Irwin King

Profile

Dr. King's research interests include machine learning, web intelligence & social computing, and multimedia processing. In these research areas, he has over 160 technical publications in journals (JMLR, ACM TOIS, IEEE TNN, Neurocomputing, NN, IEEE BME, PR, IEEE SMC, JAMC, JASIST, IJPRAI, DSS, etc.) and conferences (NIPS, IJCAI, CIKM, SIGIR, KDD, PAKDD, ICDM, WWW, WI/IAT, WCCI, IJCNN, ICONIP, ICDAR, etc.). In addition, he has contributed over 20 book chapters and edited volumes. Moreover, Dr. King has over 30 research and applied grants. One notable system he has developed is the CUPIDE (Chinese University Plagiarism IDentification Engine) system, which detects similar sentences and performs readability analysis of text-based documents in both English and in Chinese to promote academic integrity and honesty.

Dr. King is an Associate Editor of the IEEE Transactions on Neural Networks (TNN) and IEEE Computational Intelligence Magazine (CIM). He is a member of the Editorial Board of the Open Information Systems Journal, Journal of Nonlinear Analysis and Applied Mathematics, and Neural Information Processing–Letters and Reviews Journal (NIP-LR). He has also served as Special Issue Guest Editor for Neurocomputing, International Journal of Intelligent Computing and Cybernetics (IJICC), Journal of Intelligent Information Systems (JIIS), and International Journal of Computational Intelligent Research (IJCIR). He is a senior member of IEEE and a member of ACM, International Neural Network Society (INNS), and Asian Pacific Neural Network Assembly (APNNA). Currently, he is serving the Neural Network Technical Committee (NNTC) and the Data Mining Technical Committee under the IEEE Computational Intelligence Society (formerly the IEEE Neural Network Society). He is also a Vice-President and Governing Board Member of the Asian Pacific Neural Network Assembly (APNNA).

He is serving or has served as program and/or organizing member in numerous top international conferences and workshops, e.g., WWW, ACM MM, CIKM, ICME, ICASSP, IJCNN, ICONIP, ICPR, etc. He has also served as reviewer for international conferences as well as journals, e.g., Information Fusion, IEEE TCAS, SIGMOD, IEEE Transactions on Neural Networks, IEEE Pattern Analysis and Machine Intelligence, IEEE Transactions on Multimedia, IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on System, Man, and Cybernetics, Machine Vision and Applications, International Journal of Computer Vision, Real-Time

Imaging, SPIE Journal of Electronic Imaging, International Journal of Pattern Recognition and Artificial Intelligence, etc.

Dr. King has received several exemplary teaching and service awards from the Department as well as from the Faculty of Engineering. He serves as a member of the Engineering Panel with the Research Grants Council (RGC), Hong Kong SAR Government. He is also the Director of the International Programmes in the Engineering Faculty. In addition, he is a member of the Faculty Curriculum Committee and serves as the Chair of the Curriculum Committee for the department. Dr. King is also actively involved in education of students outside of the classroom. For example, he has led several ACM Programming Contest Teams to the ACM ICPC World Finals since 2000. Moreover, he actively promotes the use of technologies in education. One great example is the Chinese University Plagiarism IDentification Engine (CUPIDE) Project, which is a system that promotes academic honesty and integrity through the use of advanced information retrieval techniques to locate similar texts. The CUPIDE system is being deployed at the Chinese University with over 14,000 student, faculty, and staff members. The system is also being used in a number of local secondary schools.

Dr. King joined the Chinese University of Hong Kong in 1993. He received his B.Sc. degree in Engineering and Applied Science from California Institute of Technology, Pasadena and his M.Sc. and Ph.D. degree in Computer Science from the University of Southern California, Los Angeles.