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ONE PAGE SUMMARY WITH KEY HIGHLIGHTS (as of January 2023)

Irwin Kuo Chin KING
ORCID: 0000-0001-8106-6447

Research

1. Google Scholar: 26,128 citations, 73 h-index, 277 10-index (since 2018, 13,230 citations, 51 h-index, 176 10-index)
2. SCOPUS: 391 publications, 13548 citations, 53 h-index
3. Web of Science: 175 publications, 3265 citations, 27 h-index
4. DBLP: 81 journal manuscripts; 275 conference papers; 25 edited volumes, 2 books

Major Awards and Recognitions

In Research

1. **IEEE Fellow (2019); ACM Distinguished Member (2020)**; INNS Fellow; APAIA Fellow; HKIE Fellow; Kavli Fellow; Lee Woo Sing College Fellow; Apple Distinguished Educator
2. Global AI 2000 List since 2000
3. ACM WSDM 2022 Test of Time Award
4. ACM SIGIR 2020 Test of Time Award
5. ACM CIKM 2019 Test of Time Award
6. 2021 INNS Dennis Gabor Award for work in Neural Engineering
7. 2020 Asia Pacific Neural Network Society (APNNS) Outstanding Achievement Award
8. ICONIP 2020 Best Paper Award
9. JCDL 2012 Vannevar Bush Best Paper Award
10. The 4th Beijing-Hong Kong International Doctoral Forum 2009 Best Paper Award
11. CVPR 2019 Best Paper Finalist; CIKM 2016 Best Paper Award Runner-up; ICONIP 2017 Best Paper Award Runner-up

In Technology Transfer and Grants

1. **Seven patents worldwide** in information technology-related areas
2. **Over HKD $78.65 M** in competitive and non-competitive research grants, project contracts, education, etc. Grants: Research (HKD $10.78 M), Education (HKD $62.02 M), Industry (HKD $5.85 M)

In Education

1. **Associate Dean (Education)**, Engineering Faculty, CUHK (2013-19)
2. **University Teaching Award (Team) 2020**, CUHK
3. The Vice-Chancellor's Exemplary Award 2016
4. Faculty of Engineering Exemplary Teaching Award 2007
5. Computer Science and Engineering Exemplary Teaching Award 2006
6. Faculty of Engineering Exemplary Teaching Award 2003
7. Hong Kong ICT Awards (HKICT Awards) 2021: Smart People (Smart Education and Learning) Gold Award to the AI Academy Project

In Service

1. Chair and Professor, Department of Computer Science & Engineering (2020–present)
2. Former Associate Dean (Education), Faculty of Engineering (2013–2019)
3. Director, The ELearning Innovation and TEchnology (ELITE) Centre, CUHK
4. Director, Rich Media Big Data Analytics and Application Key Laboratory, SZRI
5. Principal Investigator, The Knowledge and Education Exchange Platform (KEEP) Project (2014–present)
6. Principal Investigator and Co-Founder, The VeriGuide Project, CUHK (2005–present)

Editorship, Panel, Organization, etc.

1. Associate Editor, Neural Network Journal, 2010-present
2. Former IEEE TNN Associate Editor (2007–2011)
3. Former Engineering Panel Member, Research Grants Council (RGC) (2005-2011)
4. President, International Neural Network Society (INNS) (2019-2020)
5. Vice-President, Asia-Pacific Neural Network Society (APNNS) (2017-2018)
6. International World Wide Web Conference Committee (IW3C2) Member (2016–2021)
7. VP of Conference, the WebConf Steering Committee (2022–present)

CURRICULUM VITAE

Irwin Kuo Chin KING
0000-0001-8106-6447

(as of January 2023)

1 PERSONAL DATA

Full Name:	Irwin Kuo Chin KING
Office Address:	Room 908, Ho Sin-Hang Engineering Building The Chinese University of Hong Kong Shatin, N.T., Hong Kong SAR
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ORCID ID:	0000-0001-8106-6447
Web of Science ResearcherID:	C-9681-2015
Publons:	C-9681-2015
Google Scholar:	MXvC7tkAAAAJ
Semantic Scholar:	145310663
DBLP:	https://dblp.org/pers/hd/k/King:Irwin

2 EDUCATION

- Ph.D., Computer Science, June 1993.
  - University of Southern California (USC), Los Angeles, CA. USA
  - Dissertation Title: A High-Level Approach to Motion Interpretation in Dynamic Scenes
  - Committee Members: Prof. Michael A. Arbib (advisor), Prof. Christoph von der Malsburg, Prof. Irving Biederman, Prof. Gerald Medioni
- M.S., Computer Science, December 1986.
  - University of Southern California (USC), Los Angeles, CA. USA
- B.Sc., Engineering & Applied Science (Computer Science), June 1984.
  - California Institute of Technology (Caltech), Pasadena, CA. USA

3 PROFESSIONAL EXPERIENCE

- **Chairman**, August 2020 - Present
  Department of Computer Science & Engineering
  The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

- **Director**, September 2019 - Present
  Centre for eLearning Innovation and Technology (ELITE)
  The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

- **Associate Dean (Education)**, August 2013 - 2019
  Faculty of Engineering
  The Chinese University of Hong Kong, Shatin, N.T., Hong Kong
  To lead and oversee endeavors in promoting education excellence through the use of technologies and pedagogical tools.

- **Professor**, A1 August 2010 - July 2017. A2 August 2017 - Present
  Department of Computer Science & Engineering
  The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Affiliated with Lee Woo Sing College
Research in machine learning, social computing, data mining, web intelligence, multimedia information processing, and teach undergraduate and graduate students. Taught Web Intelligence and Social Computing, Information Retrieval and Search Engines and Data Structure and Algorithm courses.

- **Lead Member of the Technical Staff**, November 2010 - May 2012
  AT&T Labs Research
  San Francisco, CA USA
  Research in machine learning, social computing, data mining, web intelligence, computational advertising, user profiling and modeling, etc.

- **Visiting Professor**, August 2011 - July 2012
  School of Information
  University of California, Berkeley, Berkeley, CA USA
  Teach a course on "Social Computing" to graduate students at the Information School. The topics include a wide range of them from social network theory, graph mining, recommender systems, human computation, crowdsourcing, learning to rank, sentiment analysis, opinion mining, etc.

- **Associate Professor**, July 1998 - August 2010
  Department of Computer Science & Engineering
  The Chinese University of Hong Kong, Shatin, N.T., Hong Kong
  Research in content-based information retrieval and multimedia object indexing, and teach undergraduate and graduate students. Taught Image Processing and Computer Vision and Data Structure and Algorithm courses.

- **Assistant Professor**, September 1995 - July 1998
  Department of Computer Science
  The Chinese University of Hong Kong, Shatin, N.T., Hong Kong
  Research in biological neural networks for visual processing and teach undergraduate and graduate students. Taught Fundamentals of Artificial Intelligence and Data Structure and Applications courses.

- **Lecturer**, July 1993 - September 1995
  Department of Computer Science
  The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

- **Scientific System Software Engineer**, Sept. 1984 - July 1993
  Xerox Special Information Systems (XSIS), Pasadena, CA.
  Analyst application software developments in the SmallTalk language. They include a publishing editor, icon editor, business graphics charting software, database management software, etc.

- **Research Assistant**, June 1988 - July 1993
  Center for Neural Engineering
  University of Southern California, Los Angeles, CA.
  Research work in biological neural networks, schema theory, and computer vision under Dr. M. A. Arbib.

- **Teaching Assistant**, Sept. 1987 - Dec. 1987
  Department of Computer Science
  University of Southern California, Los Angeles, CA.
  Conducted discussion sessions for CS564-Brain Theory and Artificial Intelligence.

- **Computer Science Lecturer**, Sept. 1987 - June 1988
  Occidental College, Los Angeles, CA.
  Taught three undergraduate courses: Introduction to Computer Science, Data Structure & Algorithms, and Models of Computation.

- **Physics Lab Instructor**, Jan. 1986 - June 1987
  Glendale Community College, Glendale, CA.
  California certified Physics lab instructor. Instruction on mechanics, electricity, magnetism, numerical methods, and lab techniques.

- **Summer Intern**, June 1984 - Sept. 1984
  Xerox Special Information Systems (XSIS), Pasadena, CA.
  SmallTalk application programmer.

- **System Programmer / Analyst**, Nov. 1981 - Sept. 1982
  Digital Research, Inc. Sierra Madre, CA.
  Consultant in CBASIC, and CB80 languages. Testing of CP/M, and MPM operating systems. Providing technical and customer support of software products.

- **System Programmer**, May 1981 - Nov. 1981
  Compiler System, Inc. Sierra Madre, CA.
  Application software developments and testing of CBASIC, and CB80 languages. Providing customer support of software products.

4 PROFESSIONAL SOCIETIES

1. Institute of Electrical and Electronic Engineering (IEEE) - Computational Intelligence Society, Computer Society, Member: 1986–2008; Senior Member: 2008 – 2018; Fellow: 2019 – Present
2. Association of Computing Machinery (ACM), Member: 1996 – 2019; Distinguished Member: 2020 – Present
3. International Neural Network Society (INNS), Member: 1994–1998; 2009 – Present; President: 2019 – Present
4. International World Wide Web Conference Consortium (IW3C2), Member: 2016 – Present
5. Hong Kong Institution of Engineers (HKIE), Fellow: 2013 – Present
6. Asia Pacific Neural Network Society (APNNS), Member: 1994 – Present
7. Hong Kong Society for Multimedia and Image Computing (HKSMIC), Member: June 1997 – Present
8. International Society for Optical Engineering, SPIE, Member: June 1997 – Present
9. International Who's Who of Professionals, 1997–1998, 2010-2011
10. New York Academy of Sciences, Member 1995–1997

5 MAIN RESEARCH INTERESTS

- Machine Learning, Social Computing, Web Intelligence, AI, Data Mining, Multimedia Information Processing
    - Machine Learning: multi-armed bandit, large margin classifiers, semi-supervised learning, kernel methods, online learning, etc.
    - Social Computing: recommender systems, collaborative filtering, location-based services, social network analysis, NLP, graph embedding, human computation, crowdsourcing, etc.
    - Web Intelligence: information retrieval, social media analysis, etc.
    - Multimedia Information Processing: content-based image analysis, video summarization, optic-flow, etc.

6 LIST OF RESEARCH OUTPUTS OR CREATIVE WORKS

Publications (Total: 456) (Citations: 18505; Source: Google Scholar as of August 2020)

Refereed Publications

1. ACM Transactions on Intelligent Systems and Technology (ACM TIST): 2.861 @ 2018
2. ACM Transactions on Knowledge Discovery from Data (ACM TKDD): 1.895
3. Data Knowledge Engineering: 1.500 @ 2015
4. Decision Support Systems: 4.721 @ 2020
5. IEEE Service Computing: 1.382 @ 2019
6. IEEE Transaction on Neural Networks and Learning Systems (IEEE TNNLS): 11.683 @ 2018
7. IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE): 4.561 @ 2018
8. IEEE Transactions on System, Man, and Cybernetics Part B: Cybernetics (IEEE TSMC-B): 5.132 @ 2018
9. Information Retrieval Journal: 2.209 @ 2019
10. Information Systems: 20777 @ 2016
11. International Journal of Pattern Recognition and Artificial Intelligence: 1.11 @ 2018
12. Knowledge Information Systems: 3.170 @ 2020
13. Machine Learning: 2.809 @ 2018
14. Neural Computation: 2.207 @ 2014
15. Neural Networks: 7.197 @ 2017
16. Neural Processing Letter: 1.26 @ 2018
17. Neurocomputing: 3.317 @ 2016
18. Transactions of the Association for Computational Linguistics (TACL)

6.1 Journal Papers

Please refer to DBLP (https://dblp.org/pid/k/IrwinKing.html) for a complete list of most updated publications.

1. Xixian Chen, Haiqin Yang, Shenglin Zhao, Michael R. Lyu, Irwin King: Effective Data-Aware Covariance Estimator From Compressed Data. IEEE Trans. Neural Networks Learn. Syst. 31(7): 2441-2454 (2020)
2. Jichuan Zeng, Jing Li, Yulan He, Cuiyun Gao, Michael R. Lyu, Irwin King: What You Say and How You Say it: Joint Modeling of Topics and Discourse in Microblog Conversations. Trans. Assoc. Comput. Linguistics 7: 267-281 (2019)
3. Shenglin Zhao, Michael R. Lyu, Irwin King: Point-of-Interest Recommendation in Location-Based Social Networks. Springer Briefs in Computer Science, Springer 2018, ISBN 978-981-13-1348-6, pp. 1-99
4. Shenglin Zhao, Irwin King, Michael R. Lyu: Aggregated Temporal Tensor Factorization Model for Point-of-Interest Recommendation. Neural Process. Lett. 47(3): 975-992 (2018)
5. Hongyi Zhang, Xingyu Niu, Irwin King, Michael R. Lyu: Overlapping community detection with preference and locality information: a non-negative matrix factorization approach. Social Netw. Analys. Mining 8(1): 43:1-43:14 (2018)

6. Junjie Hu, Haiqin Yang, Michael R. Lyu, Irwin King, Anthony Man-Cho So: Online Nonlinear AUC Maximization for Imbalanced Data Sets. IEEE Trans. Neural Networks Learn. Syst. 29(4): 882-895 (2018)
7. Geoffrey Holmes, Tie-Yan Liu, Hang Li, Irwin King, Masashi Sugiyama, Zhi-Hua Zhou: Introduction: special issue of selected papers from ACML 2015. Mach. Learn. 106(4): 459-461 (2017)
8. Razieh Rahimi, Azadeh Shakery, and Irwin King. Extracting translations from comparable corpora for Cross-Language Information Retrieval using the language modeling framework. Inf. Process. Manage., 52(2):299–318, 2016.
9. Kuan-Ta Chen, Omar Alonso, Martha Larson, and Irwin King. Introduction to the Special Issue on Crowd in Intelligent Systems. ACM TIST, 7(4):44:1–44:2, 2016.
10. Chen Cheng, Haiqin Yang ,Irwin King, and Michael R. Lyu. A Unified Point-of-Interest Recommendation Framework in Location-Based Social Networks. ACM TIST, 8(1):10:1– 10:21, 2016.
11. Baichuan Li, Rong-Hua Li, Irwin King, Michael R. Lyu, and Jeffrey Xu Yu. A topic-biased user reputation model in rating systems. Knowl. Inf. Syst., 44(3):581–607, 2015.
12. Razieh Rahimi, Azadeh Shakery, and Irwin King. Multilingual information retrieval in the language modeling framework. Inf. Retr. Journal, 18(3):246–281, 2015.
13. Haiqin Yang, Kaizhu Huang, Irwin King, and Michael R. Lyu. Maximum margin semi- supervised learning with irrelevant data. Neural Networks, 70:90–102, 2015.
14. Razieh Rahimi, Azadeh Shakery, and Irwin King. Multilingual information retrieval in the language modeling framework. Inf. Retr. Journal, 18(3):246–281, 2015.
15. Tom Chao Zhou, Michael Rung-Tsong Lyu, Irwin King, and Jie Lou. Learning to suggest questions in social media. Knowl. Inf. Syst., 43(2):389–416, 2015.
16. Man-Ching Yuen, Irwin King, and Kwong-Sak Leung. TaskRec: A task recommendation framework in crowdsourcing systems. Neural Processing Letters, 41(2):223–238, 2015.
17. Haiqin Yang, Guang Ling, Yuxin Su, Michael R. Lyu, and Irwin King. Boosting response aware model-based collaborative filtering. IEEE Trans. Knowl. Data Eng., 27(8):2064– 2077, 2015.
18. Bo Xu, Kaizhu Huang, Irwin King, Cheng-Lin Liu, Jun Sun, and Satoshi Naoi. Graphical lasso quadratic discriminant function and its application to character recognition. Neuro- computing, 129:33–40, 2014.
19. Irwin King and Wolfgang Nejdl. Introduction to the special section on twitter and mi- croblogging services. ACM TIST, 4(1):1, 2013.
20. Jie Tang, Ling Chen, Irwin King, and Jianyong Wang. Introduction to special section on large-scale data mining. Data Knowl. Eng., 87:355–356, 2013.
21. Haiqin Yang, Michael R. Lyu, and Irwin King. Efficient online learning for multitask feature selection. TKDD, 7(2):6, 2013.
22. Zibin Zheng, Hao Ma, Michael R. Lyu, and Irwin King. Collaborative web service qos prediction via neighborhood integrated matrix factorization. IEEE T. Services Computing, 6(3):289–299, 2013.
23. Stefan M. Ru ̈ger, Vijay V. Raghavan, Irwin King, and Jimmy Xiangji Huang. Special issue on advances in web intelligence. Neurocomputing, 76(1):48–49, 2012.
24. Guang Ling, Haiqin Yang, Michael R. Lyu, and Irwin King. Response aware model-based collaborative filtering. CoRR, abs/1210.4869, 2012.
25. Zibin Zheng, Tom Chao Zhou, Michael R. Lyu, and Irwin King. Component ranking for fault-tolerant cloud applications. IEEE T. Services Computing, 5(4):540–550, 2012.
26. Hao Ma, Irwin King, and Michael R. Lyu. Mining web graphs for recommendations. IEEE Transactions on Knowledge and Data Engineering, 24(6):1051–1064, 2012.
27. Hongbo Deng, Irwin King, and Michael R. Lyu. Enhanced models for expertise retrieval using community-aware strategies. IEEE Transactions on Systems, Man, and Cybernetics, Part B, 42(1):93–106, 2012.
28. Zhenjiang Lin, Michael R. Lyu, and Irwin King. Matchsim: a novel similarity measure based on maximum neighborhood matching. Knowledge Information System, 32(1):141–166, 2012.
29. Mingzhen Mo, Irwin King, and Kwong-Sak Leung. Empirical comparisons of attack and protection algorithms for online social networks. Procedia CS, 5:705–712, 2011.
30. Zibin Zheng, Hao Ma, Michael R. Lyu, and Irwin King. Qos-aware web service recommen- dation by collaborative filtering. IEEE Transactions on Service Computing, 4(2):140–152, 2011.

31. Hao Ma, Jacky Zhu, Michael R. Lyu, and Irwin King. Bridging the semantic gap between image contents and tags. IEEE Transactions on Multimedia (TMM), 12(5):462–473, August 2010.
32. Hao Ma, Irwin King, and Michael R. Lyu. Learning to recommend with explicit and implicit social relations. ACM Transactions on Intelligent Systems and Technology (TIST), 2(3):29:1–29:19, May 2011.
33. Hao Ma, Tom Chao Zhou, Michael R. Lyu, and Irwin King. Improving recommender systems by incorporating social contextual information. ACM Transactions on Information Systems (TOIS), 29(2):9:1–9:23, April 2011.
34. Wei Wang and Irwin King. Label ranking with semi supervised learning. Australian Journal of Intelligent Information Processing Systems, 2(1):35–40, 2010.
35. Zenglin Xu, Irwin King, Michael Lyu, and Rong Jin. Discriminative semi-supervised feature selection via manifold regularization. IEEE Transactions on Neural Networks, 21(7):1033–1047, July 2010. ISI(2009)=3.726, SCI(2007)=2.769.
36. Timon C. Du, Feng Li, and Irwin King. Managing knowledge on the web–extracting an ontology from html documents. Decision Support Systems, 47:319–331, October 2009. ISI(2009)=1.873, SCI(2007)=1.119.
37. Zenglin Xu, Kaizhu Huang, Jianke Zhu, Irwin King, and Michael R. Lyu. A novel kernel- based maximum a posteriori classification method. Neural Networks, 22(7):977–987, 2009. ISI(2009)=2.656, SCI(2007)=1.951.
38. Haiqin Yang, Kaizhu Huang, Irwin King, and Michael R. Lyu. Localized support vector regression for time series prediction. Neurocomputing, 72(10-12):2659–2669, June 2009. ISI(2009)=1.234, SCI(2007)=0.865.
39. Haixuan Yang, Michael R. Lyu, and Irwin King. A volume-based heat diffusion classifier. IEEE Transactions on System, Man, and Cybernetics Part B: Cybernetics, 39(2):417–430, April 2009. ISI(2009)=2.361, SCI(2007)=1.353.
40. Xiang Peng and Irwin King. A biased minimax probability machine-based scheme for relevance feedback in image retrieval. Neurocomputing, 72(7-9):2046–2051, March 2009. ISI(2009)=1.234, SCI(2007)=0.865.
41. Kaizhu Huang, Danian Zheng, Irwin King, and Michael R. Lyu. Arbitrary norm support vector machines. Neural Computation, 21(2):560–582, February 2009. ISI(2009)=2.378, SCI(2007)=2.335.
42. Zenglin Xu, Irwin King, and Michael R. Lyu. Feature selection based on minimum error minimax probability machine. International Journal of Pattern Recognition and Artificial Intelligence, 21(8):1279–1292, December 2007. ISI(2009)=0.660, SCI(2004)=0.588.
43. Xiang Peng and Irwin King. Robust BMPM training based on second order cone pro- gramming and its application in medical diagnosis tasks. Neural Networks, 21(2-3):450–457, March 2008. ISI(2009)=2.656, SCI(2007)=1.951.
44. Kaizhu Huang, Haiqin Yang, Michael R. Lyu, and Irwin King. Maxi-min margin ma- chine: Learning large margin classifiers locally and globally. IEEE Transactions on Neural Networks, 19(2):260–272, February 2008. ISI(2009)=3.726, SCI(2007)=2.769.
45. Haixuan Yang, Irwin King, and Michael R. Lyu. The generalized dependency degree be- tween attributes. Journal of the American Society for Information Science and Technology, 58(14):2280–2294, 2007. ISI(2009)=1.954, SCI(2004)=2.086.
46. Kaizhu Huang, Haiqin Yang, Irwin King, and Michael R. Lyu. Imbalanced learning with biased minimax probability machine. IEEE Transactions on System, Man, and Cybernetics Part B, 36(4):913–923, August 2006. SCI(2004)=1.052.
47. Kaizhu Huang, Haiqin Yang, Irwin King, and Michael R. Lyu. Maximizing sensitivity in medical diagnosis using biased minimax probability machine. IEEE Transactions on Biomedical Engineering, 53(5):821–831, May 2006. ISI(2009)=2.496, SCI(2004)=1.815.
48. K.S. Leung, Irwin King, and Y.B. Wong. A probabilistic cooperative-competitive hier- archical model for global optimization. Journal of Applied Mathematics and Computation, 175(2):1092–1124, 15 April 2006. ISI(2009)=0.961, SCI(2004)=0.567.
49. Kaizhu Huang, Haiqin Yang, Irwin King, Michael R. Lyu, and Laiwan Chan. Minimum error minimax probability machine. Journal of Machine Learning Research, 5:1253–1286, October 2004. IF(2004)=5.952.

50. Irwin King, Cheuk Hang Ng, and Ka Cheung Sia. Distributed content-based visual information retrieval system on peer-to-peer networks. ACM Transactions on Information Systems, 22(3):477–501, 2004. IF(2004)=4.097.
51. Huilin Xiong, M.N.S. Swamy, M.O. Ahmad, and Irwin King. Branching competitive learning network: A novel self-creating model. IEEE Transactions on Neural Networks, 15(2):417–429, July 2004. IF(2004)=2.178.
52. Irwin King and Jin Zhong. Integrated probability function and its application to content- based image retrieval by relevance feedback. Pattern Recognition, 36(9):2177–2186, Septem- ber 2003. IF(2003)=1.611.
53. Rezaul Alam Chowdhury, M. Kaykobad, and Irwin King. An efficient decoding tech- nique for Huffman codes. Information Processing Letter, 81(6):305–308, March 2002. IF(2002)=0.331.
54. Lei Xu and Irwin King. A PCA approach for fast retrieval of structural patterns in at- tributed graphs. IEEE Transactions on System, Man, and Cybernetics Part B: Cybernetics, 31(5):812–817, October 2001. IF(2001)=0.789.
55. L. H. Tung and I. King. A two-stage framework for polygon retrieval. Multimedia Tools and Applications, 11(2):235–255, 2000. IF(2000)=0.154.
56. D.A. Adjeroh, M.C. Lee, and I. King. A distance measure for video sequences. Journal of Computer Vision and Image Understanding, 75(1):25–45, 1999. IF(1999)=0.938.
57. Siu-hang Or, W. S. Luk, Kin-hong Wong, and Irwin King. An efficient iterative pose estimation algorithm. Image and Vision Computing, 16(5):355–364, 1998. IF(1998)=0.431.
58. J. Fiser and I. King. Gabor-wavelet decomposition based filtering of gray-level images for object recognition experiments. Spatial Vision, 11(1):117–119, 1997. IF(1998)=0.887.
59. I. King. Report on the computer strategy game programming workshop. International Computer Chess Association Journal, pages 113–115, June 1995.
60. I. King and J. Fiser. Generating complementary gray level images with the use of Gabor wavelets for object recognition experiments. J. Behavior Research Methods, Instruments, and Computers, 27(4):433–441, 1995.

6.2 Conference Papers

Please refer to DBLP (https://dblp.org/pid/k/IrwinKing.html) for a complete list of most updated publications.

Summary of Conference Rankings

1. CCF (https://www.ccf.org.cn/en/Bulletin/2019-05-13/663884.shtml)
2. THU Conference Rank: Computer Science (https://www.aminer.cn/ranks/conf)

As of 2020/08	Overall	2015-2020	2017-2020	CCF Level	THU Level
CIKM	25	7	4		
WWW	22	7	7	B	NA
IJCNN	21	6	3		
ICONIP	21	5	5		
AAAI	15	7	6	A	A
IJCAI	13	8	6	A	B
SIGIR	8	3	3		
NIPS, NeurIPS	7	1	1	A	A
ACL	6	6	6	A	
Web Intelligence	6	0	0		
ICML	5	1	1	A	A
UAI	5	4	3		
CVPR	5	4	4	A	A
WSDM	5	1	1		
ICDM	4	1	1		
SLT	4	0	0		
RecSys	4	0	0		
ADMA	3	1	1		
NAACL-HLT	3	3	3		
ICME	3	1	1		

1. Haoli Bai, Jiaxiang Wu, Irwin King, Michael R. Lyu: Few Shot Network Compression via Cross Distillation. AAAI 2020: 3203-3210
2. Wenxiang Jiao, Michael R. Lyu, Irwin King: Real-Time Emotion Recognition via Attention Gated Hierarchical Memory Network. AAAI 2020: 8002-8009
3. Jichuan Zeng, Xi Victoria Lin, Steven C. H. Hoi, Richard Socher, Caiming Xiong, Michael R. Lyu, Irwin King: Photon: A Robust Cross-Domain Text-to-SQL System. ACL (demo) 2020: 204-214
4. Yifan Gao, Chien-Sheng Wu, Shafiq R. Joty, Caiming Xiong, Richard Socher, Irwin King, Michael R. Lyu, Steven C. H. Hoi: Explicit Memory Tracker with Coarse-to-Fine Reasoning for Conversational Machine Reading. ACL 2020: 935-945
5. Wang Chen, Hou Pong Chan, Piji Li, Irwin King: Exclusive Hierarchical Decoding for Deep Keyphrase Generation. ACL 2020: 1095-1105
6. Weibin Wu, Yuxin Su, Xixian Chen, Shenglin Zhao, Irwin King, Michael R. Lyu, Yu-Wing Tai: Boosting the Transferability of Adversarial Samples via Attention. CVPR 2020: 1158-1167
7. Pengpeng Liu, Irwin King, Michael R. Lyu, Jia Xu: Flow2Stereo: Effective Self-Supervised Learning of Optical Flow and Stereo Matching. CVPR 2020: 6647-6656
8. Weibin Wu, Yuxin Su, Xixian Chen, Shenglin Zhao, Irwin King, Michael R. Lyu, Yu-Wing Tai: Towards Global Explanations of Convolutional Neural Networks With Concept Attribution. CVPR 2020: 8649-8658
9. Yankai Chen, Jie Zhang, Yixiang Fang, Xin Cao, Irwin King: Efficient Community Search over Large Directed Graph: An Augmented Index-based Approach. IJCAI 2020: 3544-3550

10. Hou Pong Chan, Wang Chen, Irwin King: A Unified Dual-view Model for Review Summarization and Sentiment Classification with Inconsistency Loss. SIGIR 2020: 1191-1200
11. Jichuan Zeng, Jing Li, Yulan He, Cuiyun Gao, Michael R. Lyu, Irwin King: What Changed Your Mind: The Roles of Dynamic Topics and Discourse in Argumentation Process. WWW 2020: 1502-1513
12. Xinyu Fu, Jiani Zhang, Ziqiao Meng, Irwin King: MAGNN: Metapath Aggregated Graph Neural Network for Heterogeneous Graph Embedding. WWW 2020: 2331-2341
13. Wang Chen, Yifan Gao, Jiani Zhang, Irwin King, Michael R. Lyu: Title-Guided Encoding for Keyphrase Generation. AAAI 2019: 6268-6275
14. Yifan Gao, Lidong Bing, Piji Li, Irwin King, Michael R. Lyu: Generating Distractors for Reading Comprehension Questions from Real Examinations. AAAI 2019: 6423-6430
15. Pengpeng Liu, Irwin King, Michael R. Lyu, Jia Xu: DDFlow: Learning Optical Flow with Unlabeled Data Distillation. AAAI 2019: 8770-8777
16. Hou Pong Chan, Wang Chen, Lu Wang, Irwin King: Neural Keyphrase Generation via Reinforcement Learning with Adaptive Rewards. ACL (1) 2019: 2163-2174
17. Yue Wang, Jing Li, Hou Pong Chan, Irwin King, Michael R. Lyu, Shuming Shi: Topic-Aware Neural Keyphrase Generation for Social Media Language. ACL (1) 2019: 2516-2526
18. Yifan Gao, Piji Li, Irwin King, Michael R. Lyu: Interconnected Question Generation with Coreference Alignment and Conversation Flow Modeling. ACL (1) 2019: 4853-4862
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6.4 Books Authored

1. Shenglin Zhao, Michael R. Lyu, Irwin King: Point-of-Interest Recommendation in Location-Based Social Networks. Springer Briefs in Computer Science, Springer 2018, ISBN 978-981-13-1348-6, pp. 1-99.
2. Hongyi Zhang, Irwin King, and Michael R. Lyu. Matrix Factorization Framework for Overlapping Community Detection: Modeling the Relationship between Links and Communities. LAP LAMBERT Academic Publishing. August 8, 2018.
3. Haiqin Yang, Irwin King, and Michael R. Lyu. Sparse Learning Under Regularization Framework: Theory and Applications. LAP LAMBERT Academic Publishing, April 2011.
4. Zenglin Xu, Irwin King, and Michael R. Lyu. More Than Semi-supervised Learning: A unified view on Learning with Labeled and Unlabeled Data. LAP LAMBERT Academic Publishing, first edition, December 28, 2010.

6.5 Book Chapters

1. Hanqin Yang, Kaizhu Huang, Zenglin Xu, Irwin King, and Michael R. Lyu. Semi- supervised learning with mixed unlabeled data. Machine Learning and Its Applications: 2011, chapter 13, pages 221–242. Tsinghua University Press, 2011.
2. Chi Hong Cheong, Lau Tak Pang, and Irwin King. Policy and issues in deploying auto- mated plagiarism detection systems in academic communities: A case study of veriguide. In Marian Quigley, editor, ICT Ethics and Security in the 21st Century: New Developments and Applications, chapter 9, pages 172–195. Information Science Publisher, February 2011.
3. Kaizhu Huang, Zenglin Xu, Irwin King, Michael R. Lyu, and Zhangbing Zhou. Bayesian network technologies: Applications and graphical models. chapter A Novel Discriminative Naive Bayesian Network for Classification, pages 1–12. IGI Publishing, 2007.
4. Wan-Yeung Wong, Tak-Pang Lau, Irwin King, and Michael R. Lyu. A tutorial on RDF with Jena. In Eldon Y. Li and Timon C. Du, editors, Advances in Electronic Business Volume 2, volume 2, pages 116–140. Cybertech Publishing, 2007.
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2. Longbing Cao, Hiroshi Motoda, Jaideep Srivastava, Ee-peng Lim, Irwin King, Philip S. Yu, Wonfgang Nejdl, Guangdong Xu, Gang Li, and Ya Zhang. Behavior and Social Computing: International Workshop on Behavior and Social Informatics, BSI 2013, Gold Coast, Australia, April 14-17, 2013. (Lecture Notes in Computer Science (8178)), Springer. December 11, 2013.
3. Steven Ch.H. Hoi, Jiebo Luo, Susanne Boll, Dong Xu, Rong Jin, and Irwin King. Social Media Modeling and Computing. Springer. 2011.
4. Bebo White, Irwin King, and Philip Tsang. Social Media Tools and Platforms in Learning Environments. Springer. 2011.
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6. Jie Tang, Irwin King, Ling Chen, Jianyong Wang. Advanced Data Mining and Applications: 7th International Conference, ADMA 2011, Beijing, China, December 17-19, 2011, Proceedings, Part I (Lecture Notes in Computer Science (7120)). Springer. December 2, 2011.
7. Jie Tang, Irwin King, Ling Chen, Jianyong Wang. Advanced Data Mining and Applications: 7th International Conference, ADMA 2011, Beijing, China, December 17-19, 2011, Proceedings, Part II (Lecture Notes in Computer Science (7121)). Springer. December 2, 2011.
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10. Irwin King and Ricardo Baeza-Yates. Weaving Services and People on the World Wide Web. Springer, July 20, 2009.
11. Kau-Zhu Huang, Haiqin Yang, Irwin King, and Michael R. Lyu. Machine Learning: Modeling Data Locally and Globally (Advanced Topics in Science and Technology in China). Springer. September 10, 2008.
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6.7 Book Reviews

1. Irwin King. Book reviews: Advances in large margin classifiers. IEEE Transactions on Neural Networks, 14(4):968–970, July 2003. IF(2003)=1.666.

7 KNOWLEDGE TRANSFER ACTIVITIES

7.1 Patents

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3. Irwin King, Jimmy Ho-Man Lee, Patrick Lau, Chi Chung Mak, and Chi Chung Chan, 中大剽檢通, The Chinese University Plagiarism IDentification Engine (CUPIDE), Taiwan Patent No. I 368144, 2012.

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7. Irwin King, Jimmy Ho-Man Lee, Patrick Lau, Chi Chung Mak, and Chi Chung Chan, 中大剽檢通, Chinese Patent No. 200710105835.3, 2010.

7.2 Trademarks

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1. Irwin King and Tak Pang Lau. The veriguide system. The Chinese University of Hong Kong, January 2009.
2. 2. Irwin King, Jimmy Lee, and Tak Pang Lau. The Chinese University Plagiarism IDentification Engine (CUPIDE). The Chinese University of Hong Kong, September 2005.
3. 3. Irwin King, Ada Fu, Laiwan Chan, and Lei Xu. Montage lite 1.0 (a content-based image retrieval system). The Chinese University of Hong Kong, 1997.
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7.4 ITDC Montage Image Database Project and Related Information

7.4.1 Publications

1. Yang-Wahn Hew. Lab's new version of image database set of the market. South China Morning Post, Technology Section, September 1, 1998 page 3, 1998.
2. Irwin King and Laiwan Chan. Montage image search engine & dbms. The IT Magazine, pages 45–46, May 1998.
3. Grace Loo. Chinese University releases image management system. Computerworld, Hong Kong, XV(11):2, December 11 1997.
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5. VIP Lab. Montage: Image database and management system. Network Today, pages 83–86, December 1997.
6. Hong Kong's Economic Times, Technology Section, October 1, 1997, page G9, 1997.
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9. Lisa Lee. Company logistics and global sourcing: a leap onto the information highway. Journal for Asia on Textile & Apparel, 8(1):15–22, 1997.

7.4.2 Exhibitions & Demonstrations

1. Tom Hung and Catherine Chan. Montage : an image database system. Macau IT'98, January 14, 1998.
2. Montage image database. Software Exhibition'97, Hong Kong Convention and Exhibition Center, Wai Chai, Hong Kong, December 3-6, 1997.
3. Image management with Montage. Public Seminar at Software Exhibition'97, Hong Kong Convention and Exhibition Center, Wai Chai, Hong Kong, December 4, 1997.
4. Montage: An image database. Presentation at the Quick Response Center, Hong Kong, October 31, 1997.
5. Hong Kong Technology Week 1997, January 6-9, Hong Kong Convention and Exhibition Center, Wan Chai, Hong Kong.
6. RGC visit, June 1996, The Chinese University of Hong Kong, Shatin, NT, Hong Kong.

8 RESEARCH GRANTS

8.1 Competitive Grants

1. Co-PI, Tackling Grand Challenges in Food Safety: A Big Data and IoT Enabled Approach, RGC Research Impact Fund (RIF R5034-18), HKD $917,600, June 2019-May 2024.
2. Co-PI, Multi-stage Big Data Analytics for Complex Systems: Methodologies and Applications, RGC Collaborative Research Fund (CRF C5026-18GF), HKD $180,240, June 2019-June 2022.
3. PI, Graph Embedding in Knowledge Graphs for Medical Citation Networks, CUHK Research Sustainability of Major RGC Funding Schemes (RSFS 1819), HKD $400,000, September 2019-August 2021.
4. PI, Generalized shared contextual features multi-armed bandit algorithms for recommender systems, RGC GRF HKD $496,028.00, October 1, 2015 to September 30, 2018.
5. PI, Scalable tensor analysis with approximation algorithms for big data applications, RGC GRF HKD $500,000.00, November 1, 2014 to October 31, 2017.
6. PI, An Investigation of Analyzing and Comparing MOOCs Platforms, MOE China CNY ¥500,000, Jan 1, 2016 to December 31, 2017.
7. PI, Knowledge and Education Exchange Platform (KEEP), UGC HKD $15,000,000, August 1, 2017 to July 31, 2020.
8. PI, Knowledge and Education Exchange Platform (KEEP), UGC HKD $15,000,000, July 1, 2015 to September 30, 2017.
9. PI, CUHK RAC allocated project - 2012/13 - funding support for Veriguide, CUHK HKD $2,230,000.00, April 1, 2013 to September 30, 2015.
10. PI, Factorization-based on-line recommendation framework with social and location information, RGC GRF HKD $500,000.00, September 1, 2012 to August 31, 2015.
11. PI, CUHK RAC allocated project - 2010/11 - bilingual assignment management system with plagiarism detection functions, CUHK HKD $1,241,000, December 1, 2010 to December 31, 2013.
12. PI, Irrelevant data classification in semi-supervised learning for social computing applications, RGC GRF HKD $858,500.00, July 1, 2010 to June 30, 2013.
13. Co-PI, Visible and infrared video integrated marking for augmented gesture extraction (vivid image) in digital entertainment, Innovation and Technology Fund (ITF), HKD $999,660, 2009/9/1 to 2010/7/31. Reference No: ITS/069/09; Project Code: 6902710.
14. Co-PI, A collaborative machine learning framework for multi- media, Microsoft, HK $98,000, June 25, 2009.
15. PI, The exploration of low density and manifold assumptions in semi-supervised learning, RGC GRF, HK $310,677, June 2008.
16. Co-PI, Intelligent language games with social interactions: Models and applications, Microsoft, HK $120,000, June 2008.
17. Co-PI, The hare election system and the cupide system, CUHK RAC, HK $3,000,000, June 3, 2008.
18. Co-PI, Video processing toolkit for visual perception technology in computer games, Innovation and Technology Fund (ITF), HKD $998,315, 2007.
19. PI, Theoretical investigation on kernel-based maximum a posteriori (MAP) classifiers under gaussianity assumption, RGC Earmarked Grant, HKD $396,000, 2007.
20. Co-PI, FYP Archival, Support, and Tracking (FAST) System, Faculty Strategic Incentive Projects Fund, HKD $180,000, 2007.
21. Co-PI, edPod Lecture Archival System, Faculty Strategic Incentive Projects Fund, 2007.
22. PI, The Croucher Foundation–2007 Beijing-Hong Kong Doctoral Forum, Croucher Foundation, HKD $60,000, 2007.
23. Co-PI, Enabling face-to-face entertainment computing technology (effect), Innovation and Technology Fund (ITF), HKD $1,000,000, 2006.
24. PI, Beijing-Hong Kong Doctoral Forum: Network and Multimedia Computing, CUHK RAC, HKD $35,000, 2006.
25. PI, A Study of Kernel-based Discriminant Classifiers, CUHK Internal Direct Grant, HKD $105,000, 2006.
26. Co-PI, The Chinese University Plagiarism IDentification System (CUPID), CUHK Internal, HKD $152,000, 2005.

27. PI, Improving Optimization in the Minimum Error Minimax Probability Machine, CUHK Internal, HKD $65,360, 2005.
28. Co-PI, Augmented reality computing arena for digital entertainment (ARCADE), ITF, HKD $4,480,000, 2004.
29. PI, Theoretical and experimental research on biased classification using extensions of the minimax probability machine, RGC, HKD $339,414, 2004.
30. PI, Target information estimation for relevance feedback framework in content- based image retrieval, RGC Earmarked Grant, HKD $413,404, 2002.
31. PI, Distributed content-based image search engine, RGC Research Grant Direct Allocation, HKD $150,000, 2002.
32. Co-PI, Where is the beef? data mining in high dimensional space, RGC Earmarked Grant, HKD $401,917, 2001–2003.
33. Co-PI, An intelligent system for satellite meteorological data mining and its applications, Research Grants Council, Earmarked Grants, 1999–2000.
34. Co-PI, A portfolio management system for the Hong Kong market, Research Grants Council, Earmarked Grants, HKD $600,000, 1999.
35. Co-PI, The design and analysis of stochastic clustering methods for generating indexing structure for information retrieval in image database applications, Hong Kong RGC Earmarked Grant, HKD $ 786,000, 1999.
36. PI, An image database for content-based query and retrieval for the fashion and textile industry (montage), CUHK Internal Research Grant, HK $144,000, July 1998.
37. Co-PI, Apparel manufacturing knowledge portal site, Industry Support Fund, HK $3,100,000, 1999.
38. Co-PI, Electronic commerce front end for HK apparel industry community, Industry Support Fund (contract through HKUST), HKD $250,000, September 1998.
39. Co-PI, Working model for intranet commerce in fabric sourcing and trading, Additional Funding for Industrial Support, HKD $622,000, 1997.
40. Co-PI, Content-Based Image Retrieval of Classical Chinese Paintings and Calligraphy, Hong Kong RGC Earmarked Grant (competitive), HKD $360,000, 1997.
41. Co-PI, A State Space Approach to Recurrent Neural Network, Hong Kong RGC Earmarked Grant (competitive), HKD $360,000, 1997.
42. PI, Min/Max Entropy Principles for Unsupervised Visual Processing via Con- strained Sigmoidal Neural Networks, CUHK Direct Grant, HKD $100,000, 1996.
43. Co-PI, FACE: A face analysis and computing environment, Hong Kong RGC Earmarked Grant (competitive), HKD $653,000, 1995.
44. Co-PI, Development of an Image Database for Hong Kong's Fashion Industry Supporting Content-Based Retrieval, Additional Funding for Industrial Support, HKD $2,921,000, 1995.
45. Co-PI, Facial Expression Animation and Lip-Synchronization Using Anatomical Models in Reading Text in Cantonese and Mandarin, CUHK Direct Grant, HK $50,000, 1994.
46. Co-PI, A Face Recognition System Using the Dynamic Link Architecture, CUHK Direct Grant, HKD $100,000, 1993.
47. Co-PI, A Computational Model of Mammalian's Memory System, Chiap Hua Cheng's Foundation Fund, HKD $2,800, 1993.
48. Co-PI, Spatial and appearance correlation of multi-view surveillance videos for in-store customer trace discovery and proactive selling, Innovation and Technology Fund (ITF).
49. Co-PI, Video capture and view construction for volume computing (vc3) in digital entertainment, Asia Media Technology Limited, HKD $18,000.
50. Co-PI, Video capture and view construction for volume computing (vc3) in digital entertainment, Innovation and Technology Fund (ITF), HKD $995,900.

8.2 Non-Competitive Grants

1. PI, Apple's WWDC Student Travel Grant 2009, Apple Computer Asia, HK $15,600, July 2009.
2. Co-PI, Apple's WWDC Travel Grant 2008, Apple Computer Asia, HK $46,000, June 2008.
3. PI, The Croucher Foundation–2007 Beijing-Hong Kong Doctoral Forum, Croucher Foundation, HKD $60,000, 2007.
4. PI, Proceeding editing for the Theoretical Aspects of Neural Computation (TANC'97) Conference, Student Campus Work Scheme, CUHK, HKD $2,750, 1997.

5. PI, WWW design and implementation for the Hong Kong Neural Computing and Intelligent System (HKNCIS) Forum, New Asia Student Campus Work Scheme, HK $2,100, 1995.
6. PI, Clerical work for International Conference on Neural Information Processing (ICONIP'96), CUHK Student Campus Work Scheme, HKD $4,500, 1995.
7. PI, An Integrative Environment for Artificial Neural Network Research, Strategic Research Grant, HKD $40,000, 1994.
8. Co-PI, A study of coherent oscillations and phase-locking behavior in neural networks, China Scholar Exchange Grant, 1994.
9. PI, World-Wide Web Homepage for the Neural Network Group, New Asia Student Campus Work Scheme, HKD $2,800, 1994.
10. Co-PI, Invitation of Professor Yan Ping Fan to visit CUHK, China Scholar Exchange Grant, 1994.

8.3 Project Contracts (HKD $60.23 M as of August 2020)

1. PI, CLAP, CUHK HKD $6,700,000, 2019-2020
2. Co-PI, AI Academy with HKJC, HKD $8,407,000, 2019-2022
3. PI, KEEP 2.0, HKD 15,000,000, 2017-2020
4. PI, KEEP, HKD $15,000,000, 2014-2017
5. PI, VeriGuide, 4720203, CUHK, HKD $3,795,000.00, July 1, 2015 to June 30, 2017.
6. PI, VeriGuide, 4720181, CUHK, HKD $2,230,000.00, April 1, 2013 to September 30, 2015.
7. PI, VeriGuide, 4720135, CUHK HKD $1,241,000, December 1, 2010 to December 31, 2013.

8.4 Summary

Research

Account No.	Project Title	Start Date	End Date	Amount
44P5012	An Image Database for Content-Based Query and Retrieval for the Fashion and Textile Industry (Montage)	00000000	00000000	144000
2050091	Facial Expression Animation and Lip-Synchronization Using Anatomical Models in Reading Text in Cantonese and Mandarin	19941201	19960831	50000
2150062	FACE: A Face Analysis and Computing Environment	19950901	19980831	653000
2050135	Min/Max Entropy Principles for Unsupervised Visual Processing Via Constrained Sigmoidal Neural Networks	19961201	19981130	100000
2150142	Content-Based Image Retrieval of Classical Chinese Paintings and Calligraphy	19971201	20001130	36000
2150197	The Design and Analysis of Stochastic Clustering Methods for GeneratingIndexing Structure for Information Retrieval in Image Database Applications	19991201	20021130	786000
2050259	Distributed Content-Based Image Search Engine	20020101	20021231	150000
2150317	Target Information Estimation for Relevance Feedback Framework in Content-Based Image Retrieval	20020901	20050228	413404
2150422	Theoretical and Experimental Research on Biased Classification Using Extensions of the Minimax Probability Machine	20040901	20070228	339414
2050346	Improving Optimization in the Minimum Error Minimax Probability Machine	20051201	20071130	65360

2050379	A Study of Kernel-based Discriminant Classifiers	20070101	20081231	105000
2150526	Theoretical Investigation on Kernel-based Maximum a Posteriori (MAP) Classifiers Under Gaussianity Assumption	20071101	20091031	396000
4200173	Theoretical Investigation on Kernel-based Maximum a Posteriori (MAP) Classifiers Under Gaussianity Assumption - YANG Haixuan	20080201	20080731	54231.6
2150583	The Exploration of Low Density and Manifold Assumptions in Semi-supervised Learning	20080901	20100831	310677
4440100	The Exploration of Low Density and Manifold Assumptions in Semi-supervised Learning	20080901	20100831	20000
4200205	The Exploration of Low Density and Manifold Assumptions in Semi-supervised Learning - XU Zenglin	20090521	20091120	66204
2150668	Irrelevant Data Classification in Semi-supervised Learning for Social Computing Applications	20100701	20130630	846000
4440494	Irrelevant Data Classification in Semi-supervised Learning for Social Computing Applications	20100701	20130630	20000
4280025	Irrelevant Data Classification in Semi-supervised Learning for Social Computing Applications	20100901	20130831	20000
2050498	IMPROVING RECOMMENDER SYSTEMS BY INCORPORATING SOCIAL INFORMATION	20120101	20131231	60492
2150727	Factorization-based On-line Recommendation Framework with Social and Location Information	20120901	20150831	500000
4440828	Factorization-based On-line Recommendation Framework with Social and Location Information	20120901	20150831	20000
3230134	Corporate Leaders Analytics and Network System (CLANS): application of data mining in China's capital market for identifying social networks among corporations and business elites	20130801	20140731	200000
2150761	Scalable Contextual Learning Techniques for Big Data: Theory, Algorithms, and Applications	20140101	20161231	500000
4441037	Scalable Contextual Learning Techniques for Big Data: Theory, Algorithms, and Applications	20140101	20161231	20000
2150802	Scalable Tensor Analysis with Approximation Algorithms for Big Data Applications	20141101	20180430	500000
4441259	Scalable Tensor Analysis with Approximation Algorithms for Big Data Applications	20141101	20180430	20000
2150853	Generalized Shared Contextual Features Multi-armed Bandit Algorithms for Recommender Systems	20151001	20180930	496028
4441501	Generalized Shared Contextual Features Multi-armed Bandit Algorithms for Recommender Systems	20151001	20180930	20000
2410021	Tackling Grand Challenges in Food Safety: A Big Data and IoT Enabled Approach	20190601	20240531	642320

3133150	Tackling Grand Challenges in Food Safety: A Big Data and IoT Enabled Approach	20190601	20240531	275280
2300174	Multi-stage Big Data Analytics for Complex Systems: Methodologies and Applications	20190628	20220627	180240
3133238	RSFS - Graph Embedding in Knowledge Graphs for Medical Citation Networks	20190901	20210831	400000
	973.1 网络大数据复杂性分析和计算平台组合测试合同	2013	2014	110000
	973.5 网络大数据模式发现与效应分析测试合同	2013	2014	144000
	973.6 软硬一体化的网络大数据处理系统测试合同	2013	2014	98000
	MOE--基于国内外多个在线教育平台的分析和比较研究	20160101	20171231	500000
	新一代神经网络模型:小样本/弱标签/无标签学习	2019	2024	1530000
	Total			**10.78 M**

Education

Account No.	Project Title	Start Date	End Date	Amount
UGC	KEEP--Knowledge and Education Exchange Platform	20140701	20180331	15000000
4720203	RAC Allocated Project - 2015/17 - Funding Support for VeriGuide	20150701	20180930	3795000
CUHK, CO-I	TDLEG 2016-19, Understanding the Academic Pathways and Experiences of S ub-degree Transfer Students	20170101	20190630	600000
UGC	KEEP 2.0	20170901	20200831	15000000
4170495	TDLEG 2016-19 - Developing Meaningful Learning Analytics Enable Teaching Development	20170101	20190630	1164300
4170564	TDLEG 2016-19 - Online Micro-Modules Video Library Production for Fundamental Programming Courses	20180701	20190930	591212
4720235	RAC Allocated Project - 2018/20 - VeriGuide Bilingual Assignment Management System	20180701	20210831	4136000
CUHK	Project Impact Enhancement Fund (PIEF) for VeriGuide	20180701	20200531	100000
6905143	AI Academy with HKJC	20190801	20220731	8407000
7106028	Development on CLAP Portfolio "Infinity" Platform	20190301	20208310	1200000
	CLAP 2.0			6700000
4170653	TDLEG 2019-22 - Enhancing and Sustaining the KEEP Platform for ELITE Advancement	20200901	20220430	3541851
4170814	TDLEG 2019-22 - Artificail Intelligence (AI) for Collaborative Learning	20210201	20200430	200000

4170845	TDLEG-2019-22-VTL-VTL technology sandbox on Knowledge and Education Exchange Platform (KEEP)	20210301	20220630	516000
3212114	VTL Technology Sandbox on Knowledge and Education Exchange Platform	20210324	20230630	550000
3212119	VTL Support on KEEP VISUAL Framework	20210412	20230630	525000
	Total			**62.02 M**

Industry

Account No.	Project Title	Start Date	End Date	Amount
	AT&T Labs Research	2012	2013	160000
ITF	ITF--Open-source cloud-based SDK framework for location-based services	20141101	20151031	1399550
	富媒体大数据重点实验室			3000000
6903556	Microsoft Research Asia Grant - Scalable Learning of User's Reputation and Trust Relations with Social Media	20170101	20190630	116375
7010355	Huawei Technologies Company Limited - Survey of Techniques and Applications in Location Based Services	20180701	20190930	185660
7010445	Meitu (China) Limited - Generative Q&A Dialog	20181010	20190918	585000
	Amazon AWS Credit	20200701	20210630	400000
	Total			**5.85 M**

12 AWARDS AND HONORS

9.1 Research

1. 2021 International Neural Network Society (INNS) Dennis Gabor Award
2. ACM WSDM 2022 Test of Time Award for Hao Ma, Dengyong Zhou, Chao Liu, Michael R. Lyu, Irwin King: Recommender systems with social regularization. WSDM 2011: 287-296 (https://www.wsdm-conference.org/2022/timetable/event/wsdm-awards-program-test-of-time-presentation/)
3. ACM SIGIR 2020 Xian Test of Time Award for Hao Ma, Irwin King, Michael R. Lyu: Learning to Recommend with Social Trust Ensemble. SIGIR 2009: 203-210 (https://sigir.org/awards/test-of-time-awards/).
4. AI 2000 Most Influential Scholars (https://www.aminer.org/ai2000) for #34 in AAAI/IJCAI; #44 in Information Retrieval and Recommendation; #56 in Data Mining. CUHK CPRO (https://www.cpr.cuhk.edu.hk/en/press_detail.php?id=3236).
5. ACM CIKM 2019 Beijing Test of Time Award for Hao Ma, Haixuan Yang, Michael R. Lyu, and Irwin King, SoRec: Social Recommendation Using Probabilistic Matrix Factorization, presented at CIKM 2008 (http://www.cikmconference.org/cikmToTA.html).

6. CVPR 2019 Best Paper Finalist for Pengpeng Liu, Michael R. Lyu, Irwin King, Jia Xu: SelFlow: Self-Supervised Learning of Optical Flow. CVPR 2019: 4571-4580.
7. ICONIP 2017 Best Paper Runner Up for Shenglin Zhao, Irwin King, Michael R. Lyu: Geo-Pairwise Ranking Matrix Factorization Model for Point-of-Interest Recommendation. ICONIP (5) 2017: 368-377.
8. ACM SIGIR and SIG Web Best Student Paper Runner-Up for Tong Zhao, Irwin King: Constructing Reliable Gradient Exploration for Online Learning to Rank. CIKM 2016: 1643-1652.
9. Hongbo Deng, Jiawei Han, Michael R. Lyu, and Irwin King. Modeling and Exploiting Heterogeneous Bibliographic Networks for Expertise Ranking, Vannevar Bush Best Paper Award, Joint Conference on Digital Libraries (JCDL2012), Washington D.C., USA, June 2012. (https://www.jcdl.org/awards.php)
10. Man-Ching Yuen and Irwin King. Mathematical Modeling of Social Games, Best Paper Award, Proceedings of The 4th Beijing-Hong Kong International Doctoral Forum 2009, Best Paper Award in Web Intelligence and Social Computing, Hong Kong, August 2009.
11. Kaizhu Huang, Haiqin Yang, Irwin King, and Michael Lyu, Modeling Data Locally and Globally (Advanced Topics in Science and Technology in China), First ed., Zhejiang University Press with Springer Verlag, 2008. (Selected as One of The Top 100 books published in the field of Engineering in China's 第二屆``三個一百"原創出版工程表彰大會)
12. Best Poster Award, Expo: Excellence Online, eLearning Service with ITSC and CLEAR, The Chinese University of Hong Kong, 2007.

9.2 Teaching, Service, Competition, and Others

1. Irwin King. 2010 APNNA Excellent Service Award, Sydney, Australia, 2010.
2. Irwin King, Jimmy Lee, and Patrick Lau. WIKIs for building a collaborative education environment. Poster Commendation in EXPO: Excellence Online, 2008, CUHK, October 17, 2008.
3. Champion, Final Year Project Competition 2006-2007, Computational Intelligence Chapter (IEEE Hong Kong Section)
4. Bronze Prize, Challenge Cup, China, 2007.
5. Vice-Chancellor Cup of Student Innovation, Champion, Undergraduate Group Team, 2007
6. Irwin King. Faculty of Engineering Exemplary Teaching Award 2007, Engineering Faculty, The Chinese University of Hong Kong, 2007.
7. Irwin King. Department of Computer Science Departmental Service Award 2006, Department of Computer Science and Engineering, The Chinese University of Hong Kong, May 2006.
8. Irwin King. Department of Computer Science Departmental Teaching Award 2006, Department of Computer Science and Engineering, The Chinese University of Hong Kong, May 2006.
9. Irwin King. Faculty of Engineering Service Award 2006, Engineering Faculty, The Chinese University of Hong Kong, March 4, 2006.
10. Bronze Prize, Challenge Cup, China, 2005.
11. Champion, Final Year Project Competition 2004-2005, Computational Intelligence Chapter (IEEE Hong Kong Section)
12. Vice-Chancellor Cup of Student Innovation, Champion, Undergraduate Individual Team, 2005
13. Irwin King. Faculty of Engineering Exemplary Teaching Award 2003, Engineering Faculty, The Chinese University of Hong Kong, February 7, 2003.
14. Marquis Who's Whos in the World (27th Edition), USA, 2010.
15. International Who's Who of Professionals, USA, 1997.

10 VISITING AND GUEST PROFESSORSHIP

1. **Visiting Professor**, August 2011 - July 2012
   School of Information
   University of California, Berkeley, Berkeley, CA USA

11 EDITORSHIP

Current

1. Associate Editor, Neural Network Journal, 2010– present

2. Associate Editor, ACM Transactions on Knowledge Discovery in Data (ACM TKDD), 2011–2016
3. Book Series Editor, Social Media and Social Computing, Taylor and Francis (CRC Press), 2010–present
4. Editorial Advisory Board, ICT Ethics and Security in the 21st Century: New Developments and Applications, IGI Global, November 2009 – Present
5. Editorial Board, International Journal of Intelligent Computing and Cybernetics (IJICC), September 2007 – Present
6. Editorial Board, Journal of Nonlinear Analysis and Applied Mathematics, April 2006 – Present
7. Editorial Board, Neural Information Processing-Letters & Review (NIP-LR), 2004 – Present
8. Member of the Editorial Board, Web Intelligence and Web Science (WIWS), Higher Education Press, China

Former

1. Former Associate Editor, IEEE Transactions on Neural Networks (IEEE TNN), 2007–2011
2. Former Associate Editor, IEEE Computational Intelligence Magazine (IEEE CIM)
3. Editorial Board, The Open Information Systems Journal

Special Issues

1. Special Issue Guest Editor, Twitter and Microblogging Services, ACM TIST, 2011-2012
2. Special Issue Guest Editor, Web Intelligence, Neurocomputing, 2011
3. Special Issue Guest Editor, International Journal of Intelligent Computing and Cybernetics (IJICC), 2008
4. Special Issue Guest Editor, Neurocomputing, 2007
5. Special Issue Guest Editor, International Journal of Pattern Recognition and Artificial Intelligence, 2007
6. Special Issue Guest Editor, International Journal of Computational Intelligent Research (IJCIR), 2006

12 INVITED PRESENTATIONS/ LECTURES

Invited Presentations/ Lectures at Conferences, Workshops, Research Institutes and Universities (Total: 35+)

1. Invited Speaker, TTRN – CITRIS Summer Institute, NLP in Medicine and Healthcare, UC Davis, August 24-26, 2020.
2. Invited Speaker, Hong Kong AI Summit, Hong Kong, July 28, 2020
3. Invited Speaker, CSC532 Machine Learning, KMUTT, May 1, 2020
4. Invited Speaker, UGEB217, CUHK, March 19, 2020
5. Invited Speaker, Alibaba, Hangzhou, May 29, 2019
6. Invited Speaker, 粤港澳大湾区高校智慧教学与金课建设研讨会, June 28-29, 2019
7. Invited Speaker, Greater China MOOC Symposium (GCMS2019), SJTU, Shanghai, China, October 19, 2019
8. Invited Speaker, WCCI2018, Rio de Janeiro, Brazil, July 11, 2018
9. Invited Speaker, CUHK-MIT eLearning Workshop, June 1, 2018
10. Invited Speaker, National Chiao Tung University, June 19, 2018
11. Invited Speaker, INNS-CIIS 2018, Brunei, March 26, 2018.
12. Invited Speaker, Tsinghua University, January 26, 2018
13. Invited Speaker, APNNS Workshop, Thailand, February 1, 2018
14. Invited Speaker, Singapore, University of Technology and Design (SUTD), January 12, 2018
15. Invited Speaker, AntFinance, Alibaba, Hangzhou, November 28, 2017
16. Invited Speaker, ICONIP2017 Security and Privacy Workshop, Guangzhou, China, November 15, 2017
17. Invited Speaker, 台灣人工智慧年會 x 2017 台灣資料科學年會, Taipei, Taiwan, November 9-12, 2017
18. Invited Speaker, VINCI2017, KX KMUTT, Bangkok, Thailand, August 14-15, 2017
19. Invited Speaker, Taichung MOOC Event, April 22, 2017
20. Invited Speaker, International Workshop on Intelligent Optimization and Social Computing, Changsha, China, January 7-8, 2017

21. Invited Speaker, Microsoft Asia Faculty Summit 2016, Seoul, Korea, November 4, 2016
22. Invited Speaker, The 2nd International Conference on Behavioral, Economic and Socio- Cultural Computing (BESC 2015), Nanjing, China, October 30 - November 1, 2015.
23. Invited Speaker, 4th National Conference on Social Media Processing (SMP2015), 2015, Guangzhou, China, October 31, 2015.
24. Invited Speaker, Workshop on Web Education Technology 2015, Florence, Italy, May 19, 2015.
25. Invited Speaker, INNS-CIIS, Brunei, November 7-9, 2014.
26. Invited Speaker, INNS Workshop on Trends in Natural and Machine Intelligence (TNMI2012), Bangkok, Thailand, January 20, 2012.
27. Invited Speaker, The Moving Target of Mobile User Modeling, UMWA2011 Workshop at WSDM2011, Hong Kong, February 9, 2011.
28. Invited Speaker, Future Generation Information Technology 2009 (FGIT2009), Jeju Island, South Korea, December 10-12, 2009.
29. Invited Talk at The Tsinghua-CUHK Joint Research Center, Shenzhen, China, November 27, 2009.
30. Invited Talk, Forum on CyberSpace and Social Computing (CyberSocialCom-09), Vaton Yunqi Resort Hotel, Hangzhou, China, November 9, 2009.
31. Invited Talk, The 7th Chinese Workshop on Machine Learning and Applications (MLA'09), Nanjing University, Nanjing, China, November 6-8, 2009.
32. Invited Speaker, International Workshop on Multimedia Technologies for Education(IWMTE2009), Taipei, Taiwan, June 26, 2009.
33. Plenary, 16th International Conference on Systems, Signals and Image Processing (IWS- SIP2009), Chalkida, Greece, June 18-20, 2009.

13 KEYNOTE SPEECHES/ DISTINGUISHED LECTURES

Keynotes/Distinguished Lectures (Total: 25+)

1. Distinguished Lecture of Class Acts Online Talk, A Traveler's Guide to the 3-Pound Universe, CUHK, March 25, 2020.
2. Keynote, International Conference on Software and Computer Applications (ICSCA2020), Langkawi, Malaysia, February 18-21, 2020
3. Keynote, The 4th International Conference on Machine Vision and Information Technology (CMVIT 2020), Sanya, Hainan, China, February 20-22, 2020
4. Keynote, The 18th International Conference on Web-based Learning (ICWL2019), Magdeburg, Germany, September 23-25, 2019
5. Distinguished Speaker, CUHKSZ, February 7, 2018
6. Keynote, The 2nd International Conference on Machine Vision and Information Technology (CMVIT 2018), Hong Kong, June 23-25, 2018
7. Keynote, ICIETT2017, Phuket, Thailand, October 12-13, 2017
8. Keynote, International Conference on Neural Information Processing (ICONIP2016), Kyoto, Japan, October 16-21, 2016.
9. Keynote, The 19th Asia Pacific Symposium on Intelligent and Evolutionary Systems (IES 2015), Bangkok, Thailand, November 22-25, 2015.
10. Keynote, International Conference on Neural Information Processing (ICONIP2016), Kyoto, Japan, October 16-21, 2016.
11. Keynote, Ninth International Symposium on Multispectral Image Processing and Pattern Recognition (MIPPR 2015), Enshi, China, October 30 - November 1, 2015.
12. Invited Speaker, The 2nd International Conference on Behavioral, Economic and Socio-Cultural Computing (BESC 2015), Nanjing, China, October 30 - November 1, 2015.
13. Invited Speaker, 4th National Conference on Social Media Processing (SMP2015), 2015, Guangzhou, China, October 31, 2015.
14. Invited Speaker, INNS-CIIS, Brunei, November 7-9, 2014.
15. Keynote, The 19th Asia Pacific Symposium on Intelligent and Evolutionary Systems (IES 2015), Bangkok, Thailand, November 22-25, 2015.
16. Keynote, Ninth International Symposium on Multispectral Image Processing and Pattern Recognition (MIPPR 2015), Enshi, China, October 30 - November 1, 2015.

17. Keynote, International Workshop on Advanced Image Technology (IWAIT 2015), Tainan, Taiwan, January 12, 2015.
18. Keynote, The 6thInternationalConferenceonAdvancesinInformationTechnology (IAIT2012), Bangkok, Thailand, October-November, 2012.
19. Keynote, Workshop on Transfer Learning for Information Retrieval and Web Mining, World Wide Web Conference (WWW2012) , Lyon, France., April 16-20, 2012
20. Keynote, The 5th Conference on Intelligent Systems and Knowledge Engineering (ISKE2010), Hangzhou, China, November 15-16, 2010.
21. Keynote, The 2nd International Workshop on Education Technology and Computer Science (ETCS2010), Wuhan, China, March 6-7, 2010.
22. Keynote, 2009 International Symposium on Education and Computer Science (ECS2009), Wuhan, China, March 7-8, 2009.
23. Keynote, The International Workshop on Multimedia Technologies for Education (IWMTE2009), Taipei, Taiwan, June 26, 2009.
24. Keynote, The 16th International Conference on Systems, Signals and Image Processing (IWSSIP'09), Chalkida, Greece, June 18-20, 2009.
25. Keynote, The 2009 International Symposium on Education and Computer Science (ECS2009), Wuhan, China, March 7, 2009.

14 CONFERENCE ORGANIZATION

1. Honorary Co-Chair, The 27th International Conference on Neural Information Processing (ICONIP2020), Bangkok, Thailand, 2020.
2. General Co-Chair, The 26th International World Wide Web Conference (WWW2020), Taipei, Taiwan, 2020.
3. Organizing Committee Co-Chair, The 4th Greater China MOOC Symposium (GCMS2017), Hong Kong, July 20-21, 2017.
4. General Co-Chair, The 7th Asian Conference on Machine Learning (ACML2015), Hong Kong, November 20-22, 2015.
5. General Co-chair, The 7th ACM Conference on Recommender Systems (RecSys 2013), Hong Kong, October 12-16, 2013
6. General Co-Chair, International Conference on Social Computing and Applications (SCA2012).
7. General Co-Chair, The 2012 International Conference on Advances in Social Networks Analysis and Mining (ASONAM2012), Istanbul, Turkey, August 26-29, 2012.
8. Tutorial Co-Chair, World Wide Web Conference (WWW2012), April 16-20, 2012, Lyon, France
9. PC Co-Chair, The 7th International Conference on Advanced Data Mining and Applications (ADMA 2011), Beijing, China, December 16-18, 2011.
10. General Co-Chair, The 4th IEEE International Conference on Cyber, Physical and Social Computing (CPSCom 2011), Dalian, China, October 19-22, 2011.
11. Vice-Program Chair, The 8th International Conference on Mobile Web Information Systems (MobiWIS), Niagara Falls, Ontario, Canada, September 19-21, 2011.
12. Program Co-Chair, IEEE (SSCI) Symposium Series on Computational Intelligence and Data Mining (CIDM2011), Paris, France, April 11-15, 2011.
13. General Chair, International Conference on Web Search and Data Mining (WSDM2011), Hong Kong, February 9-12, 2011.
14. Vice-Program Chair, The 8th International Conference on Mobile Web Information Systems (MobiWIS), Niagara Falls, Ontario, Canada, September 19-21, 2011.
15. Program Co-Chair, IEEE Symposium on Computational Intelligence and Data Mining(CIDM2011), Paris, France, April 2011.
16. Program Co-Chair, The 2010 Conference on Technologies and Applications of Artificial Intelligence (TAAI2010), Hsinchu, Taiwan, November 18-20, 2010.
17. Workshop Co-Chair, The 16th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD2010), Washington DC, USA, August, 2010.
18. General Co-Chair, Workshop on Social Media and Web. 2.0 to be held in conjunction with The 6th International Conference on Intelligent Environments (IE'10), Kuala Lumpur, Malaysia, July 19-21, 2010.

19. General Co-Chair, Workshop on Social Computing in Education (WSCE2009), in conjunction with SocialComp'09.
20. General Co-Chair, The Fourth BJ-HK Doctoral Forum (BJ-HK PhD Forum 2009), August 6-10, 2009, Hong Kong.
21. General Co-Chair, Workshop on Social Web Search and Mining, in conjunction with CIKM2009.
22. Program Co-Chair, The first SIGMM Workshop on Social Media (WSM2009) in conjunction with ACM Multimedia 2009 (ACM MM'09), Beijing, China, October 19-24, 2009.

15 PROFESSIONAL SOCIETY ACTIVITIES

15.1 Professional Qualification and Membership

1. Institute of Electrical and Electronic Engineering (IEEE) - Computer & Neural Network Societies, Member: 1986–2008; Senior Member: 2008–2018; Fellow: 2019–present.
2. Association of Computing Machinery (ACM), Member: 1996–present; Distinguished Member: 2019–present.
3. International Neural Network Society (INNS), Member: 1994–1998; 2009–present.
4. Asia Pacific Neural Network Assembly (APNNS), Member: 1994–present.
5. Hong Kong Institution of Engineers (HKIE), Fellow: 2013–present.
6. Hong Kong Society for Multimedia and Image Computing (HKSMIC), Member: June 1997–present.
7. International Society for Optical Engineering, SPIE, Member: June 1997–present.
8. International Who's Who of Professionals, 1997–1998, 2010-2011.
9. New York Academy of Sciences, Member 1995–1997.

15.2 Society Activities

1. President, International Neural Network Society (INNS), 2019 – 2020
2. Vice-President Pro Tempore of Education, Board of Governors, International Neural Network Society (INNS), 2017 – 2019
3. Vice-President of Membership, Board of Governors, International Neural Network Society (INNS), 2011–2016
4. Vice-President and Member of Governing Board, Asia Pacific Neural Network Assembly (APNNS), 2004–2021
5. Chair, Task Force on the Future Directions of Neural Networks (IEEE CIS), 2009 – Present
6. Chair, SIG and Regional Chapters Committee for Asia and the Pacific, (INNS), 2007 – Present
7. Technical Committee Member, IEEE Computational Intelligence Society (CIS) Neural Networks Technical Committee
8. Technical Committee Member, IEEE Computational Intelligence Society (CIS) Data Mining Technical Committee
9. Former Member of Review Panel of the Natural Science, and Engineering of Academy of Finland
10. Former Member of Review Panel of the Natural Sciences and Engineering Research Council of Canada (NSERC)
11. Former Engineering Panel Member, RGC Engineering Panel and NSFC/RGC Joint Research Scheme Committee, Hong Kong SAR Government

16 POSTGRADUATE STUDENTS

(Please refer to the Teaching File for further details)

16.1 Graduated PhD students (Total: 29)

1. Yifan Gao (co-supervise with Michael R. Lyu). Teaching Machines to Ask and Answer Questions. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, 2021.
2. Weibin Wu (co-supervise with Michael R. Lyu). On the Robustness and Interpretability of Deep Learning Models. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, 2021.
3. Wenxiang Jiao (co-supervise with Michael R. Lyu). Effective Training with Data Engineering for Language Understanding and Generation. PhD thesis. The Chinese University of Hong Kong,

Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, 2021.

4. Wang Chen. Text Summarization with Different Granularities. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, September 2021.
5. Ken Hou-pong Chan. Learning to Summarize Text Documents. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, 2020.
6. Pengpeng Liu (co-supervise with Michael R. Lyu). Self-Supervised Learning of Dense Correspondence. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, 2021.
7. Jiani Zhang. Exploring Deep Learning Architectures for Graph Applications. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, 2020.
8. Yue Wang (co-supervise with Michael R. Lyu). Neural Keyphrase Generation for Social Media Understanding. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, 2020.
9. Jichuan Zeng (co-supervise with Michael R. Lyu). Latent Variable Modeling for Natural Language Understanding. PhD thesis. The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, September 2019.
10. Yuxin Su (co-supervise with Michael R. Lyu). Distributed Distance Learning Algorithms and Applications. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, September 2019.
11. Xiaotian Yu (co-supervise with Michael R. Lyu). Efficient Learning in Stochastic Bandits. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, May 2019.
12. Xixian Chen (co-supervise with Michael R. Lyu). Randomized Algorithms for Machine Learning. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, February 2018.
13. Shenglin Zhao (co-supervise with Michael R. Lyu). Point-of-interest Recommendation in Location-based Social Networks. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, November 2017.
14. Hongyi Zhang (co-supervise with Michael R. Lyu). Exploring and Modeling the Relationship Between Links and Communities for Overlapping Community Detection. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, September 2017.
15. Tong Zhao. Learning to Search and Recommend from Users' Implicit Feedback. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, February 2017.
16. Man-Ching Yuen. Task Recommendation in Crowdsourcing Systems. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, June 2016.
17. Chen Cheng (co-supervise with Michael R. Lyu). Learning to Recommend with Location and Context PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, September 2015.
18. Guang Ling (co-supervise with Michael R. Lyu). Learning to Improve Recommender Systems PhD thesis, The Chinese Uni- versity of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, March 2015.
19. Shouyuan Chen (co-supervise with Michael R. Lyu). Learning with Limited Samples PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, October 2014.
20. Baichuan Li (co-supervise with Michael R. Lyu). A Computational Framework for Question Processing in Community Question Answering Services PhD thesis, The Chinese University of Hong Kong, De- partment of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, February 2014.

21. Zhou Chao (co-supervise with Michael R. Lyu). Learning with Social Media PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, April 2013.
22. Xin Xin (co-supervise with Michael R. Lyu). Effective Fusion-based Approaches for Recommender Systems PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, July 2011.
23. Zhenjiang Lin (co-supervise with Michael R. Lyu). Link-based Similarity Measurement Techniques and Applications PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, September 2011.
24. Haiqin Yang (co-supervise with Michael R. Lyu). Sparse Learning Under Regularization Framework PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, January 2011.
25. Hao Ma (co-supervise with Michael R. Lyu). Learning to Recommend. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, December 2009.
26. Hongbo Deng (co-supervise with Michael R. Lyu). Web Mining Techniques for Query Log Analysis and Expertise Retrieval. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, September 2009.
27. Zenglin Xu (co-supervise with Michael R. Lyu). Learning with Unlabeled Data. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, January 2009.
28. Haixuan Yang (co-supervise with Michael R. Lyu). Machine Learning Models on Random Graphs. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, September 2007.
29. Kaizhu Huang (co-supervise with Michael R. Lyu). Learning From Data Locally and Globally. PhD thesis, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, September 2004.

16.2 Graduated MPhil students (Total: 24)

1. Han Shao (co-supervise with Michael R. Lyu), August 2016 - 2019. Linear Stochastic Bandits with Heavy-Tailed Payoffs. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, June 2019.
2. Junjie Hu (co-supervise with Michael R. Lyu). Kernelized Online Imbalanced Learning. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, June 2015.
3. Priyanka Garg (co-supervise with Michael R. Lyu). Impact of Opinions in Social Networks. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, July 2012.
4. Dingyan Wang. Graph-based recommendation with label propagation. Master's the- sis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, Septem- ber 2011.
5. Wei Wang. Ranking and Its Application on Web Search. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2011.
6. Mingzhen Mo. Attack and Protection Issues in Online Social Networks. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2011.
7. Yi Zhu. Commercial Intention Detection on Twitter. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, September 2011.
8. Kam Tong Chan. Improving opinion mining with feature-opinion association and hu- man computation. Master's thesis, Department of Computer Science and Engineering, The Chinese

University of Hong Kong, Department of Computer Science and Engineer- ing, CUHK, Shatin, NT, September 2009.

9. Xiang Peng. Biased classification for relevance feedback in content-based image re- trieval. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2007.
10. Tak Pang Lau. Chinese readability analysis and its applications on the internet. Mas- ter's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2006.
11. Wan Yeung Wong. Information retrieval and query routing in peer-to-peer networks. Master's thesis, Department of Computer Science and Engineering, The Chinese Univer- sity of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2005.
12. Chi-Hang Chan. Using biased support vector machine in image retrieval with self- organizing map. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineer- ing, CUHK, Shatin, NT, August 2004.
13. Shi Lu (co-supervise with Michael R. Lyu). Content analysis and summarization for video documents. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2004.
14. Haiqin Yang. Margin variations in support vector regression for the stock market prediction. Master's thesis, Department of ComChi-puter Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2003.
15. Cheuk-Hang Ng. Peer clustering and firework query model in peer-to-peer networks. Master's thesis, Department of Computer Science and Engineering, The Chinese Univer- sity of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2003.
16. Richard Sia. Content-based image retrieval: Reading one's mind and helping people share. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2003.
17. Wan Zhang. Fast training of svm with β-neighbor editing. Master's thesis, Depart- ment of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2003.
18. Chi-Wai Lee (co-supervise with Michael R. Lyu). A web-based agent service platform for e-commerce applications. Mas- ter's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2001.
19. Ho-Yin Yue. Fuzzy clustering for content-based indexing in multimedia database. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 2001.
20. Yuk Ming Chan. Shape-based image retrieval in iconic image databases. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 1999.
21. Tak Kan Lau. Rival penalized competitive learning for content-based indexing. Mas- ter's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 1998.
22. Yin Bun Wong. A probabilistic cooperative-competitive hierarchical search model. Master's thesis, Department of Computer Science and Engineering, The Chinese Univer- sity of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 1998.
23. Lun Hsing Tung. A two-stage framework for polygon retrieval. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 1997.
24. Wai Kit Chan. Application of temporal difference learning and supervised learning in the game of go. Master's thesis, Department of Computer Science and Engineering, The Chinese University of Hong Kong, Department of Computer Science and Engineering, CUHK, Shatin, NT, August 1996.

16.3 Current PhD Students (Total: 11)

1. Minda Hu, February 2022 - Present
2. Zhihang Hu (co-supervise with Yu Li), August 2021 - Present
3. Conghao Xiaong (co-supervise with Joseph Sung), August 2021 - Present

4. Zixing Song, August 2020 - Present
5. Yifei Zhang, August 2020 - Present
6. Yankai Chen, August 2019 - Present
7. Menglin Yang, August 2019 - Present
8. Xinyu Fu, August 2018 - Present
9. Ziqiao Meng, August 2018 - Present
10. Jingjing Li (co-supervise with Michael R. Lyu), August 2017 - Present
11. Yaoman Li, August 2016 - Present

16.4 Current MPhil Students (Total: 1)

1. Tianyu Liu, August 2019 - Present

16.5 Postdoctoral Research Associates and Fellows

1. Dr. Haiqin Yang, Machine Learning, 2011–2016.
2. Prof. Guosheng Wang, Machine Learning, 2010–2011.
3. Dr. Zhirong Yang, Machine Learning, 2009–2009.
4. Dr. Zenglin Xu, Machine Learning, 2008–2009.
5. Dr. Kaizhu Huang, Machine Learning, 2007–2008.
6. Dr. Haixuan Yang, Machine Learning, 2008–2008.
7. Dr. Fang-Yong Duan, Digital Watermarking, 1997–1998.
8. Dr. Xiao-Feng Liao, Analysis of Rival Penalized Competitive Learning, 1997–1998.
9. Dr. Ajeroh Donald Asogu, Image Sequence Segmentation for Multimedia Applications, 1997–1998.
10. Dr. Bai-Ling Zhang, A Face Recognition System Using the Dynamic Link Architecture, 1994–1995

17 INTERNAL SERVICE

17.1 Department

1. Chair, Department of Computer Science and Engineering, The Chinese University of Hong Kong, August 2020–present
2. Chair, Curriculum Committee, Department of Computer Science and Engineering, The Chinese University of Hong Kong, 2006–2009.
    a. Double degree programme with the BBA Faculty of CUHK-Represented the Department to design and implement the programme and curriculum
    b. Outcomes-based Approach Teaching-Led the effort in transforming the department to a more Outcomes-Based Approach (OBA) teaching curriculum since 2006. He organized and conducted an OBA workshop for the department.
    c. Programme Review - He was an instrumental member in the department's Programme Review exercise in 2008 that received a high remark from the University.
    d. HKIE Accreditation 2009 - Heavily involved with the Hong Kong Institute of Engineers' (HKIE) accreditation process in 2009 that resulted in accreditation for both the Computer Science and Computer Engineering Programmes.
    e. 334 Curriculum - Led the committee in formulating the faculty package and department's curriculum for 2012.
    f. Streamlining Programme Courses - Reorganized the basic programming courses to provide a more complete set of courses for CSE students and service courses for students from other departments.
    g. Survey and Benchmarking - Conducted benchmarking with other curricula from other universities.
3. Chair, Accreditation Task Force, Department of Computer Science and Engineering, 2008– 2009
4. Representative, University General Education, The Chinese University of Hong Kong, 2007– Present
5. Member, Programme Review Task Force, Department of Computer Science and Engineering, 2006–2007
6. Member, EXCO, Department of Computer Science and Engineering, 2006–2007
7. Graduate Panel, 2002 – 2006.
8. Library Committee, 1994 – 2005.
9. Coach of the CS&E department's ACM Programming Contest team, 1998–2006. Led a team to a third-placed finish (out of 22) in the Asia-Pacific Regional Contest held at the Waseda University, Japan in November 1998.
10. Working with the Central Library to set up a book approval program in order to speed up book purchasing, December 1997.
11. 4812. Founding member of the Multimedia Information Processing Lab (MIP Lab), 2000.
12. Founding member of the Visual Information Processing Lab (VIP Lab), 1995.
13. Founding member of the Neural Computing and Engineering Lab (NCEL), 1994.
14. Deputy Director of the SGI Visualization Research Center, June 1996 – present.
15. Member of the Computer Users Group, 1995 – present.
16. Chairperson of the Library Committee, 1993 – 2003.
17. Working Group responsible for the Ho Sin-Hang Engineering Building's display booth for the CS department, 1994 – 1995.
18. Internal marker to Final Year Projects.
19. Internal marker to M. Phil. theses.
20. Internal marker to Ph.D. theses.

17.2 Faculty

1. Associate Dean (Education), Engineering Faculty, August 2013-July 2019.
2. Member, Engineering Faculty Board, The Chinese University of Hong Kong, 1 August 2009 to 31 July 2011
3. Member, Engineering Faculty Board, The Chinese University of Hong Kong, 1 August 2009 to 31 July 2011
4. Director, Engineering International Programmes (ERGIP), Faculty of Engineering, The Chinese University of Hong Kong, 2004–Present Here is a list of the events in the past few years.

a. Hosted President Mamdouh Shoukri, York University, Canada, November 9, 2009
b. Hosted Dean Peter Crouch and AD Song Choi, University of Hawaii, USA, October 15, 2009
c. Briefing Session for International Programmes, October 9, 2009, 50+ students
d. Hosted Herman, Mo-How Shen, Ohio State University, USA, June 23, 2009
e. Briefing Session for International Programmes, October 14, 2008, 50+ students
f. Meeting with Mr. Pierre Baladi, Deputy Director of International Affairs, MINES ParisTech, April 14, 2009
g. Visiting IST, Lisbon, Portugal, April 17, 2009
h. Hosted a group of 26 Computer Science students from KTH, June 9, 2009
i. Hosted Mario Rosario of IST, Portugal, February 23, 2009
j. Interview for OAL, November 21, 2008
k. Summer intern programme w/ OALC, August 1, 2008
l. Hosted a visit by Waseda University, Japan, June 9, 2008
m. Hosted Lester Gerhardt, RPI, USA, March 20, 2008
n. Hosted Cambridge, Loyola Marymount University, USA, March 12, 2007
o. Hosted Santi Giraldo, Embry-Riddle Aeronautical University, USA, March 8, 2007
p. Hosted SY Kuo, National Taiwan University of Science and Technology, August 1, 2006
q. Hosted Rice University, USA, June 27, 2006
r. Hosted Prof. Richard Comley, Middlesex University, UK, November 17, 2005
s. Hosted Prof. Tanya Zlateva, Boston University, USA, June 28, 2005
t. Hosted Korea University, Korea, June 21, 2005
u. Hosted President of Henri Poincare University, France, May 23, 2005
v. Hosted Marco Federighi, University College London, UK, January 17, 2005

5. Member, Faculty Curriculum Committee, 2006–2009
6. Member, Committee on Teaching and Learning, 2007–2009
7. Member, Academic Committee, CUHK MoE-Microsoft Key Laboratory of Human-Centric Computing and Interface Technologies, 2008–Present
8. Member of the Faculty Board, August 2001 – July 2007; August 2009–Present.
9. Member of the Working Committee of the Innovative Technology Fair 1999, April 30-May 1, 1999, The Chinese University of Hong Kong.
10. Chairperson of the Faculty Library Committee, 1994 – 2004.
11. Member, Working Group for the Opening of Ho Sin-Hang Engineering Building (November 1993 – January 1994).
12. Working Group on the Proficiency of English Language (August 1993).
13. Category (d) Member of Board/Committee of Studies (August 1993)

17.2.1 Summary of Selected Achievements as Associate Dean (Education) from 2013-2016

Here is a summary of selected achievements as Associate Dean (Education) from 2013-2019.

17.2.1.1 Curriculum

1. Created the Faculty Teaching and Learning Committee (FTLC) to oversee, monitor, and evaluate the curriculum.
2. Designed the Mathematics Placement Test, which is for all engineering undergraduates.
3. Designed the Physics Placement Test, which is for all engineering undergraduates.
4. Launched the bi-yearly course housekeeping exercise. In two rounds of exercise, inactivated over 300 dormant courses. Made sound policies for introduction of new courses to avoid overlapping, e.g., double-coded courses, and reducing teaching manpower.
5. Coordinated the provisional accreditation in 2016 and then full accreditation in 2019.
6. Redesigned the practicum, ethics, and safety requirements to free up more courses for major programmes.
7. Conducted extensive review of engineering mathematics courses and re-design the Faculty Package and foundation courses.
8. Set-up the Faculty media lab to expedite the implementation of micro-modules and flipped teaching.
9. Design the logistics and arrangement of class visits for faculty foundation courses.
10. Launch the online repository platform for departments to archive their final year projects.

11. Nurtured and developed a number of UGC teaching award candidates.
12. Nurtured and promoted teaching and learning activities such as TALENTS, seminars, expo, symposium, etc.
13. Created the ENGG5700 Engineering Entrepreneurship course and brought students to Silicon Valley, Pearl River Delta, and Taiwan to learn about entrepreneurship.

17.2.1.2 New Programmes

1. Created the ELITE Stream - the first Stream could be officially recorded on University transcript in 2014. Full operation at the Faculty level and maintains the average number of participants of around 220.
2. Created the first University-level Stream in Data Analytics in 2014.
3. Created the first Faculty-Level Minor programme in Data Analytics and Informatics in 2016.
4. Created the MSc programme in Financial Engineering, which is the first inter-disciplinary programme and fully managed at Faculty level in 2019.
5. Created the UG programme in Financial Engineering, which is the first inter-disciplinary programme and fully managed at Faculty level in 2017.
6. Created the UG programme in Artificial Intelligence: Systems and Technologies, which is the first inter-departmental Engineering programme of its kind in HK in 2019.
7. Created the Dual Degree Programme with Peking University (FinTech Programme) and Tsinghua University (Computer Science) in 2019.

17.3 College

17.3.1 Lee Woo Sing College (LWSC)

1. Member, Student Advisory and Disciplinary Committee, Lee Woo Sing College, 2020–Present.
2. Chair, Strategic Information Technology Committee (SITC), Lee Woo Sing College, 2016-Present.
3. Fellow, Lee Woo Sing College, 2016-Present.

17.3.2 New Asia College (NAC)

1. Member, General Education Committee, 1996–present.
2. Member, New Asia Staff Association Committee, 2002-2004.
3. Computer Science & Engineering Coordinator for the New Asia College, 1996, 2001.
4. Instructor, STOT General Education Class, September 1993 (10); September 1996 (19), 1999, 2002, 2006, 2009

17.4 University

1. Member of the Senate, 2020--2023
2. Category (2) Member of the MAE Board for 2020-21
3. CUHK-Shenzhen, A member of School of Data Science (SDS) School Academic Personnel Committee (SAPC)
4. Publication Ethics Committee, 2020-2022
5. Global Engagement Working Group for CUHK Strategic Plan 2021-2025
6. Education Working Group for CUHK Strategic Plan 2021-2025

Major Projects

1. **Principal Investigator, Knowledge and Education Exchange Platform (KEEP), The Chinese University of Hong Kong, 1994--Present**

   The Knowledge and Education Exchange Platform (KEEP) KEEP is an e-learning platform that educational resources can be shared, searched, and made accessible to target users. The platform strives to facilitate local educators to practice eLearning, eventually enhancing their teaching effectiveness.Over 43,000 users are using KEEP and 65,000 online courses are searchable on KEEP.

2. **Principal Investigator, Chief Technologist and Co-Founder, The VeriGuide System, The Chinese University of Hong Kong, 2004–Present.**

VeriGuide System. The VeriGuide is a plagiarism identification engine for detecting similar text among English and Chinese documents. It was commissioned by the Chinese and has been in operation since 2005. It has been adapted by the CUHK's Senate to be a mandatory system used to promote academic integrity and quality. It now serves the 14,000+ CUHK community at large. Moreover, we are also serving the Hong Kong Shue Yan University (HKSYU) with over 4,000+ staff and students.

18 EXTERNAL SERVICE

18.1 Panel Members

1. Former Member, Engineering Panel, Research Grants Councils (RGC), Hong Kong SAR Government, 2005–2012.
2. Former Panel Member, National Natural Science Foundation of China (NSFC)/Hong Kong Research Grants Council (RGC) Joint Research Scheme Joint Selection Committee, 2006-2007
3. Former Chair, Task Force on External Reviewers Database, Hong Kong Research Grants Council (RGC), Hong Kong SAR Government, 2006-2007
4. Former Member, Public Policy Grant Panel Member, Research Grants Councils (RGC), Hong Kong SAR Government, 2006–2007.
5. Former Member, Executive Committee of the IEEE (Hong Kong) Computer Chapter, 1998.
6. Former External Examiner, The Open University of Hong Kong, 2005
7. Former Member, Continuing Education Committee, YMCA of Hong Kong, 2004-2010
8. Former External Assessor, Hong Kong Applied R & D Fund Co. Ltd., August 1994.
9. Former Reviewer, RGC Earmarked Grants
10. Former Member, CIS Outstanding Chapter Award Subcommittee, (IEEE CIS)
11. Former Member of Review Panel of the Natural Science, and Engineering of Academy of Finland
12. Former Member of Review Panel of the Natural Sciences and Engineering Research Council of Canada (NSERC)
13. Former Member of RGC Engineering Panel, The Hong Kong SAR Government
14. Former Member of Joint Research Scheme (JRS) Panel under RGC, The Hong Kong SAR Government

18.2 Journal Reviewer/Referee

1. IEEE Signal Processing Letter (IEEE SPL)
2. IEEE Transactions on Circuits and Systems (IEEE TCAS)
3. IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)
4. IEEE Transactions on Multimedia (IEEE TMM)
5. IEEE Transactions on Neural Networks (IEEE TNN)
6. IEEE Transactions Parallel and Distributed System (IEEE TPDS)
7. IEEE Transactions on Pattern Analysis and Machine Intelligence (IEEE PAMI)
8. IEEE Transactions on System, Man, and Cybernetics, Part B (IEEE SMC-B)
9. Information Fusion
10. International Journal of Computer Vision
11. International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI)
12. Journal of Machine Learning Research (JMLR)
13. Machine Vision and Applications
14. Pattern Recognition
15. Pattern Recognition Letter
16. Real-Time Imaging
17. SPIE Journal of Electronic Imaging

18.3 Conference Area Chair, Senior PC, and PC

Area Chair (AC)

1. AC, Thirty-Fifth AAAI Conference on Artificial Intelligence 2021

Senior Program Committee (SPC) Member

1. SPC, The WebConf 2021, Slovenia
2. SPC, CIKM 2020
3. SPC, AAAI 2018

Program Committee (PC) Member

1. PC, AAAI 2020
2. PC, SNAA 2020
3. PC, EMNLP2020
4. PC, NeurIPS 2020
5. PC, LWMOOCS 2020
6. PC, ACL 2020

7. PC, ICLR 2019
8. PC, ACL 2019
9. PC, NeurIPS 2018
10. PC, ICONIP 2018
11. PC, EMNLP 2018
12. PC, ASONAM 2018
13. PC, IJCAI 2018
14. PC, IJCNN 2018
15. PC, NeurIPS 2017
16. PC, SIGIR 2017
17. PC, ASONAM 2016
18. PC, ACL 2016
19. PC, KDD 2016
20. PC, KDD 2015
21. PC, SIGIR 2015
22. PC, ICKM 2014
23. PC, NIPS 2014
24. PC, ICWSM 2014
25. PC, SDM 2014
26. PC, WSDM 2014
27. PC, NIPS 2013
28. PC, IJCAI 2013
29. PC, WWW 2013
30. PC, SDM 2013
31. PC, WSDM 2013
32. PC, CIKM 2012
33. PC, ACM MM 2012
34. PC, EMNLP 2012
35. PC, KDD 2012
36. PC, ICML 2012
37. PC, SIGIR 2012
38. PC, AAAI 2012