

Curriculum Vitae

Jimmy Ho Man Lee
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1 Personal Data

Sex: Male Date of birth: 20th August, 1963
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2 Education and Professional Qualification

Nov/22: Distinguished Fellow, Hong Kong Computer Society, Hong Kong
Sep/12: Fellow, The Hong Kong Institution of Engineers, Hong Kong
Sep/88–Jul/92: Ph.D. (Computer Science), University of Victoria, Victoria, B.C., Canada
May/87–Aug/88: M.Math. (Computer Science, thesis option), University of Waterloo, Waterloo, Ontario, Canada
Sep/83–Apr/87: B.Math. (Double Honours Computer Science and Applied Mathematics—Dean’s Honours List), University of Waterloo, Waterloo, Ontario, Canada

3 Research and Professional Experience

Aug/24–present: Acting Director, Internal Audit Office, The Chinese University of Hong Kong, Hong Kong
Aug/23–present: Director, University Planning Office, The Chinese University of Hong Kong, Hong Kong
Aug/21–Jul/23: Associate Director, University Planning Office, The Chinese University of Hong Kong, Hong Kong

- Aug/21–present: Associate College Head, New Asia College, The Chinese University of Hong Kong, Hong Kong
- Aug/19–Jul/25: Member, Board of Trustees, New Asia College, The Chinese University of Hong Kong, Hong Kong
- Aug/19–Nov/23: Member, University Council, The Chinese University of Hong Kong, Hong Kong
- Aug/19–Jul/21: Associate Dean (Education), Faculty of Engineering, The Chinese University of Hong Kong, Hong Kong
- Aug/18–Jul/19: Assistant Dean (Education), Faculty of Engineering, The Chinese University of Hong Kong, Hong Kong
- Aug/19–Jul/21: Graduate Division Head, Graduate Division of Financial Technology, Faculty of Engineering, The Chinese University of Hong Kong, Hong Kong
- Aug/18–Jul/19: Program Director, Master of Science in Financial Technology, Faculty of Engineering, The Chinese University of Hong Kong, Hong Kong
- Sep/14–Jul/21: Associate Dean of Students, New Asia College, The Chinese University of Hong Kong, Hong Kong
- Dec/12–present: Chair, Senate Committee on Student Discipline, The Chinese University of Hong Kong, Hong Kong
- Jan/12–present: Professor (by Courtesy), Department of Systems Engineering and Engineering Management, The Chinese University of Hong Kong, Hong Kong
- Aug/18: Visiting Professor, School of Computer Science, University of St. Andrews, Scotland, United Kingdom
- Aug/17–Oct/17: Visiting Professor, Department of Computing and Information Systems, The University of Melbourne, Melbourne, Australia
- Feb/16–Jun/16: Visiting Professor, Department of Computing and Information Systems, The University of Melbourne, Melbourne, Australia
- Sep/11–Jul/14: Program Co-Director, Master of Arts Programme in Information Technology in Education, Hong Kong Institute for Educational Research, The Chinese University of Hong Kong, Hong Kong
- Sep/11–Dec/12: Director, Centre for the Advancement of IT in Education, Hong Kong Institute for Educational Research, The Chinese University of Hong Kong, Hong Kong

- Jul/11–Aug/11: Visiting Professor, GREYC, Université of Caen, France
- Aug/09–Aug/11: Co-Director, Centre for the Advancement of IT in Education, Hong Kong Institute for Educational Research, The Chinese University of Hong Kong, Hong Kong
- Aug/08–Jul/11: Graduate Division Head, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Hong Kong
- May/05–Jul/09: Associate Director (Research and Development), Centre for the Advancement of IT in Education, Hong Kong Institute for Educational Research, The Chinese University of Hong Kong, Hong Kong
- Apr/05: Visiting Professor, Laboratoire d’Informatique Fondamentale d’Orléans, l’Université d’Orléans, Orléans, France
- Aug/04–present: Professor, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Hong Kong
- Aug/97–Jul/04: Associate Professor, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Hong Kong
- Aug/92–Jul/97: Assistant Professor, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Hong Kong

4 Publications

Edited Volumes

1. Jimmy Lee (Editor), *Proceedings of the 17th International Conference on Principles and Practice of Constraint Programming*, 836 pages, LNCS 6876, Springer, Perugia, Italy, September, 2011
2. J.H.M. Lee, T. Shih, Q. Wang, and Y. Zhao (Editors). *Proceedings of the 11th Global Chinese Conference on Computers in Education (GCCCE’07)*, Volumes 1 & 2 (916 pages), Beijing Normal University Press, Guangzhou, China, May, 2007
3. Jimmy Lee, Akihiro Kashiara, Ben Chang, Judy Kay, Daniel Suthers, Tatsunori Matsui, Fu-Yun Yu, and Ryo Okamoto (Editors). *Supplementary Proceedings: Workshop/Doctoral Students Consortium of the 15th International Conference on Computers in Education (ICCE’07)*, Volumes 1 & 2 (372 pages), Hiroshima, Japan, November, 2007

Book Chapters

1. Morris S.Y. Jong, Jimmy H.M. Lee and Junjie Shang. Educational Use of Computer Games: Where We Are, And What's Next. In *Ronghuai Huang, Michael Spector & Kinshuk, Reshaping Learning - The Frontiers of Learning Technologies in Global Context*, pages 299–320, Springer Verlag, 2013
2. Junjie Shang, Morris Siu Yung Jong, Fong Lok Lee, and Jimmy Ho Man Lee. Problem Solving Processes and Strategies in the Virtual Interactive Student-Oriented Learning Environment. In *H. Yang & S. Wang (Eds.), Cases on E-Learning Management: Development and Implementation*, pages 223–239, IGI Global, 2012
3. M.S.Y. Jong, J.J. Shang, F.L. Lee, and J.H.M. Lee. Constructivist learning through computer gaming. In *M.R. Syed (Ed.), Technologies shaping instruction and distance education: New studies and utilization*, pages 207–222, New York: Information Science Reference, 2010
4. M.S.Y. Jong, J.J. Shang, F.L. Lee, and J.H.M. Lee. VISOLE—A constructivist pedagogical approach to game-based learning. In *H. Yang, & S. Yuen (Eds.), Collective intelligence and e-learning 2.0: Implications of web-based communities and networking*, pages 185–206, New York: Information Science Reference, 2010

Refereed International Journals

1. Jimmy H.M. Lee and Allen Z. Zhong. Exploiting Functional Constraints in Automatic Dominance Breaking for Constraint Optimization, *Journal of Artificial Intelligence Research*, 78:1–35, September, 2023
2. Jimmy H.M. Lee and Allen Z. Zhong. Automatic Generation of Dominance Breaking Nogoods for a Class of Constraint Optimization Problems, *Artificial Intelligence*, 323:103974, October, 2023
3. Jimmy Ho Man Lee. Story-Based Learning in a MOOC Course: An Experience to Share, *Research of Educational Communications and Technology*, 122:1–9, April, 2020
4. Jimmy H.M. Lee and Zichen Zhu. Towards Breaking More Composition Symmetries in Partial Symmetry Breaking, *Artificial Intelligence*, 252:51–82, November, 2017
5. David Allouche, Christian Bessiere, Patrice Boizumault, Simon de Givry, Patricia Gutierrez, Jimmy H.M. Lee, Ka Lun Leung, Samir Loudni, Jean-Philippe Métivier, Thomas Schiex and Yi Wu. Tractability-preserving Transformations of Global Cost Functions, *Artificial Intelligence*, 238:166–189, September, 2016

6. Jimmy H.M. Lee, Pedro Meseguer and Wen Su. Adding Laziness in BnB-ADOPT+, *CONSTRAINTS*, 20(2):274–282, 2015
7. Arnaud Lallouet, Jimmy H.M. Lee, Terrence W.K. Mak and Justin Yip. Ultra-Weak Solutions and Consistency Enforcement in Minimax Weighted Constraint Satisfaction, *CONSTRAINTS*, 20(2):109–154, 2015
8. J.H.M. Lee, K.L. Leung and Y.W. Shum. Consistency Techniques for Polytime Linear Global Cost Functions in Weighted Constraint Satisfaction, *CONSTRAINTS*, 19(3):270–308, 2014
9. Y.C. Law, J.H.M. Lee, T. Walsh and M.H.C. Woo. Multiset Variable Representations and Constraint Propagation, *CONSTRAINTS*, 18(3):307–343, 2013
10. J.H.M. Lee and K.L. Leung. Consistency Techniques for Flow-Based Projection-Safe Global Cost Functions in Weighted Constraint Satisfaction, *Journal of Artificial Intelligence Research*, 43:257–292, 2012
11. Morris S.Y. Jong, Weiqin Chen, Alex W.C. Tse, Fong-lok Lee, and Jimmy H.M. Lee. Using Posting Templates for Enhancing Students’ Argumentative Elaborations in Computer-Supported Collaborative Inquiry Learning, *Research and Practice in Technology Enhanced Learning*, 5(3):275–294, 2010
12. Morris S.Y. Jong, Junjie Shang, Fong-lok Lee, and Jimmy H.M. Lee. An Evaluative Study on VISOLE—Virtual Interactive Student-Oriented Learning Environment, *IEEE Transactions on Learning Technologies*, 3(4):307–318, 2010
13. Y.C. Law, J.H.M. Lee, and M.H.C. Woo. Redundant Modeling in Permutation Weighted Constraint Satisfaction Problems, *CONSTRAINTS*, 15(3):354–403, 2010
14. Stefano Bistarelli, Philippe Codognet, H.K.C. Hui, and J.H.M. Lee. Solving Finite Domain Constraint Hierarchies by Local Consistency and Tree Search, *Journal of Experimental and Theoretical Artificial Intelligence*, 21(4):233–257, 2009.
15. Kevin K.F. CHEUNG, Morris S.Y. JONG, F.L. LEE, Jimmy H.M. LEE, Eric T.H. LUK, Junjie SHANG, and Marti K.H. WONG. FARMTASIA: an Online Game-based Learning Environment Based on the VISOLE Pedagogy, *Journal of Virtual Reality*, 12(1):17–25, 2008
16. Junjie Shang, Morris S.Y. Jong, Fong-Lok Lee, and Jimmy H.M. Lee. Case Studies of Game-based Learning and Insights into Educational Games Design (in Chinese), *China Educational Technology*, 2, pages 65–71, 2008

17. Yuxia Zhou, Fong-Lok Lee, Jimmy H.M. Lee, and Junjie Shang. Play or Learn: Students' Cognition, Sentiments, Meaning, and Behavior in the Learning Villages Platform (in Chinese), *Journal of Chinese Distance Learning Research*, 1, 2008
18. Morris S.Y. Jong, Junjie Shang, Fong-Lok Lee and Jimmy H.M. Lee. Harnessing Computer Games in Education: Why and How? *International Journal of Distance Education Technologies*, 6(1), pages 1-9, 2008
19. Junjie Shang, Morris S.Y. Jong, Fong-Lok Lee, and Jimmy H.M. Lee. Motivation Strategies and Effectiveness of VISOLE (in Chinese), *Global Chinese Journal for Computers in Education*, 5(1-2), pages 72-84, 2007
20. C.W. Choi, J.H.M. Lee, and P.J. Stuckey. Removing Propagation Redundant Constraints in Redundant Modeling, *ACM Transactions on Computational Logic*, 8(4), Article 23 (38 pages), 2007
21. H. Fang, Y. Kilani, J.H.M. Lee, and P.J. Stuckey. The Island Confinement Method for Reducing Search Space in Constraint Satisfaction, *Journal of Heuristics*, 13(6), pages 557-585, 2007
22. Y.C. Law, J.H.M. Lee, and B.M. Smith. Automatic Generation of Redundant Models for Permutation Constraint Satisfaction Problems, *CONSTRAINTS*, 12(4), pages 469-505, 2007
23. J.J. Shang, M.S.Y. Jong, F.L. Lee, J.H.M. Lee, and H.Y. Law. Computer Games in Education: A Comparative Study between Hong Kong and Beijing, *Journal of Computational Information Systems*, 2(2), pages 481-487, 2006
24. Y.C. Law and J.H.M. Lee. Symmetry Breaking Constraints for Value Symmetries in Constraint Satisfaction, *CONSTRAINTS*, 11(2-3), pages 221-267, 2006
25. Jimmy Ho-Man Lee, Fong-Lok Lee, and Tai-Shing Lau. Folklore-based Learning on the Web—Pedagogy, Case Study and Evaluation, *Journal of Educational Computing Research*, 34(1), pages 1-27, 2006.
26. Junjie Shang, Fong-Lok Lee, and Jimmy Ho-Man Lee. Light Game: The Future of the Digital Game-Based Learning (in Chinese), *Journal of e-Education Research*, 1, pages 24-26, 2005
27. F.L. Lee, K.K. Lau, and J.H.M. Lee. Developing Global Chinese Web-based Learning Environment (in Chinese), *Global Chinese Journal on Computers in Education*, 1(1), pages 7-19, 2003

28. Fong-lok Lee, Jimmy Ho-man Lee, and Tai-shing Lau. Fantasy-based Learning on the Web—Tong Pak Fu and Chou Heung: the Probabilistic Fantasy, *Hong Kong Science Teachers' Journal*, 21(1), pages 10–14, 2003
29. Xudong Luo, Nicholas R. Jennings, Nigel Shadbolt, Ho-fung Leung, and Jimmy Ho-man Lee. A Fuzzy Constraint Based Knowledge Model for Bilateral, Multi-Issue Negotiations in Competitive Environments, *Artificial Intelligence*, 148(1–2), pages 53–102, 2003
30. Xudong Luo, Jimmy Ho-man Lee, Ho-fung Leung, and Nicholas R. Jennings. Prioritised Fuzzy Constraint Satisfaction Problems: Axioms, Instantiation and Validation, *Fuzzy Sets and Systems*, 136(2), pages 155–188, Elsevier Science Ltd, 2003
31. C.K. Chiu and J.H.M. Lee. Efficient Interval Linear Equality Solving in Constraint Logic Programming, *Reliable Computing*, 8(2), pages 139–174, Kluwer Academic Publishers, 2002
32. C.K. Chiu, C.M. Chou, J.H.M. Lee, H.F. Leung, and Y.W. Leung. A Constraint-Based Interactive Train Rescheduling Tool, *CONSTRAINTS*, 7(2), pages 167–198, Kluwer Academic Publishers, 2002
33. K.M.F. Choi, J.H.M. Lee, and P.J. Stuckey. A Lagrangian Reconstruction of GENET, *Artificial Intelligence*, 123(1–2), pages 1–39, Elsevier Science Ltd, 2000
34. J.H.M. Lee and H.F. Leung. An Execution Scheme for Interactive Problem-Solving in Concurrent Constraint Logic Programming Languages, *Computer Languages*, 25(3), pages 119–144, Elsevier Science Ltd, 2000
35. B.M.W. Cheng, K.M.F. Choi, J.H.M. Lee, and J.C.K. Wu. Increasing Constraint Propagation by Redundant Modeling: an Experience Report, *CONSTRAINTS*, 4, pages 167–192, Kluwer Academic Publishers, 1999
36. C.K. Chiu and J.H.M. Lee. Extending HCLP with Partially Ordered Hierarchies and Composite Constraints, *Journal of Experimental and Theoretical Artificial Intelligence*, 10, pages 5–24, Taylor & Francis Ltd, 1998
37. B.M.W. Cheng, J.H.M. Lee, and J.C.K. Wu. A Nurse Rostering System Using Constraint Programming and Redundant Modeling, *IEEE Transactions on Information Technology in Biomedicine*, 1, pages 44–54, IEEE Publishers, 1997
38. J.H.M. Lee and P.K.C. Pun. Object Logic Integration: a Multiparadigm Design Methodology and a Programming Language, *Computer Languages*, 23, pages 25–42, Elsevier Science Ltd, 1997

39. J.H.M. Lee and V.W.L. Tam. A Framework for Integrating Artificial Neural Networks and Logic Programming, *International Journal on Artificial Intelligence Tools*, 4(1&2), pages 3–32, World Scientific, June, 1995
40. J.H.M. Lee and M.H. van Emden. Interval Computation as Deduction in CHIP, *Journal of Logic Programming*, 16(3&4), pages 255-276, North-Holland, May, 1993

Refereed International Conferences

1. Hon Kit Hui, Jimmy H.M. Lee, Anthony K.W. Sum and Darwin Lau, Indoor Hydroponics Robot System for Automated Seeding and Logistics, 18th IEEE International Conference on Control & Automation (IEEE ICCA 2024), pages 376–381, Reykjavik, Iceland, June, 2024
2. Xinyi Hu, Jasper C.H. Lee and Jimmy H.M. Lee, Two-Stage Predict+Optimize for Mixed Integer Linear Programs with Unknown Parameters in Constraints, Predict+Optimize, (to appear) *Advances in Neural Information Processing Systems (NeurIPS-23)*, New Orleans, USA, December, 2023
3. Xinyi Hu, Jasper C.H. Lee and Jimmy H.M. Lee, Branch & Learn with Post-hoc Correction for Predict+Optimize with Unknown Parameters in Constraints, *Proceedings of the 20th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR-23)*, pages 264–280, Nice, France, May-June, 2023
4. Hongbo Li and Jimmy H.M. Lee, Finding Good Partial Assignments During Restart-based Branch and Bound Search, *Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI-23)*, pages 4035–4043, Washington DC, USA, February, 2023
5. Xinyi Hu, Jasper C.H. Lee and Jimmy H.M. Lee, Predict+Optimize for Packing and Covering LPs with Unknown Parameters in Constraints, *Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI-23)*, pages 3987–3995, Washington DC, USA, February, 2023
6. Xinyi Hu, Jasper C.H. Lee, Jimmy H.M. Lee and Allen Z. Zhong. Branch & Learn for Recursively and Iteratively Solvable Problems in Predict+Optimize, *Advances in Neural Information Processing Systems (NeurIPS-22)*, 35, pages 25807-25817, New Orleans, USA, November-December, 2022
7. **(Best Student Paper Award)** Jimmy H.M. Lee and Allen Z. Zhong. Exploiting Functional Constraints in Generating Dominance Breaking Nogoods for Constraint Optimization, *Proceedings of the 28th International Conference on Principles and Practice of Constraint Programming (CP-22)*, pages 31:1–31:17, Haifa, Israel, July-August, 2022

8. Jimmy H.M. Lee. From MOOC to SPOC: Fable-based Learning, *Proceedings of the 14th International Conference on Blended Learning (ICBL'21)*, pages 16–25, a virtual conference, August, 2021
9. Jimmy H.M. Lee and Allen Z. Zhong. Towards More Practical and Efficient Automatic Dominance Breaking, *Proceedings of the 35th AAAI Conference on Artificial Intelligence (AAAI-21)*, pages 3868–3876, a virtual conference, February, 2020
10. S.S.C. Young, K.O. Villalba-Condori, H.M. Lee, P.J. Stuckey, M.Y. Tsai, C.N. Lan and Y.H. Liao. A Study of the Perceptions of the Innovative Cross-Cultural MOOC Course via the Animated Promotional Video (in Chinese), *Proceedings of 2020 Taiwan Association of Educational Communication and Technology (TAECT) International Conference: Towards Culturally-Situated Learning Design and Research*, New Taipei City, Taiwan, December, 2020
11. Jimmy H.M. Lee and Allen Z. Zhong. Automatic Dominance Breaking for a Class of Constraint Optimization Problems, *Proceedings of the 29th International Joint Conference on Artificial Intelligence and the 17th Pacific Rim International Conference on Artificial Intelligence (IJCAI-PRICAI 2020)*, pages 1192–1200, Yokohama, Japan, July, 2020
12. Hongbo Li, Jimmy H.M. Lee, He Mi and Minghao Yin. Finding Good Subtrees for Constraint Optimization Problems Using Frequent Pattern Mining, *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI-20)*, pages 1577–1584, New York, USA, February, 2020
13. Mavis Chan, Cecilia Chun, Holly Fung, Jimmy H.M. Lee and Peter J. Stuckey. Teaching Constraint Programming Using Fable-Based Learning, *Proceedings of the 10th Symposium on Educational Advances in Artificial Intelligence (EAAI-20) (Collocated with AAAI-20)*, pages 13366–13373, New York, USA, February, 2020
14. Xuming Huang and Jimmy Lee. DoubleLex Revisited and Beyond, *Proceedings of the 28th International Joint Conference on Artificial Intelligence (IJCAI 2019)*, pages 1101–1107, Macao, China, August, 2019
15. Jasper C.H. Lee, Jimmy H.M. Lee and Allen Z. Zhong. Augmenting Stream Constraint Programming with Eventuality Conditions, *Proceedings of the 24th International Conference on Principles and Practice of Constraint Programming (CP-18)*, pages 242–258, Lille, France, August, 2018
16. Jimmy Lee and Zichen Zhu. Static Symmetry Breaking with the Reflex Ordering, *Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI-16)*, pages 758–765, New York City, USA, July, 2016

17. Jimmy Lee and Zichen Zhu. Breaking More Composition Symmetries Using Search Heuristics, *Proceedings of the 30th AAAI Conference on Artificial Intelligence (AAAI 2016)*, pages 3418–3425, Phoenix, Arizona, USA, February, 2016
18. Jimmy Lee, Christian Schulte and Zichen Zhu. Increasing Nogoods in Restart-Based Search, *Proceedings of the 30th AAAI Conference on Artificial Intelligence (AAAI 2016)*, pages 3426–3433, Phoenix, Arizona, USA, February, 2016
19. Jimmy H.M. Lee and Zichen Zhu. Filtering Nogoods Lazily in Dynamic Symmetry Breaking During Search, *Proceedings of the 24th International Joint Conference on Artificial Intelligence (IJCAI 2015)*, pages 339–345, Buenos Aires, Argentina, July, 2015
20. Jasper Lee and Jimmy Lee. Towards Practical Infinite Stream Constraint Programming: Applications and Implementation, *Proceedings of the 20th International Conference on Principles and Practice of Constraint Programming (CP 2014)*, pages 449–464, Lyon, France, September, 2014
21. Simon De Givry, Jimmy Lee, Ka Lun Leung and Yu Wai Shum. Solving a Judge Assignment Problem Using Conjunctions of Global Cost Functions, *Proceedings of the 20th International Conference on Principles and Practice of Constraint Programming (CP 2014)*, pages 797–812, Lyon, France, September, 2014
22. Jimmy Lee and Zichen Zhu. An Increasing-Nogoods Global Constraint for Symmetry Breaking During Search, *Proceedings of the 20th International Conference on Principles and Practice of Constraint Programming (CP 2014)*, pages 465–480, Lyon, France, September, 2014
23. Jimmy H.M. Lee and Zichen Zhu. Boosting SBDS for Partial Symmetry Breaking in Constraint Programming, *Proceedings of the Twenty-Eighth Conference on Artificial Intelligence (AAAI-14)*, pages 2695–2702, Quebec City, Quebec, Canada, July, 2014
24. Jimmy H.M. Lee and Yuxiang Shi. Removing Redundant Conflict Value Assignments in Resolvent Based Nogood Learning, *Proceedings of 13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS-14)*, pages 1133–1140, Paris, France, May, 2014
25. Jimmy H.M. Lee, Terrence W.K. Mak and Yuxiang Shi. A General Privacy Loss Aggregation Framework for Distributed Constraint Reasoning, *Proceedings of 25th IEEE International Conference on Tools with Artificial Intelligence (ICTAI-13)*, pages 979–986, Washington DC, USA, November, 2013

26. Patricia Gutierrez, Jimmy H.M. Lee, Ka Man Lei, Terrence W.K. Mak and Pedro Meseguer. Maintaining Soft Arc Consistencies in BnB-ADOPT+ During Search, *Proceedings of the 19th International Conference on Principles and Practice of Constraint Programming (CP-13)*, pages 365–380, Uppsala, Sweden, September, 2013
27. J.H.M. Lee and T.W.K. Mak. A Value Ordering Heuristic for Solving Ultra-Weak Solutions in Minimax Weighted CSPs, *Proceedings of the 24th IEEE International Conference on Tools with Artificial Intelligence (ICTAI-12)*, pages 17–24, Athens, Greece, November, 2012
28. J.H.M. Lee, K.L. Leung, and Y.W. Shum. Propagating Polynomially (Integral) Linear Projection-Safe Global Cost Functions in WCSPs, *Proceedings of the 24th IEEE International Conference on Tools with Artificial Intelligence (ICTAI-12)*, pages 9–16, Athens, Greece, November, 2012
29. Morris S.Y. Jong, Eric T.H. Luk, and Jimmy H.M. Lee. An Integrated GPS-supported Outdoor Exploratory Educational System—EagleEye, *Proceedings of the 20th International Conference on Computers in Education (ICCE-12)*, pages 338–345, Singapore, November, 2012
30. A. Lallouet, J.H.M. Lee, and T.W.K. Mak. Consistencies for Ultra-Weak Solutions in MWCSPs Using the Duality Principle, *Proceedings of the Eighteenth International Conference on Principles and Practice of Constraint Programming (CP-12)*, pages 373–389, Quebec City, Canada, October, 2012
31. J.H.M. Lee and J.Y. Li. Increasing Symmetry Breaking by Preserving Target Symmetries, *Proceedings of the Eighteenth International Conference on Principles and Practice of Constraint Programming (CP-12)*, pages 422–438, Quebec City, Canada, October, 2012
32. J.H.M. Lee, K.L. Leung and Y. Wu. Polynomially Decomposable Global Cost Functions in Weighted Constraint Satisfaction, *Proceedings of the Twenty-Sixth AAAI Conference on Artificial Intelligence (AAAI-12)*, pages 507–513, Toronto, Canada, July, 2012
33. Jimmy H.M. Lee, Terrence W.K. Mak, and Justin Yip. Weighted Constraint Satisfaction Problems with Min-Max Quantifiers, *Proceedings of the 23rd IEEE International Conference on Tools with Artificial Intelligence (ICTAI-11)*, pages 769–776, Florida, USA, November, 2011
34. J.H.M. Lee and Y.W. Shum. Modeling Soft Global Constraints as Linear Programs in Weighted Constraint Satisfaction, *Proceedings of the 23rd IEEE International Conference on Tools with Artificial Intelligence (ICTAI-11)*, pages 305–312, Florida, USA, November, 2011

35. Y.C. Law, J.H.M. Lee, M.H.W. Woo, and T. Walsh. A Comparison of Lex Bounds for Multiset Variables in Constraint Programming, *Proceedings of the Twenty-Fifth Conference on Artificial Intelligence (AAAI-11)*, pages 61–67, San Francisco, USA, August, 2011
36. A. Lallouet, Y.C. Law, J.H.M. Lee, and C.F.K. Siu. Constraint Programming on Infinite Data Streams, *Proceedings of the 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011)*, pages 597–604, Barcelona, Spain, July, 2011
37. Morris S.Y. Jong, Junjie Shang, Fong-lok Lee, and Jimmy H.M. Lee. A Case Study of an Academic Achievement-oriented Student in Game-based Learning, *Proceedings of the 11th IEEE International Conference on Advanced Learning Technologies (ICALT 2011)*, pages 7–11, Athens, Georgia, July, 2011
38. **(Best Paper Award)** Morris S.Y. Jong, Junjie Shang, Fong-lok Lee, and Jimmy H.M. Lee. The Significance of Emotional Support to Students in Game-based Learning, *Proceedings of the 18th International Conference on Computers in Education (ICCE'10)*, pages 525–532, Putrajaya, Malaysia, November, 2010
39. J.H.M. Lee and K.L. Leung. A Stronger Consistency for Soft Global Constraints in Weighted Constraint Satisfaction, *Proceedings of the Twenty-Fourth AAAI Conference on Artificial Intelligence (AAAI'10)*, pages 121–127, Atlanta, USA, July, 2010
40. **(Finalists of Best Paper Award)** Morris S.Y. Jong, Junjie Shang, Fong-lok Lee, and Jimmy H.M. Lee. A Case Study of a Non-Gamer Student's Learning Process in VISOLE, *Proceedings of the 3rd IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning*, pages 77–84, Koahsiung, Taiwan, April, 2010
41. J.H.M. Lee and K.L. Leung. Towards Efficient Consistency Enforcement for Global Constraints in Weighted Constraint Satisfaction, *Proceedings of the Twenty-First International Joint Conference on Artificial Intelligence (IJCAI'09)*, pages 559–565, Pasadena, California, USA, July, 2009
42. Y.C. Law, J.H.M. Lee, and M.H.C. Woo. Variety Reasoning for Multiset Constraint Propagation, *Proceedings of the Twenty-First International Joint Conference on Artificial Intelligence (IJCAI'09)*, pages 552–558, Pasadena, California, USA, July, 2009
43. **(Best Paper Award)** J.J. Shang, M. Jong, F.L. Lee, and J.H.M. Lee. Problem Solving Process and Strategies in the Virtual Interactive Student-Oriented Learning Environment (in Chinese), *Proceedings of the 13th Global Chinese on Computers in Education Conference (GCCCE 2009)*, pages 150–158, Taipei, Taiwan, May, 2009
44. Morris S.Y. Jong, Alex W.C. Tse, Yuxia Zhou, Weiqin Chen, Fong-lok Lee, Jimmy H.M. Lee. Using Posting Templates for Enhancing Students' Argumentative Elaborations in

- Learning Villages, *Proceedings of the 2nd IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning (DIGITEL 2008)*, pages 180–187, Banff, Canada, November, 2008
45. J.H.M. and F.K. Siu. Stronger Consistencies in WCSPs with Set Variables, *Proceedings of the 20th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2008)*, pages 291–298, Dayton, Ohio, USA, November, 2008
 46. M. Jong, J.J. Shang, F.L. Lee, and J.H.M. Lee. Teachers’ Concerns about the Implementation of the VISOLE Pedagogy, *Proceedings of the 16th International Conference on Computers in Education (ICCE-2008)*, 8 pages (electronic proceedings), Taipei, Taiwan, October, 2008
 47. J.J. Shang, M.S.Y. Jong, F.L. Lee, and J.H.M. Lee. VISOLE: An Example of Hybrid Learning, *Proceedings of the First International Conference on Hybrid Learning 2008 (ICHL 2008)*, pages 348–358, LNCS 5169, Hong Kong, August, 2008
 48. Y.C. Law, J.H.M. Lee, and M.H.C. Woo. A Parameterized Local Consistency for Redundant Modeling in Weighted CSPs, *Proceedings of the 20th Australian Joint Conference on Artificial Intelligence (AI 2007)*, pages 191–201, LNAI 4830, Gold Coast, Queensland, Australia, December, 2007
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 50. C.W. Choi and J.H.M. Lee. Solving the Salinity Control Problem in a Potable Water System, (*Applications Track*) *Proceedings of the Thirteenth International Conference on Principles and Practice of Constraint Programming (CP’07)*, pages 33–48, LNCS 4741, Providence, Rhode Island, USA, September, 2007
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5 Patents

1. Irwin King, Jimmy Ho-Man Lee, Patrick Lau, Chi Chung Mak, and Chi Chung Chan, *The Chinese University Plagiarism IDentification Engine (CUPIDE)*, Taiwan Patent No. I 368144, 2012.
2. Irwin King, Jimmy Lee, Tak Pang Lau, Chi Chung Mak and Chi Chung Chan. *Systems and Methods for Detecting Similarity of Documents*, Singapore patent 200804446-3, May 31, 2011.
3. Irwin King, Jimmy Lee, Tak Pang Lau and Chi Chung Mak. *A System for Determining Plagiarism of Files and a Method Thereof*, HK1123108, Hong Kong SAR, 2011.01.21
4. Irwin King, Jimmy Lee, Tak Pang Lau, Chi Chung Mak and Chi Chung Chan. *Sistema e método para detecção de similaridade dos documentos*, Macao Patent J/527, Macau, 2010.09.21
5. Irwin King, Jimmy Ho-Man Lee, Patrick Lau, Chi Chung Mak, and Chi Chung Chan, *The Chinese University Plagiarism IDentification Engine (CUPIDE)*, Hong Kong Patent No. 09100342.6, 2010.
6. Irwin King, Jimmy Ho-Man Lee, Patrick Lau, Chi Chung Mak, and Chi Chung Chan, *The Chinese University Plagiarism IDentification Engine (CUPIDE)* (in Chinese), Chinese Patent No. 200710105835.3, 2010.

6 Research Grants

1. *Predict+Optimize: Theory and Algorithms*, Principal Investigator, Direct Grant, CUHK, 2024-26, HK\$40,735

2. *Further Development of Smart Plant Sowing Robot System for Nurseries and Hydroponics*, Principal Investigator (with Darwin Lau), Technology and Business Development Fund, ORKTS, CUHK, 2022-23, HK\$200,000
3. *Telepresence Robot with Mixed Reality and Intelligent Human-Robot Teleoperation*, Co-Investigator (with Darwin Lau), Technology and Business Development Fund, ORKTS, CUHK, 2022-23, HK\$193,330
4. *Exploiting Dominance Relations in Constraint Optimization: Theory, Automation and Algorithms*, Principal Investigator, RGC General Research Fund, Research Grants Council (Hong Kong), 2021–2024, HK\$838,393
5. *Tele-Operated Experimental Platforms for Online Remote Robotics Laboratories*, Co-Principal Investigator (with Darwin Lau), Special Grant for Strategic Development of Virtual Teaching and Learning (Institutional Portion), 2021-23, HK\$300,000
6. *An Online Exam Invigilation System Based on Face Recognition*, Co-Investigator (with Daoyuan Wu), Courseware Development Grant, CUHK, 2021-22, HK\$99,804
7. *An eLearning Course to Improve the Teaching Quality for Teachers and Teaching Assistants in the Faculty of Engineering*, Co-Investigator (with Dongkun Han and Darwin Lau), CUHK Teaching Development and Language Enhancement Grant, CUHK, 2020-22, HK\$874,409
8. *Fable-based Learning for Learning Discrete Optimization*. Principal Investigator, Micro-Module Courseware Development Grant, CUHK, 2017–2018, HK\$100,000
9. *Dynamic Symmetry Breaking in Constraint Satisfaction Revisited*. Principal Investigator, Direct Grant from Engineering Panel, CUHK, 2017–2018, HK\$150,000
10. *International Consortium for Optimization of Soybean Cultivation*, Co-Investigator (with Hon-Ming Lam and Amos Tai), Vice-Chancellor Discretionary Fund (CUHK), 2015–2020, HK\$2,000,000
11. *Modeling Issues in Distributed Constraint Programming: From Theory to Practice*, Principal Investigator, RGC General Research Fund, Research Grants Council (Hong Kong), 2014–2016, HK\$645,500
12. *Design-based Research on Teacher Facilitation in Constructivist Online Game-based Learning in Formal School Education*, Co-Investigator (with PI Morris Jong and Co-Is Shang Junjie, Vincent Tam and Lucy Huang), RGC General Research Fund, Research Grant Council (Hong Kong), 2014–2016, HK\$391,000

13. *Towards a Practical Library of Global Cost Functions in Weighted Constraint Networks*, Principal Investigator, PROCORE-France/Hong Kong Joint Research Scheme, 2013–2014, HK\$45,000
14. *Promoting Junior Secondary Students? Motivation and Skills in Issue-enquiry through Inter-school Game-based Collaborative Learning*, Co-Investigator (with PI Morris Jong, and Co-Is Chi-shing Tse and Tom Chan), Knowledge Transfer Fund, Research Grant Council, 2012–2013, HK\$240,000
15. *Modeling Distributed Constraint Satisfaction and Optimization Problems*, Principal Investigator, CSIC/RGC Joint Research Scheme, 2012–2014, HK\$48,600
16. *Soft Global Constraints in Weighted Constraint Satisfaction: Properties, Algorithms, and Applications*, Principal investigator (with Y.C. Law), RGC General Research Fund, Research Grant Council (Hong Kong), 2011–2014, HK\$1,302,807
17. *Constraint Satisfaction with Cost Conditioning Reduced Ordered Binary Decision Diagrams (CC-ROBDD): Definitions, Properties, and Algorithms*, Principal investigator (with Peter Stuckey and Y.C. Law), RGC Earmarked Grant, Research Grant Council (Hong Kong), 2008–2011, HK\$491,906
18. *Set Variables in Constraint Satisfaction Revisited*, Principal investigator (with Peter Stuckey and Y.C. Law), RGC Earmarked Grant, Research Grant Council (Hong Kong), 2006–2008, HK\$609,391
19. *Project-based Learning with Learning Villages among schools in the Mainland, Hong Kong and the USA*, Co-Principal Investigator (with F.L. Lee), Quality Education Fund (Hong Kong), 2006–2007, HK\$701,800
20. *A Web-based Platform for Mathematics Knowledge Diagnostic Testing for Engineering Freshmen*, Co-Principal Investigator (with L.W. Chan and Will Ng—Department of Information Engineering), Teaching Development Grants for 2005-08 Triennium, The Chinese University of Hong Kong, 2005-2006, HK\$219,300
21. *Breaking Symmetries of Indistinguishable Values in Constraint Satisfaction*, Principal investigator, RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2006–2008, HK\$692,480
22. *Utilizing Useful Redundancy Information to Increase Search Efficiency in Constraint Satisfaction*, Principal investigator (with P.J. Stuckey—University of Melbourne), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2005–2007, HK\$339,414
23. *Problem Generation Platform*, Co-principal investigator (with Kenneth Young—Dept of Physics), Teaching Development Grant, The Chinese University of Hong Kong, 2003, HK\$20,000

24. *From Flatland to Spaceland: the Higher Dimensional Space Odyssey*, Co-principal investigator (with Wang Lu—Capital Normal University, Zhang Jing Zhong—Capital Normal University, F.L. Lee—Dept of Curriculum and Instruction), Key Technology Education Project grant, Beijing City Natural Science Foundation and Beijing Municipal Education Commission, 2004-2006, RMB\$200,000
25. *Efficient Local Search Methods for Soft Constraint Satisfaction Problems*, Co-principal investigator (with P. Codognet—University of Paris 6), France/Hong Kong Joint Research Scheme, 2003-2004, HK\$61,200
26. *Efficient Local Search Methods for Soft Constraint Satisfaction Problems*, Principal investigator (with H.F. Leung and P. Codognet—University of Paris 6), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2002–2004, HK\$413,404
27. *Adaptive Strategies for Soft Bid-Determination in Agent Based Continuous Double Auctions*, Co-investigator (with H.F. Leung), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2002–2004, HK\$599,404
28. *Virtual Interactive Student-Oriented Learning Environment (VISOLE)—Extending the Frontier of WEB-Based Learning*, Co-investigator (with F.L. Lee—Dept of Curriculum and Instruction, Y. Leung—Dept of Geography and Resource Management, K.C. Chau—Dept of Geography and Resource Management), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2002–2004, HK\$793,605
29. *Summative Evaluation of the Web-based PBL Package—Tong Pak Fu and Chou Heung: The Probabilistic Fantasy*, Co-Principal investigator (with T.S. Lau and F.L. Lee), Teaching Development Grant 1998/2001, 1st Tranche, Promotion of Experience Sharing and Sharing of Good Teaching and Learning Practices, CLEAR, The Chinese University of Hong Kong, 2001–2002, HK\$250,000
30. *Reducing Search Space in Local Search for Constraint Satisfaction*, Principal investigator (with H.F. Leung and P.J. Stuckey—University of Melbourne), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2001–2003, HK\$387,248
31. *Integration of Constraint Satisfaction Techniques and Mixed Integer Programming*, Co-investigator (with H.F. Leung), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2001–2003, HK\$387,248
32. *Collaborating Redundant Models in Constraint Satisfaction*, Principal investigator (with H.F. Leung and P.J. Stuckey—University of Melbourne), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 2000–2002, HK\$437,817

33. *Solving Constrained Optimization Problems with Lagrangian-Based Search Methods*, Co-investigator (with V. Tam—National University of Singapore, Singapore, P.J. Stuckey—University of Melbourne, Australia and E. Tsang—University of Essex, U.K.), ARF Grant from the National University of Singapore (Singapore), 1999–2001, SG\$45,000
34. *Using Stochastic Methods to Guide Search in Constraint Programming*. Principal investigator (with H.F. Leung and P.J. Stuckey—University of Melbourne), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 1998–2000, HK\$405,000
35. *Soft Constraint-Based Scheduling in Intelligent Multiagent Systems*. Co-Investigator (with H.F. Leung and Keith L. Clark—Imperial College), RGC Earmarked Grant from the Research Grant Council (Hong Kong), 1998–2000, HK\$455,000
36. *Co-operative Constraint Satisfaction Among Intelligent Agents*. Co-Principal investigator (with H.F. Leung and K.L. Clark—Imperial College), UK-HK Joint Research Scheme 96-97, British Council, HK\$77,700
37. *Multiparadigm Programming Language Implementation and Applications*. Principal investigator (with H.F. Leung), Direct Grant from the Research Grant Council (Hong Kong), 1996–1998, HK\$100,000
38. *Object-oriented Real-time Rule-based Programming for Intelligent Control*. Co-investigator (with H.F. Leung), Direct Grant from the Research Grant Council (Hong Kong), 1996–1998, HK\$100,000
39. *Binary Fuzzy Constraint Satisfaction Problems: Properties and Solutions*. Co-investigator (with H.F. Leung), The Croucher Foundation Research Grant (CF94/21), 1996–1998, HK\$482,000
40. *Stochastic Solvers in Constraint Programming*. Principal investigator (with Peter Stuckey—U. of Melbourne), Young Asian Scholars 1996, University of Melbourne, AUD5,000
41. *Real-time Logic Programming for Intelligent Control*. Co-investigator (with H.F. Leung), Direct Grant from the Research Grant Council (Hong Kong), 1995–1997, HK\$150,000
42. *Towards an AI Architecture for Very Large-Scale Constraint Satisfaction Problems*. Principal investigator (with H.F. Leung and L.W. Chan), Direct Grant from the Research Grant Council (Hong Kong), 1995–1997, HK\$150,000
43. *Integrating Constraint Logic Programming and Artificial Neural Network*. Principal investigator, Direct Grant from the Research Grant Council (Hong Kong), 1995–1996, HK\$37,000

44. *A Multi-Paradigm Programming Design Methodology*. Co-Principal investigator (with P.K.C. Pun—University of Manchester), UK-HK Joint Research Scheme 94-95, British Council, £6,691
45. *Design and Implementation of a Distributed Concurrent Constraint Logic Programming System and Its Applications*. Principal investigator (with H.F. Leung, K.L. Clark—Imperial College, and M.H. van Emden—University of Victoria), RGC Earmarked Grant from the University and Polytechnic Grants Committee (Hong Kong), 1993–1995, HK\$266,000
46. *Constraint Interval Arithmetic in CLP(\mathcal{R})*. Principal investigator, Direct Grant from the University and Polytechnic Grants Committee (Hong Kong), 1992–1993, HK\$80,000

7 Research Contracts

1. *Design and Construct a Sowing Robot for Displaying in FARMFEST 2022*, Co-Principal Investigator (with Darwin Lau and Anthony Sum), Vegetable Market Organization, Hong Kong SAR Government, 2021-23, HK\$210,000
2. *Provision of Services for the Design, Production and Installation of Robotics for Automatic Operation and Demonstration on the 3rd Floor of the Premium Vegetable Section*, Co-Principal Investigator (with Darwin Lau), Vegetable Market Organization, Hong Kong SAR Government, 2021-23, HK\$1,200,000
3. *Provision of Services for Production of an Autonomous Field Patrol Robot System and a Video Featuring the Operation of the Robot System in the Open Field for the Exhibition at the Agriculture Hall of Lions Nature Education Centre*, Co-Principal Investigator (with Darwin Lau), Agriculture, Fisheries & Conservation Department, Hong Kong SAR Government, 2021-23, HK\$900,000
4. *Implementation of a Web Crawling System*, Principal Investigator, Logistics and Supply Chain MultiTech R&D Centre Limited, 2020-22, HK\$200,000
5. *Prototype Software Development for a Delivery Robot*, Principal Investigator, Rice Robotics Limited, 2019-22, HK\$800,000
6. *Integration of Free e-Learning Apps and Mobile Devices to Enhance the Effectiveness of Learning and Teaching of Measures, Shape and Space Dimension in Secondary School Mathematics*, Co-Investigator (with PI Morris Jong and Co-I Tom Chan), RTC Courses, Education Bureau, 2012–2013, HK\$350,000
7. *Pedagogical Design and Implementation of Mobile GPS-based Outdoor Exploratory Learning and Teaching Activities in Primary and Secondary Schools*, Co-Investigator (with

- PI Morris Jong and Co-I Tom Chan), RTC Courses, Education Bureau, 2012–2013, HK\$455,400
8. *Effective Use of Google Sketchup to Enhance the Quality of Learning and Teaching of Geometry in Secondary Schools*, Co-Investigator (with PI Morris Jong), RTC Courses, Education Bureau, 2012, HK\$240,000
 9. *Using Free Web-based Applications for Learning and Teaching with Focuses on Project-based Learning (PBL) and Independent Enquiry Study (IES)*, Co-Investigator (with PI Morris Jong), RTC Courses, Education Bureau, 2011–2012, HK\$300,000
 10. *Design and Use of WebQuest—Developing Secondary School Science Students’ Information Processing Skills through School-based Assessment Tasks Using WebQuest Platform*, Co-Principal investigator (with Morris Jong), RTC Courses, Education Bureau, 2010–2011, HK\$495,000
 11. *Game-based Collaborative Inquiry Learning between Hong Kong and Beijing Primary Schools*, Co-Investigator (with PI Morris Jong and Co-I Fong-Lok Lee), Quality Education Fund (Hong Kong), 2010–2011, HK\$599,000
 12. *A Compiler for High Performance Computing on Array Technologies*, Co-Investigator (with Philip Leong), Hong Kong Innovation and Technology Fund (Tier 3), 2007–2008, HK\$805,943
 13. *Study for Optimization of Operation during the Salinity Period*, Principal investigator, The Macao Water Supply Co. Ltd., 2004–2006, HK\$191,100 (US\$24,500)

8 Awards

1. Best Student Paper Award, 28th International Conference on Principles and Practice of Constraint Programming, Paper title: Exploiting Functional Constraints in Generating Dominance Breaking Nogoods for Constraint Optimization, Authors: Jimmy H.M. Lee and Allen Z. Zhong, Haifa, Israel, August, 2022
2. K Hui, M Bhutta, D Lau and J Lee, *Online Robotics Laboratory Framework for Interactive and Group Hands-On Learning* Pedagogical Innovation: Silver Poster Award, CUHK Teaching and Learning Innovation Expo, 2021
3. X Zhao, S Lam, M Bhutta, D Lau and J Lee, *Mixed Reality in Hands-On Learning of Robotics*, Educational Technology Innovation: Gold Poster Award, CUHK Teaching and Learning Innovation Expo, 2021

4. KH Law, HJ Huang, DK Han, D Lau, J Lee, S Jaggi, A So and F Wong, *The E-Learning Platform for Junior Teachers and Teaching Assistants in the Faculty of Engineering*, Pedagogical Innovation: Silver Poster Award, CUHK Teaching and Learning Innovation Expo, 2021
5. KH Law, HJ Huang, DK Han, D Lau, J Lee, S Jaggi, A So and F Wong, *The E-Learning Platform for Junior Teachers and Teaching Assistants in the Faculty of Engineering*, People's Poster Prize, CUHK Teaching and Learning Innovation Expo, 2021
6. Distinguished Senior Program Committee Member, 28th International Joint Conference on Artificial Intelligence, Macao, China, 2019
7. The 2017 University Education Award, The Chinese University of Hong Kong, 2016-17
8. The Vice-Chancellor's Exemplary Teaching Award, The Chinese University of Hong Kong, 2014-15
9. Dean's Exemplary Teaching Award, Faculty of Engineering, The Chinese University of Hong Kong, 2014-15
10. Department Exemplary Teaching Award, Department of Computer Science and Engineering, Faculty of Engineering, The Chinese University of Hong Kong, 2014-15
11. Department Service Award, Department of Computer Science and Engineering, Faculty of Engineering, The Chinese University of Hong Kong, 2013-14
12. Outstanding Teaching, MITE 6102 (Object-Oriented Programming), Masters of Arts Programme in Information Technology in Education, Faculty of Education, 2012-13
13. Department Service Award, Department of Computer Science and Engineering, Faculty of Engineering, The Chinese University of Hong Kong, 2011-12
14. Department Exemplary Teaching Award, Department of Computer Science and Engineering, Faculty of Engineering, The Chinese University of Hong Kong, 2011-12
15. Certificate of Merit on Teaching Performance, Department of Computer Science and Engineering, Faculty of Engineering, The Chinese University of Hong Kong, 2010-11
16. Best Paper Award, 18th International Conference on Computers in Education (ICCE'10), Paper title: The Significance of Emotional Support to Students in Game-based Learning, Authors: Morris S.Y. Jong, Junjie Shang, Fong-lok Lee, and Jimmy H.M. Lee. Putrajaya, Malaysia, November, 2010
17. Department Service Award, Department of Computer Science and Engineering, Faculty of Engineering, The Chinese University of Hong Kong, 2009-10

18. Finalists of Best Paper Award, 3rd IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning, Paper title: “A Case Study of a Non-Gamer Student’s Learning Process in VISOLE”, Authors: Morris S.Y. Jong, Junjie Shang, Fong-lok Lee, and Jimmy H.M. Lee, Koahsiung, Taiwan, April, 2010.
19. Best Paper Award, 13th Global Chinese on Computers in Education Conference (GCCCE 2009), Paper title: “Problem Solving Process and Strategies in the Virtual Interactive Student-Oriented Learning Environment”, Authors: J.J. Shang, M. Jong, F.L. Lee, and J.H.M. Lee, Taipei, Taiwan, May, 2009.
20. Best Paper Award, 11th Global Chinese Conference on Computers in Education (GCCCE’07), Paper title: “Motivation Strategies and Effectiveness of VISOLE”, Authors: J.J. Shang, M. Jong, F.L. Lee, and J.H.M. Lee, Quangzhou, China, May, 2007.
21. The Vice-Chancellor’s Exemplary Teaching Award, The Chinese University of Hong Kong, 2004-05
22. Faculty Exemplary Teaching Award, Faculty of Engineering, The Chinese University of Hong Kong, 2004-05, 2002-03, 2000-01, 1999-00, 1998-99
23. Department Exemplary Teaching Award, Department of Computer Science and Engineering, Faculty of Engineering, The Chinese University of Hong Kong, 2006-07, 2005-06, 2003-04, 2001-02
24. Faculty Service Award, Faculty of Engineering, The Chinese University of Hong Kong, 2003-04
25. Best Presentation Award, Second International Conference on Principles and Practice of Constraint Programming, Cambridge, Massachusetts, USA, 1996

9 Keynote Speeches and Invited Talks

1. Invited Speaker, *A Tale of Two Cities: Teaching CP with Story-Telling*, 29th International Conference on Principles and Practice of Constraint Programming (CP 2023), Toronto, Canada, August-September, 2023
2. Keynote Speaker, *Towards Automatic Generation of Dominance Breaking Nogoods for Constraint Optimization Problems*, 3th International Conference on Artificial Intelligence Logic and Applications, Changchun, China, August, 2023
3. Keynote Speaker, *From MOOC to SPOC: Fable-based Learning*, 14th International Conference on Blended Learning (ICBL 2021), Online, August, 2021

4. Keynote Speaker, *Fable-Based Learning in MOOCs: Experience Sharing*, 2019 Taiwan Association of Educational Communication and Technology (TAECT) Annual Meeting cum International Academic Conference—Technology Inspired Professional Learning, Hsinchu, Taiwan, November, 2019
5. Invited Speaker, *Fable-Based Learning in MOOCs: A Tale of Two Cities*, 2018 Online Learning Summit Taiwan, National Chiao Tung University, Hsinchu, Taiwan, May, 2018
6. Keynote Speaker, *Fable-Based Learning in MOOCs: A Tale of Two Cities*, International Conference on Game-Based Learning (ICGBL 2017), Nanjing, China, November, 2017
7. Invited Speaker, *CUHK + UniMelb = Fable-based Learning + A Tale of Two Cities*, 4th Greater China MOOC Symposium (GCMS 2017), Hong Kong, July, 2017
8. Keynote Speaker, *Global Cost Functions in Weighted Constraint Satisfaction*, Workshop on Hard Computational Problems: Representations, Algorithms and Applications, Chang Chun, China, July, 2017
9. Banquet Speaker, *Everything You Always Wanted to Know About PC Chairs, But Were Afraid to Ask*. The 19th International Conference on Principles and Practice of Constraint Programming (CP 2013), Uppsala, Sweden, September, 2013
10. Keynote Speaker, *The Joy of Inquiry-Based Learning*. Joyful Learning and Society Conference (JL&S 2011), Kenting, Taiwan, January, 2011
11. Keynote Speaker, *Education in Games? Or Games in Education?*. The 10th IEEE International Conference on Advanced Learning Technologies (ICALT2010), Sousse, Tunisia, July, 2010
12. Keynote Speaker, *Impeding Factors of Game-based Constructivist Learning: a Case Study*, International Conference on Innovation of Teaching and Learning (ICITL2009), Jhongli City, Taiwan, November, 2009
13. Keynote Speaker, *Solving the Salinity Control Problem in a Potable Water System Using Constraint Programming*. 2009 International Symposium on Education and Computer Science, Wuhan, China, March, 2009
14. Plenary Invited Speaker, *Education in Games? Or Games in Education?*. The 16th International Conference on Computers in Education, Taipei, Taiwan, October, 2008
15. Keynote Speaker, *Pedagogy of Educational Games—What Makes an Educational Game Educational*. Second Guangdong - Hong Kong - Macau Conference on Information Technology in Education (GHM-06), Guangzhou, China, September, 2006

16. Invited Speaker, *CUPIDE—The Chinese University Plagiarism IDentification Engine*. Tenth Global Chinese Conference on Computers in Education (GCCCE'2006), Beijing, China, June, 2006
17. Keynote Speaker, *Application of Scenario-based Learning in Digital Games*. Symposium on Game-based Digital Learning, Taipei, Taiwan, March, 2006

10 Services

Although research and teaching are the main duties of an academic, I participate and contribute extensively in community work in the University, the local and the international arenas.

University/College/Faculty/Department Administrative Duties

I participate actively in committee work at the university, college, faculty and department level. I list some of the **major** offices I held.

- University
 1. Acting Director, Internal Audit Office: 2024-present
 2. Director, University Planning Office: 2023-present
 3. Associate Director, University Planning Office: 2021-2023
 4. Chairman, Run Run Shaw Science Building Management Committee: 2019-present
 5. Chairman, Senate Committee on Student Discipline, 2012-present
 6. Chairman, Student IT Competence (SITC) Committee: 2005-2014
 7. Member, University Council: 2019-23
 8. Member, Task Force on Upholding Academic Honesty
 9. Member, Fitness to Practice Committee, Faculty of Medicine: 2012-present
- College
 1. Associate College Head: 2021-present
 2. Associate Dean of Students: 2014-21
 3. Chairman, New Asia College Committee on Scholarships and Bursaries: 2012-present
 4. Member, Board of Trustees: 2019-25

5. Member, Committee for the Appointment of the Next Head of New Asia College: 2020
6. Chairman, College Staff Association: 2011-2012

- Faculty

1. Director, University Digital Literacy Core Requirement: 2021-23
2. Associate Dean (Education): 2019-2021
3. Assistant Dean (Education): 2018-2019
4. Graduate Division Head, Division of Financial Technology: 2019-21
5. Programme Director, Master of Science in Financial Technology: 2018-19
6. Course Director, University Core ENGG1000 IT Foundation Course: 2010-2023
7. Chairman, 1-Unit IT Foundation Course Task Force: 2009-2012
8. Program Co-Director, Master of Arts Programme in Information Technology in Education, Hong Kong Institute for Educational Research, Faculty of Education: 2011-2014

- Department

1. Chairman, Teaching and Learning Committee: 2012-13
2. Chairman, Curriculum Committee: 2005-2006, 2011-2014
3. Graduate Division Head, Division of Computer Science & Engineering: 2008-2011
4. Chairman, Undergraduate Academic Advice Committee: 2007-2008
5. Chairman, Discipline Committee: 2007-2008
6. Chairman, Admissions: 2001-2004
7. Chairman, Computer User Group: 1992-2005

10.1 Services to the International Community

Serving the international community is a duty of every academic. Towards this aim, I participate actively in the committees of various conferences and organizations. In the following, I summarize some of my important contributions.

- Journal Editorship

1. Associate Editor, Journal of Artificial Intelligence Research, AAAI Press, 2017–2023

2. Member, IJCAI-JAIR Best Paper Award Selection Committee, Journal of Artificial Intelligence Research, AAAI Press, {2020, 2019}
 3. Member, Editorial Board, The CONSTRAINTS Journal, Springer, {2009-14, 2021-present}
 4. Member, Editorial Board, Journal of Artificial Intelligence Research, AAAI Press, 2011–2017
 5. Member, Editorial Board, The Research and Practice in Technology Enhanced Learning Journal, Springer, 2011-present
 6. Associate Editor, Artificial Intelligence Review, Springer, 2015–2020
 7. Member, Editorial Board, Journal of Discrete Algorithms, Elsevier, 2005–14
 8. Member, Editorial Board, Constraint Programming News, Association for Constraint Programming, 2004–13
 9. Member, Editorial Advisory Board, Journal of Educational Technology & Society, 2010–present
- Professional Bodies
 1. Secretary, Executive Committee, Association of Constraint Programming, 2007–2012
 2. Elected Member, Executive Committee, Association of Constraint Programming, 2006-09
 3. Member, Executive Committee, Global Chinese Society of Computers in Education (GCSCE), 2006–2012
 4. Co-Chair, Special Interest Group in Digital Game and Intelligent Toy Enhanced Learning (SIGDigitel), Asia-Pacific Society for Computers in Education, 2008–2009
 5. Vice Chair, Global Chinese Society for Computers in Education (Hong Kong and Macau Regional Chapter), 2004–2012
 - Conference Organization
 1. Conference Chair of Education Conferences: Edutainment’11
 2. Program Committee Chair of Computer Science Conferences: CP’11
 3. Program Committee Chair of Education Conferences: GCCCE’07, ICCE’09 (DIGITEL Track), AECT-ICFER’13, ICALT’14 (DIGITEL Track), ICALT’15 (DIGITEL Track), GCCCE’19 (Sub-Conference on Science of Learning, Computer-Assisted Collaborative Learning and Smart Education)
 4. Area Chair of conference: AAAI’25, AAAI’24, IJCAI’21, IJCAI-PRICAI’20

5. Organizing Committee Chair of conferences: GCCCE'04, IDEAL'2000
6. Doctoral Consortium Chair of conferences: IJCAI'13,17}
7. Panel Chair of conferences: GCCCE'10
8. Workshop Chair of conference: CP'08,99}, ICCE'07
9. Tutorial Chair of conference: CP'08,99}
10. Workshop Co-Chair of conference: ICCE'06
11. Poster Co-Chair of conference: ICCE'12
12. Senior Program Committee member of AI conference: AI'17,16,13,07}, CP'23,17,15,14,13}, IJCAI'24,22,19,18,17,15,13,11}, AAAI'23,22,21,12}
13. Senior Program Committee member of IT in Education conference: ICCE'08
14. Program Committee member of AI conferences:
 - IJCAI'16,09}
 - AAAI'20,18,17,16,15,13,10,08,07,06,04}
 - EAAI'21
 - IAAI'22,21}
 - CP'24,21,20,19,18,16,10,09,08,07,06,05,04,99,98}
 - CPAIOR'24,21,13}
 - AAMAS'16,15}
 - ECAI'16,12}
 - ICTAI'20,19,18,17,16,05}
 - ICA'16
 - LION'16
 - FLAIRS'05,04}
 - ACM-SAC (Constraint Track)'15,14,13,12,11,10,09,08,07,06,05}
 - AI'09,08}
 - IDEAL'06,05,04,03,02,00}
15. Program Committee member of Agent and other computer science conferences: ASIAN'04,97}, IAT'15,06,05,04,03,01}, DIMEA'07, ESAS'07, ICDCIT'07, ICE-GOV'07
16. Program Committee member of IT in Education conferences and workshops: TALE '12, ICTE'10, ICWL'08, ICCE'14,12,11,10,09,07}, GCCCE'13,12,11,10,08,07,05,04}, GHM-CITE'05, DIGITEL'12,10,07}, Edutainment'12,11,07}, T4E'11,10}, UX-FUL'10, JEL'11, DUPL & SPeL@ICALT 2012
17. Regular reviewer for AI, constraints, agents, and education conferences and journals

10.2 Services to Hong Kong

As an educator in higher learning and a professional, I never hesitated in serving my expertise to the local community. In the following, I highlight some of the important appointments.

- Panel Chair, Learning Programme Accreditation at QF Level 4 for (a) Higher Diploma in Data Science and AI and (b) Professional Certificate in Immersive Game Development, Hong Kong Institute of Information Technology, Vocational Training Council, Hong Kong Council for Academic Accreditation and Vocational Qualifications, May, 2024
- Panel Chair, (a) Internal Institutional Evaluation and (b) Internal Programme Validation, Yew Chung College of Early Childhood Education, April, 2024
- Member, Learning Programme Re-accreditation for Bachelor of Science (Honours) in Multimedia Technology and Innovation (HKQF Level 5), Technological and Higher Education Institute of Hong Kong (THEi) Vocational Training Council, Hong Kong Council for Academic Accreditation and Vocational Qualifications, March, 2024
- Member, Learning Programme Re-accreditation for Bachelor of Science (Honours) in Computer Science for the Hong Kong Chu Hai College, Hong Kong Council for Academic Accreditation and Vocational Qualifications, November, 2023
- Panel Chair, Initial Evaluation (QF Level 4) and Learning Programme accreditation (LPA) (QF Levels 3 & 4) in Certificate in Advanced Training for In-Service Bus Captains and Professional Certificate for Bus Technical Instructors and Driving Instructors, KMB Academy, Hong Kong Council for Academic Accreditation and Vocational Qualifications, July, 2023
- Visiting Team Chairman, Advisory Visit of the Macau University of Science and Technology (MUST), The Hong Kong Institution of Engineers (HKIE), Hong Kong, May, 2023
- Panel Chair, Learning Programme accreditation (LPA) and Re-accreditations at QF Level 4 for the Hong Kong Institute of Technology, Hong Kong Council for Academic Accreditation and Vocational Qualifications, October, 2022
- Visiting Team Chairman, Accreditation Exercise for the University of Hong Kong Engineering Programmes, The Hong Kong Institution of Engineers (HKIE), Hong Kong, November, 2021
- Panel Chair, Review of Decision in Learning Programme Re-accreditation of the Council of Health and Beauty Limited's 2 Programmes Under Appeal as Directed by the

Appeal Board (Case No. 1/2020 and Case No. 1/2021) under Cap. 592, Hong Kong Council for Academic Accreditation and Vocational Qualifications, July, 2021

- Panel Chair, Programme Area Accreditation (PAA) for the Employees Retraining Board, Hong Kong Council for Academic Accreditation and Vocational Qualifications, June, 2021
- Assessor, Accreditation Exercise for the Hong Kong University of Science and Technology Engineering Programmes, The Hong Kong Institution of Engineers (HKIE), Hong Kong, January, 2021
- Appointed Member, Accreditation Board, Hong Kong Institution of Engineers, 2020-25
- Adviser, School of Business and Hospitality Management, Caritas Institute of Higher Education, April 2018 to September 2022
- Member, Accreditation Board, Hong Kong Institution of Engineers (HKIE), 2020-present
- Panel Chair, Learning Programme Re-accreditation at QF Level 4 (Face-to-face and Online Programmes), Professional Certificate in Cosmetic Light Therapy, Council of Health and Beauty Limited, Hong Kong Council for Academic Accreditation and Vocational Qualifications, August, 2020
- Panel Chair, Learning Programme Accreditation for Bachelor of Christian Ministry (Honours) Programme, Gratia Christian College, Hong Kong Council for Academic Accreditation and Vocational Qualifications, August, 2020
- Panel Chair, Assessment of Substantial Change, Professional Certificate in Cosmetic Light Therapy, Council of Health and Beauty Limited, Hong Kong Council for Academic Accreditation and Vocational Qualifications, February, 2020
- Panel Chair, Initial Evaluation (IE) and Learning Programme Accreditation (LPA) for the Commercial Crime Bureau, Hong Kong Police Force (CCB), Hong Kong Council for Academic Accreditation and Vocational Qualifications, June, 2019
- Member, Assessment Panel, ELITE Programme, Hong Kong Science and Technology Parks Corp, 2019-22
- Member, Expert Review Panel, Logistics and Supply Chain MultiTech R&D Centre (LSCM), 2019-2022
- Member, Project Steering Committee, Logistics and Supply Chain MultiTech R&D Centre (LSCM), 2019-2022

- Panel Chair, Learning Programme Re-Accreditation for (a) Professional Diploma in Business Management (b) Professional Diploma in Insurance (c) Professional Diploma in Java 3-Tier Web Application Development and Oracle Database Administration Java (d) Professional Diploma in Management for the Catering Industry for Institute of Professional Education and Knowledge (PEAK), Vocational Training Council, Hong Kong Council for Academic Accreditation and Vocational Qualifications, November, 2017
- Visiting Team Chairman, Accreditation Exercise for the Hong Kong Baptist University, Computer Science, and Computing and Information Systems Programmes, The Hong Kong Institution of Engineers (HKIE), Hong Kong, November, 2017
- Visiting Team member, Accreditation Exercise for the University of Hong Kong, Computer Science Programme, The Hong Kong Institution of Engineers (HKIE), Hong Kong, October, 2016
- Consultant, Enriched IT Class Programme, Pak Kau College, 2015-23
- Visiting Team member, Accreditation Exercise for the City University of Hong Kong, Computer Science Programme, The Hong Kong Institution of Engineers (HKIE), Hong Kong, 2015
- Member, Steering Committee, Hong Kong Information and Communication Technology Awards, Office of Government Chief Information Officer, Hong Kong Government, 2013–
- Member, Validation Panel, Programme Validation for BSc (Hons) Computing and BSc (Hons) Multimedia Computing, Hong Kong Council for Academic Accreditation and Vocational Qualifications, February, 2014
- Member, IT Division, Hong Kong Institution of Engineers, Hong Kong, (Co-opted) 2012-13, 2013-14
- Member, Steering Committee on Selection, Quality Assurance and Review for the e-Textbook Market Development Scheme, Education Bureau, Hong Kong SAR Government, Hong Kong, 2012-16
- Member, High-level Advisory Panel, Chief Executive's Award for Teaching Excellence (CEATE), Education Bureau, Hong Kong SAR Government, Hong Kong, 2011-12
- Visiting Team member, Accreditation Exercise for the Hong Kong Polytechnic University Geomatics Programmes, The Hong Kong Institution of Engineers (HKIE), Hong Kong, 2010
- Member, Steering Committee, Hong Kong ICT Awards, Hong Kong, 2014-15

- Convenor, Standards Assurance Sub-Committee, Hong Kong ICT Awards, Hong Kong, 2010-16
- Assessor, Accreditation Exercise for the Hong Kong University of Science and Technology Computer Science Programme, The Hong Kong Institution of Engineers (HKIE), Hong Kong, 2010
- Member, Steering Committee, Development of a Certification Roadmap for IT Professional Certification Project, Hong Kong Computer Society, 2009-10
- Appointed member, CE Computer & Information Technology Subject Committee, Hong Kong Examinations and Assessment Authority, 2009-11
- Member, Steering Committee on Strategic Development of Information Technology in Education (ITEd), Hong Kong Government, 2009–15
- Assessor, Accreditation Exercise for the City University of Hong Kong Computer Science Programme, The Hong Kong Institution of Engineers (HKIE), Hong Kong, 2007
- Appointed Member, Accreditation Committee for Computer Science Programmes, The Hong Kong Institution of Engineers (HKIE), Hong Kong, 2006–10
- Panel Chairman, Validation Panel, Validation of Certificate in Vocational Studies (Business) and Foundation Diploma (Computing)—Vocational Training Council, Hong Kong Council for Academic Accreditation, Hong Kong, 2004
- Member of Liaison Panel for Academic Accreditation, and Panel chairman and member of validation panels, Hong Kong Council for Academic Accreditation (HKCAA), to validate various post-secondary programmes related to IT
[HKCAA, subsequently renamed to HKCAAVQ, is an independent *statutory* body and accreditation authority established in 1990 by the Hong Kong Government in charge of the academic standards of post secondary programmes in higher education institutions in Hong Kong and on educational standards and qualifications in general]
- Chief examiner and moderator of Papers I & II, Hong Kong Advanced Level (A-Level) Examination, Computer Studies: 1994–2001, 2002–2003
- Council member and Director of Professional Development, Hong Kong Computer Society: 1996–2000
- Local Arrangement Chair, National Olympiad in Informatics (NOI'97), 1997
[NOI is the national competition for the entire China to select representatives to participate in the International Olympiad in Informatics (IOI)]
- Executive Committee member, ACM (HK Chapter): 1992–1995 (Vice Chairman in 1994–1995)