLICATIONS

Journals:

1. MAA Khattab, IY Liao, EH Ooi, and **SY Chong**, “Compound W-Net with Fully Accumulative Residual Connections for Liver Segmentation using CT images,” *Computational and Mathematical Methods in Medicine*, <https://doi.org/10.1155/2022/8501828>.
2. ST Yong, **SY Chong**, KM Tiong, TK Tan, and R Matthews, “The Impact of COVID-19 Pandemic on Engineering Foundation Students’ Course Experience,” *International Journal of Virtual and Personal Learning Environments*, Vol. 12, No. 1, pp. 1-16, 2022, <https://doi.org/10.4018/IJVPLE.295307>.
3. SL Verghese, IY Liao, T Maul, and **SY Chong**, “An Empirical Study of Several Information Theoretic Based Feature Extraction Methods for Classifying High Dimensional Low Sample Size Data,” *IEEE Access*, Vol. 9, pp. 69157-69172, 2021, <https://doi.org/10.1109/access.2021.3077958>.
4. **SY Chong**, P Tino, and J He, “Coevolutionary Systems and PageRank,” *Artificial Intelligence*, Vol. 277, 2019, <https://doi.org/10.1016/j.artint.2019.103164>.
5. **SY Chong**, P Tino, J He, and X Yao, “A New Framework for Analysis of Coevolutionary Systems – Directed Graph Representation and Random Walks,” *Evolutionary Computation*, Vol. 27, No. 2, pp. 195-228, 2019.
6. YM Lee, **SY Chong**, K Goonting and E Sheppard, “The Effect of Speed Limit Credibility on Drivers? Speed Choice,” *Transportation Research Part F*, Vol. 45, pp. 43-53, 2017.
7. JY Tey, R Ramli, CW Kheng, **SY Chong**, and MAZ Abidin, “Identification of Vehicle Suspension Parameters by Design Optimization,” *Engineering Optimization*, Vol. 46, No. 5, pp. 669-686, 2014.

8. P Tino, **SY Chong**, and X Yao, "Complex Co-evolutionary Dynamics - Structural Stability and Finite Population Effects," *IEEE Transactions on Evolutionary Computation*, Vol. 17, No. 2, pp. 155-164, Apr. 2013.
9. D Ashlock, G Kendall, and **SY Chong**, "Guest Editorial: Special Issue on Understanding Complex Evolutionary Systems," *IEEE Transactions on Evolutionary Computation*, Vol. 17, No. 2, pp. 153-154, Apr. 2013.
10. **SY Chong**, P Tino, DC Ku, and X Yao, "Improving Generalization Performance in Co-evolutionary Learning," *IEEE Transactions on Evolutionary Computation*, Vol. 16, No. 1, pp. 70-85, Feb. 2012.
11. CW Kheng, **SY Chong**, and MH Lim, "Centroid-Based Memetic Algorithm: Adaptive Lamarckian and Baldwinian Learning," *International Journal of Systems Science*, Vol. 43, No. 7, pp. 1193-1216, 2012.
12. **SY Chong**, P Tino, and X Yao, "Relationship Between Generalization and Diversity in Co-evolutionary Learning," *IEEE Transactions on Computational Intelligence and AI in Games*, Vol. 1, No. 3, pp. 214-232, Sep. 2009.
13. **SY Chong**, P Tino, and X Yao, "Measuring Generalization Performance in Co-evolutionary Learning," *IEEE Transactions on Evolutionary Computation*, Vol. 12, No. 4, pp. 479-505, Aug. 2008 (**IEEE Transactions on Evolutionary Computation Outstanding Paper Award**).
14. **SY Chong** and X Yao, "Multiple Choices and Reputation in Multiagent Interactions," *IEEE Transactions on Evolutionary Computation*, Vol. 11, No. 6, pp. 689-711, Dec. 2007.
15. **SY Chong** and X Yao, "Behavioral Diversity, Choices, and Noise in the Iterated Prisoner's Dilemma," *IEEE Transactions on Evolutionary Computation*, Vol. 9, No. 6, pp. 540-551, Dec. 2005.
16. **SY Chong**, MK Tan, and JD White, "Observing the Evolution of Neural Networks Learning to Play the Game of Othello," *IEEE Transactions on Evolutionary Computation*, Vol. 9, No. 3, pp. 240-251, Jun. 2005.

Refereed Papers in Conference Proceedings:

17. CW Kheng, DC Ku, HF Ng, M Khattab and **SY Chong**, "Curvature Flight Path for Particle Swarm Optimisation," *Proc. of the Genetic and Evolutionary Computation Conference 2016 (GECCO 2016)*, pp. 29-36, 20-24 July, 2016, Denver, USA.
18. NR Sabar, **SY Chong**, and G Kendall, "A Hybrid Differential Evolution Algorithm - Game Theory for the Berth Allocation Problem," *Proc. of the 18th Asia Pacific Symposium on Intelligent and Evolutionary Systems - Volume 2*, Proceedings in Adaptation, Learning and Optimization Volume 2, pp. 77-87, 2015.
19. A Peleteiro, JC Burguillo, and **SY Chong**, "Exploring Indirect Reciprocity in Complex Networks Using Coalitions and Rewiring," *Proc. of the 13th International Conference on Autonomous Agents and Multi-agent Systems (AAMAS 2014)*, pp. 669-676, 5-9 May, 2014, Paris, France.
20. TH Maul, A Bargiela, **SY Chong**, and AS Adamu, "Towards Evolutionary Deep Neural Networks," *Proc. of the 28th European Conference on Modelling and Simulation (ECMS 2014)*, pp. 319-325, 27-30 May, 2014, Brescia, Italy.
21. P Tino, **SY Chong**, and X Yao, "On Reliability of Simulations of Complex Co-evolutionary Process," *Proc. of the 24th European Conference on Modelling and Simulation (ECMS 2010)*, pp. 258-264, 1-4 June, 2010, Kuala Lumpur, Malaysia.
22. CW Kheng, MH Lim, and **SY Chong**, "A Study on Lamarckian and Baldwinian Learning on Noisy and Noiseless Landscapes," *Proc. of the 24th European Conference on Modelling and Simulation (ECMS 2010)*, pp. 323-329, 1-4 June, 2010, Kuala Lumpur, Malaysia (**Best Paper Award**).
23. **SY Chong**, C. Hill, and X Yao, "Co-evolutionary Learning of Contextual Asymmetric Actors," *Proc. of the 23rd European Conference on Modelling and Simulation (ECMS 2009)*, pp. 827-833, 9-12 June, 2009, Madrid, Spain.
24. CW Kheng, **SY Chong**, and A Bargiela, "Multi-resolution Optimisation: Application of Meta-heuristic in Function Remodelling," *Proc. of the 23rd European Conference on Modelling and Simulation (ECMS 2009)*, pp. 834-840, 9-12 June, 2009, Madrid, Spain.

25. CM Frayn, AN Pryke, and **SY Chong**, “Exploring the Effect of Proximity and Kinship on Mutual Cooperation in the Iterated Prisoner’s Dilemma,” *Proc. of the 9th International Conference on Parallel Problem Solving from Nature (PPSN IX)*, Lecture Notes in Computer Science, Vol. 4193, pp. 701-710, Reykjavik, Iceland, 2006.
26. **SY Chong** and X Yao, “Self-Adapting Payoff Matrices in Repeated Interactions,” *Proc. of the 2006 IEEE Symposium on Computational Intelligence and Games (CIG 2006)*, pp. 103-110, IEEE Press, Piscataway, NJ, USA, 22-24 May 2006, Reno/Lake Tahoe, Nevada, USA.
27. **SY Chong** and X Yao, “The Impact of Noise on Iterated Prisoner’s Dilemma with Multiple Levels of Cooperation,” *Proc. of the 2004 Congress on Evolutionary Computation (CEC 2004)*, pp.348-355, IEEE Press, Piscataway, NJ, USA, 19-23 June 2004, Portland, Oregon, USA.
28. **SY Chong**, DC Ku, HS Lim, MK Tan, and JD White, “Evolved Neural Networks Learning Othello Strategies,” *Proc. of the 2003 Congress on Evolutionary Computation (CEC 2003)*, pp.2222-2229, IEEE Press, Piscataway, NJ, USA, 8-12 December 2003, Canberra, Australia (**IEEE Student Travel Grant**).

Books/Proceedings (Edited)/Special Issues:

29. D Ashlock, G Kendall, and **SY Chong** (eds), *Special Issue on Understanding Complex Evolutionary Systems*, Volume 17 Issue 2 in IEEE Transactions on Evolutionary Computation, IEEE Press, Piscataway, NJ, USA, 2013.
30. G Kendall, X Yao, and **SY Chong** (eds), *The Iterated Prisoners’ Dilemma: 20 Years On*, Volume 4 in Advances in Natural Computation, World Scientific, Singapore, 2007.

Book Chapters:

31. D Gairola and **SY Chong**, “An Economics-Inspired Noise Model in Spatial Games with Reputation,” In *Advances in Intelligent Modeling and Simulation: Artificial Intelligence-based Models and Techniques in Scalable Computing*, J Kolodziej, SU Khan, and T Burczynski (eds), Volume 422 in Studies in Computational Intelligence, Chapter 12, pp.271-293, 2012.
32. **SY Chong**, J Humble, G Kendall, J Li and X Yao, “The iterated prisoner’s dilemma: 20 years on,” In *The Iterated Prisoners’ Dilemma: 20 Years On*, G Kendall, X Yao and **SY Chong** (eds), Volume 4 in Advances in Natural Computation, Chapter 1, pp.1-21, World Scientific, Singapore, 2007.
33. **SY Chong**, J Humble, G Kendall, J Li and X Yao, “Iterated prisoner’s dilemma and evolutionary game theory,” In *The Iterated Prisoners’ Dilemma: 20 Years On*, G Kendall, X Yao and **SY Chong** (eds), Volume 4 in Advances in Natural Computation, Chapter 2, pp.23-62, World Scientific, Singapore, 2007.
34. **SY Chong**, J Humble, G Kendall, J Li, and X Yao, “Learning IPD Strategies through Coevolution,” In *The Iterated Prisoners’ Dilemma: 20 Years On*, G Kendall, X Yao, and **SY Chong** (eds), Volume 4 in Advances in Natural Computation, Chapter 3, pp.63-87, World Scientific, Singapore, 2007.
35. **SY Chong** and X Yao, “Evolving Cooperation in Complex Behavioral Interactions through Reputation,” In *Computational Intelligence: Principles and Practice*, GG Yen and DB Fogel (eds), Chapter 11, pp. 237-256, IEEE Press, 2006.

Others:

36. ST Yong, **SY Chong**, KM Tiong, and TK Tan, “A Pilot Test: Assessing Students’ Learning Experience,” Teaching and Learning Research Workshop 2019, 15 March 2019, University of Nottingham.

RESEARCH GRANTS

External - International:

- 09/2016–03/2017 Funding body: Mobility Grants, Royal Society; Values: GBP 6,000 (funding for travelling and subsistence); *Learning the Pareto Optimal Solutions for Vehicle Dynamics on Proton Gen-2 with Hybrid Powertrain*; PI: CW Kheng (Universiti Tungu Abdul Rahman); **Co-I: SY Chong** (University of Nottingham Malaysia).

02/2016–01/2018 Funding body: H2020-MSCA-IF-2014, European Commission (EC); Values: EUR 195,455 (funding for 1 postdoctoral fellow for 24 months and materials); Proposed project: *Unified Framework for the Analysis of Co-evolutionary Systems*; PI: P Tino (University of Birmingham, UK); **Researcher: SY Chong**, University of Nottingham Malaysia.

External - National:

11/2020–10/2023 Funding body: Ministry of Higher Education (MOHE), Malaysia; Values: MYR 110,900 (funding for 1 PhD student for 24 months and materials); Proposed project: *Novel Neural Network Architecture Generators for Weight-Sharing Randomly Wired Neural Networks*; PI: YP Wong (Multimedia University); **Co-I: SY Chong**, University of Nottingham Malaysia.

01/2017–12/2019 Funding body: Ministry of Higher Education (MOHE), Malaysia; Values: MYR 61,099 (funding for 1 PhD student for 24 months and materials); Proposed project: *A New Particle Swarm Optimization Algorithm with Curvature Flight Path*; PI: CW Kheng (Universiti Tunjku Abdul Rahman); **Co-I: SY Chong**, University of Nottingham Malaysia.

10/2015–09/2017 Funding body: Ministry of Science, Technology and Innovation (MOSTI), Malaysia; Values: MYR 79,900 (funding for 1 PhD student for 24 months); Proposed project: *Novel Combination of Eye Tracking and Brain Imaging Techniques to Determine How the Human Brain Performs Visual Search Tasks for Application in Robotics and Computer Vision*; PI: J Satel (Psychology); **Co-I: SY Chong**, University of Nottingham Malaysia.

01/2015–12/2017 Funding body: Ministry of Higher Education (MOHE), Malaysia; Values: MYR 93,200 (funding for 1 PhD student for 24 months and materials); Proposed project: *Using State of the Art Behavioural and Brain Imaging Techniques to Develop Novel Methods of English Language Training for Malaysians*; PI: J Satel (Psychology); **Co-I: SY Chong**, University of Nottingham Malaysia.

11/2014–10/2016 Funding body: Ministry of Science, Technology and Innovation (MOSTI), Malaysia; Values: MYR 153,860 (funding for 2 PhD student for 24 months); Proposed project: *Automatic Identification from 3D Cranio-Facial Data for Forensic Examinations*; PI: IY Liao; **Co-I: SY Chong**, University of Nottingham Malaysia.

09/2014–08/2016 Funding body: Ministry of Higher Education (MOHE), Malaysia; Values: MYR 72,785 (funding for 1 PhD student for 24 months and materials); Proposed project: *A Novel Data Space Regularization Method for Solving Anti-Learning Problems in Machine Learning*; PI: IY Liao; **Co-I: SY Chong**, University of Nottingham Malaysia.

06/2013–06/2015 Funding body: Ministry of Higher Education (MOHE), Malaysia; Values: MYR 60,000 (funding for 1 PhD student for 24 months and materials); Proposed project: *Cognitive Aspects of Driving in Malaysia: Perception and Judgment*; PI: E Sheppard (Psychology); **Co-I: SY Chong**, University of Nottingham Malaysia.

09/2007–09/2009 Funding body: **Leverhulme Trust**; Values: GBP 70,906 (funding for 1 research fellow for 24 months and materials); Proposed project: *A Quantitative Analysis of Co-evolutionary Computation*; **PI: SY Chong**, The University of Birmingham, UK. Note: Awarded.

Internal:

09/2018–01/2019 Funding body: Teaching and Learning Grant, University of Nottingham Malaysia; Values: MYR 1,400 (funding for 1 research assistant for 3 months); Proposed project: *A Pilot Test: Assessing Students' Learning Experience*; PI: ST Yong (Engineering), **Co-I: SY Chong**.

09/2015–12/2015 Funding body: Research Grant (Computer Science), University of Nottingham Malaysia; Values: MYR 4,000 (funding for 1 research assistant for 3 months); Proposed project: *A New Particle Swarm Algorithm for Continuous Real-World Optimization Problems*; **PI: SY Chong**.

INVITED SEMINARS AND TALKS

Seminar on *Understanding Dynamics of Coevolutionary Processes*, 21 November 2022, Professor Raul Ures Research Group, SUSTech International Center for Mathematics, Shenzhen, PR China.

Seminar on *Theory of Coevolutionary Systems: An Introduction*, 8 September 2020, Faculty of Computing and Informatics, Multimedia University, Malaysia.

Seminar on *Coevolutionary Systems and PageRank*, 19 February 2020, School of Computer Science, University of Birmingham, UK.

Seminar on *Understanding Complex Co-evolutionary Systems*, 6 November 2017, Department of Computer Science, Aberystwyth University, UK.

Seminar on *Improving Generalization Performance in Co-evolutionary Learning*, 26 May 2010, School of Computer Engineering, Nanyang Technological University, Singapore.

Seminar on *The Relationship Between Generalization and Diversity in Co-evolutionary Learning*, 15 September 2009, Intelligent Systems Centre (IntelliSys) and Centre for Computational Intelligence (C2I), Nanyang Technological University, Singapore.

Seminar on *Generalization Performance in Co-evolutionary Learning – Theory and Application*, 23 January 2008, School of Computer Engineering, Nanyang Technological University, Singapore.

Seminar on *Measuring Generalization Performance in Co-evolutionary Learning – Theory and Application*, 1 October 2007, Department of Electrical and Computer Engineering, National University of Singapore, Singapore.

Keynote Speech by Professor Yao with Dr. Chong on *A Rigorous Theoretical Framework for Measuring Generalisation of Co-evolutionary Learning*, 25-28 September 2007, *CEC 2007*, Singapore.

Plenary Speech by Professor Yao with Dr. Chong on *Noise and Reputation in Iterated Prisoner's Dilemma*, 16-21 July 2006, *CEC 2006*, Vancouver, Canada.

EDITORIAL BOARD MEMBERSHIP

2009–2016	Associate Editor , <i>IEEE Transactions on Computational Intelligence and AI in Games</i> .
2012–2013	Guest Editor , Special Issue on Understanding Complex Evolutionary Systems, <i>IEEE Transactions on Evolutionary Computation</i> .
2007	Editor , <i>The Iterated Prisoners' Dilemma: 20 Years On</i> , Volume 4 in <i>Advances in Natural Computation</i> , World Scientific.

REVIEWER FOR INTERNATIONAL JOURNALS

Reviewer	Nature Publishing Group : <i>Scientific Reports</i> . PLOS : <i>PLOS One</i> . IEEE Press : <i>IEEE Transactions on Artificial Intelligence, Evolutionary Computation, Systems, Man, and Cybernetics, Part A: Systems and Humans, Part B: Cybernetics, Computational Intelligence and AI in Games, IEEE Computational Intelligence Magazine</i> . Springer : <i>Pattern Analysis and Applications, Evolutionary Intelligence, Natural Computing, Memetic Computing, Journal of Scheduling, Autonomous Agents and Multi-Agent Systems</i> . Elsevier : <i>Simulation Modelling Practice and Theory</i> . MIT Press : <i>Evolutionary Computation</i> . World Scientific : <i>International Journal of Computational Intelligence and Applications</i> . Taylor and Francis : <i>International Journal of Systems Science</i> . IOS Press : <i>International Journal of Hybrid Intelligent Systems</i> . AIMS Press : <i>AIMS Mathematics</i> .
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CONFERENCE PROGRAM COMMITTEE

Chair	Special Session for Nature Inspired Algorithm for Real World Problems, <i>Asia Pacific Symposium on Intelligent and Evolutionary Systems (IES 2014)</i> . Special Session on Coevolution, <i>International Conference on Intelligent Data Engineering and Automated Learning (IDEAL 2013)</i> . Special Session on Multi-resolution and Granular Modelling, <i>European Conference on Modelling and Simulation (ECMS 2010, 2009)</i> .
Program Committee	<i>IEEE Conference on Games (CoG 2019)</i> . <i>Advances in Computer Games (ACG 2019)</i> . <i>IEEE Symposium Series on Computational Intelligence (SSCI 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015)</i> . <i>International Conference on Computers and Games (CG 2018)</i> . <i>International Conference on Intelligent Systems, Metaheuristics & Swarm Intelligence (ISMSI 2018)</i> . <i>Multidisciplinary International Scheduling Conference (MISTA 2019, 2017, 2015, 2013, 2011)</i> . <i>International Conference on Simulated Evolution and Learning (SEAL 2017, 2014, 2008)</i> . <i>Asia Pacific Symposium on Intelligent and Evolutionary Systems (IES 2017, 2014)</i> . <i>Genetic and Evolutionary Computation Conference (GECCO 2016, 2015, 2014, 2013, 2011)</i> . <i>International Workshop on Machine Learning, Optimization and Big Data (MOD 2016)</i> . <i>IEEE Symposium on Computational Intelligence in Dynamic and Uncertain Environments (CIDUE 2016, 2015)</i> . <i>IEEE Conference on Computational Intelligence and Games (CIG 2015)</i> . <i>International Conference on Intelligent and Interactive Computing (IIC 2015)</i> . <i>International Conference on Intelligent Data Engineering and Automated Learning (IDEAL 2013)</i> . <i>IEEE Congress on Evolutionary Computation (CEC 2012)</i> . <i>ACM Special Interest Group on Computer Graphics (SIGGRAPH ASIA 2012)</i> . <i>Parallel Problem Solving from Nature (PPSN 2014, 2012, 2010)</i> . <i>International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS 2011)</i> . <i>IEEE International Conference on Advanced Information Networking and Applications (AINA 2011)</i> . <i>International Conference on Computational Intelligence, Robotics and Autonomous Systems (CIRAS 2009)</i> .

PROFESSIONAL ACTIVITIES

2021–	Member , Marie Curie Alumni Association (0147616).
2019–	Expert Evaluator , European Commission, Horizon 2020.
2015–	Fellow , The Higher Education Academy (PR086668).
2007–2016	Member , IEEE Society and IEEE Computational Intelligence Society.
2013–2016	Committee Member , Social Media, IEEE Computational Intelligence Society.
2015–2016	Committee Member , Webinars, IEEE Computational Intelligence Society.
2014–2015	Executive Committee Member , Malaysia Chapter, IEEE Computational Intelligence Society. Awards Subcommittee Member , Outstanding PhD Dissertation Award, IEEE Computational Intelligence Society.
2011–2012	Education Task Force Member , Emergent Technology Technical Committee, IEEE Computational Intelligence Society.
2009–2011	Awards Subcommittee Member , Outstanding PhD Dissertation Award, IEEE Computational Intelligence Society.

SUPERVISION, PHD IN COMPUTER SCIENCE, UNIVERSITY OF NOTTINGHAM MALAYSIA

- 2016–2021 Mahmoud Abdel Azim Helmy Mahmoud Khattab, *Automatic Face Regions Segmentation from 3D Cranio-Facial Data Forensic Examinations* (Secondary Supervisor with I Liao).
- 2015–2020 Sheena Leeza Verghese, *High Dimensional Low Sample Size Dataset* (Secondary Supervisor with I Liao).
- 2015–2019 Arigbabu Olasimbo Ayodeji, *Automatic Identification from 3D Craniofacial for Forensic Examinations* (Secondary Supervisor with I Liao).
- 2008–2012 Cheng Wai Kheng, *Function Remodelling in Evolutionary Optimisation* (Primary Supervisor).
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PHD EXAMINER

- 04/2021 Mohammed Elsayed Mohammed Amer, *Modularity in Artificial Neural Networks* (Internal Examiner).
- 2012 Zalilah Abdul Aziz, *An Investigation of the Ant-based Hyper-heuristic for Capacitated Vehicle Routing Problem and Traveling Salesman Problem* (Internal Examiner).
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TEACHING AND LEARNING, UNIVERSITY OF NOTTINGHAM MALAYSIA

- 02/2018–03/2022 **Convenor (UG Modules):** Fundamentals of Artificial Intelligence, and Artificial Intelligence Methods (2020–). **Team-teaching** for UG Modules: Mathematics for Computer Scientists, Software Engineering Group Project, Professional Ethics in Computing, Algorithms Correctness and Efficiency (2020–), and Machine Learning (2018–2019).
Convenor (PGT Modules): Advanced Algorithms and Data Structures (2018–2019), Project in Advanced Algorithms and Data Structures (2018–2019), and Simulation and Optimisation for Decision Support (2018–2019).
Supervisor: Software Engineering Group Project (Year 2), Individual Dissertation (Year 3), and Research Project in Computer Science (MSc).
- 2017 **Exam Marker**, Intelligent Data Analysis, 3rd/4th Year UG and MSc, School of Computer Science, University of Birmingham, UK.
- 2008–01/2016 **Convenor (UG Modules):** Algorithmic Problem Solving (2008–2013), Mathematics for Computer Scientists (2008–2010), Decision Support Methodologies (2008–2011) Planning and Search (2012–2013), AI Programming Techniques (2012–2013), Planning, Search and Artificial Intelligence Programming (since 2014), and Introduction to Modelling and Optimisation (2014).
Convenor (PGT Modules): Operations Research and Modelling (2010–2014), Foundations of Artificial Intelligence (2011), Project in Information Technology (since 2012), Project in Management of Information Technology (since 2012), Introduction to Network Communications (2014), and Advanced Computer Communications (2014).
Supervisor: Individual Dissertation (Year 3) and Project in Information Technology (MSc).
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MANAGEMENT AND ADMINISTRATION, UNIVERSITY OF NOTTINGHAM MALAYSIA

- 02/2018–03/2022 **Admissions Tutor** (since 09/2020), School of Computer Science.
Postgraduate Admissions Tutor, School of Computer Science.
Member, Admissions and Marketing Committee, Faculty of Science and Engineering.
Ethics Officer, School of Computer Science.
Member, Science and Engineering Research Ethics Committee.
Member (since 10/2020), Contract Cheating Working Group, Faculty of Science and Engineering.

- 2015–03/2022 **Internal Reviewer**, E-Science Grants, Ministry of Science, Technology (2015–2016) and Innovation and Fundamental Research Grants, Ministry of Higher Education, Malaysia.
- 08/2018–02/2019 **Postgraduate Research Student Director**, School of Computer Science.
Member, Postgraduate Research Student Committee, Faculty of Science.
- 05/2008–01/2016 **Postgraduate Admissions Tutor**, School of Computer Science.
Member, Admissions and Marketing Committee, Faculty of Science.
Postgraduate Research Student Director, School of Computer Science.
Member, Postgraduate Research Student Committee, Faculty of Science.
- 09/2011–01/2016 **Course Director**, BSc (Hons) Computer Science.
- 09/2011–09/2013 **Director of Research**, School of Computer Science.
Member, Research Committee, Faculty of Science Research.
Chair, IT Committee, Faculty of Science.
Member, University Information Services Committee.

Project Supervisions (Budgeting, Procurement, and Deployment):

- 2018–2019 High Performance Computing Server (Budget: MYR 45,000).
- 2012–2013 Computer Science Lab (Budget: MYR 150,000).
- 2008–2009 High Performance Workstations (Budget: MYR 72,000).

REFEREES

- 1 **Professor Xin Yao**
Head of Department & Chair Professor
Department of Computer Science and Engineering
Southern University of Science and Technology, China
E-mail: xiny@sustech.edu.cn
- 1 **Professor Peter Tino**
Professor of Complex and Adaptive Systems
School of Computer Science
University of Birmingham, UK
E-mail: P.Tino@cs.bham.ac.uk
- 3 **Professor Lamberto Rondoni**
Professor of Mathematical Physics
Department of Mathematical Sciences
Politecnico di Torino, Italy
E-mail: lamberto.rondoni@polito.it