**Curriculum Vitae**

**Name:** KONG Wai Kin Adams

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**Current Position:** Associate Professor

Programme Director of Master Science in Artificial Intelligence, NTU

Senior Scientific, Chengdu Research Base of Giant Panda Breeding,

**Past Employment History:** Associate Professor, NTU. (Aug 2013- )

Assistant Professor, NTU. (July 2007-Aug 2013)

Consultant, Knowledge Funds Ltd, Waterloo, Canada. (Feb- April 2007)

**Academic Qualification:**

PhD degree**:** Doctor of Philosophy at University of Waterloo (UW), Canada, 2007.

Master degree: Master of Philosophy at The Hong Kong Polytechnic University (HKPolyU), Hong Kong, 2002.

Bachelor degree: Mathematical Science at Hong Kong Baptist University (HKBU), Hong Kong (First class honour with grade point average 3.78/4.00 and Scholastic Award for being the top student in the department), 1998.

**Awards:**

* Best reviewer award, given by IEEE International Conference on Biometrics: Theory, Applications, and Systems 2016
* Best reviewed paper from International Biometrics Conference 2016 (awarded rate 4/151, with Dr. Kong’s undergraduate, master, and visiting PhD students Qingyong Xu, Soham Ghosh, Xingpeng Xu, and RA Huang Yi)
* The paper entitled “A Statistical Analysis of IrisCode and its Security Implications” published in TPAMI was highlighted by IEEE Biometrics Council Newsletter, Nov, 2015.
* Silver Award in the Home Team (Singapore) Policy/Process Innovation of the Year. 2013 (with Singapore Police Force)
* Honeywell Best Student Paper Award by The IEEE Fifth International Conference on Biometrics: Theory, Applications and Systems (BTAS), 2012 (with Dr. Kong’s PhD students, Hengyi Zhang and Chaoying Tang and Dr. Noah Craft MD PhD. BTAS is a flagship biometric conference. One best student paper award was given.).
* Honorable Mention, the Journal of Pattern Recognition, 2012. (Dr. Kong is the first author. Pattern Recognition is a high quality journal. Its 5-year impact factor is 3.172. According to the 2011 journal citation reports from ISI Web of Knowledge, it was ranked 11/111 under the subject category CSAI and 21/245 under the subject category EEE. Two papers per year are awarded.)
* Best Reviewed Paper, The IEEE Fifth International Conference on Biometrics: Theory, Applications and Systems, 2012. (with Dr. Kong’s PhD students, Hengyi Zhang and Chaoying Tang, and Dr. Noah Craft MD PhD. BTAS is a flagship biometric conference. Four papers were selected.)
* Spotlight Paper, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), March issue, 2012. (Dr. Kong is the sole author. According to the 2011 journal citation reports from ISI Web of Knowledge, TPAMI was ranked 1/111 under the subject category CSAI and 4/245 under the subject category EEE. One paper per issue is selected.)
* One of most cited articles published in Pattern Recognition since 2007, citation based on SciVerse Scopus, Feb 2012 (Dr. Kong is the first author).

**Research interests:** Pattern Recognition, Image Processing, AI, Biometrics, Forensics, Medical Image Processing

**Selected publications**

1. Matkowski Wojciech Michal,Tingting Chai and Adams Kong, “Palmprint Recognition in Uncontrolled and Uncooperative Environment”, *IEEE Transactions on Information Forensics and Security,* 2020
2. Peng Chen, Swarup Pranjal, Wojciech Michal Matkowski, Adams Kong, Han Su, Zhihe Zhang, and Rong Hou, “A Large Scale Study on Giant Panda Recognition Based On Images”, *Ecology and Evolution*, 2020
3. Yanzhu Liu, Wang Fan and Adams Wai Kin Kong, “Probabilistic Deep Ordinal Regression Based on Gaussian Processes”, ICCV, 2019.
4. Shitala Prasad and Adams Kong, “Using object information for spotting text”, E*uropean Conference on Computer Vision*, 2018
5. Joseph Jia Hong Toh, Suman Bhoi, Sai Yee Chuah, Anjali Jhingan, Adams Wai Kin Kong, Steven Tien Guan Thng, Automated Scoring of Vitiligo Using Superpixel-Generated Computerized Digital Image Analysis of Clinical Photographs: A Novel and Consistent Way to Score Vitiligo, British Journal of Dermatology, accepted 2018
6. Yanzhu Liu and Adams Kong, “Constrained deep neural network for ordinal regression”, IEEE Conference on Computer Vision and Pattern Recognition, 2018
7. Yanzhu Liu, Adams Kong and Chi Keong Goh, “Deep Ordinal Regression based on Data Relationship for Small Datasets”, *International Joint Conference on Artificial Intelligence*, 2017
8. Frodo Kin Sun Chan, Xiaojie Li and Adams Kong, “A Study of Distinctiveness of Skin Texture for Forensic Applications through Comparison with Blood Vessels”, *IEEE Transactions on Information Forensics and Security,* vol. 12, no 8, pp. 1900-1915, 2017
9. Arfika Nurhudatiana, and Adams Kong, “On Criminal Identification in Color Skin Images Using Skin Marks (RPPVSM) and Fusion with Vein Patterns”, *IEEE Transactions on Information Forensics and Security, vol. 10, no. 5, pp. 916-931, 2015*
10. Adams Kong, “A Statistical Analysis of IrisCode and its Security Implications”, *IEEE Transactions on Pattern Analysis and Machine Intelligence,* vol. 37, no. 3, pp. 513-528, 2015.
11. Adams Kong, “Modeling IrisCode and its variants as convex polyhedral cones and its security implications”, *IEEE Transactions on Image Processing*, vol. 22, no. 3, pp. 1148-1160, 2013
12. Adams Kong, “IrisCode decompression based on the dependence between its bit pairs”, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 34, no. 3, pp. 506-520, 2012

**Patents**

1. Ankur Purwar, Wai Kin Adams Kong, Peicong Yu and Tomohiro Harkozaki, “Systems and Mathods for Identifying Hyperpigmented Spots”, US. Patent application number US. 62/547,196, filed at 08/18/2017
2. Adams Wai Kin Kong, Chaoying Tang, Hengyi Zhang, and Noah Ames Craft, “Method and an apparatus for determining vein patterns from a color images”, United States Patent No, No. 9,317,761, April, 2016.
3. Adams Wai Kin Kong, Noah Ames Craft, Chaoying Tang, and \*Hengyi Zhang, “Method and apparatus for extracting blood vessel patterns in color images for personal identification”, Singapore Patent No 190730, Oct 2014.
4. Noah Ames Craft, Wai Kin Adams Kong, and Arfika Nurhudatiana, “Use of relatively permanent pigmented or vascular skin mark patterns in images for personal identification”, U.S. Patent No. 8,787,625, Oct 2015
5. Kong Wai Kin Adams and Naif Alajlan, “Method and apparatus for image generation”, US Patent No. 8,705,809, 2014
6. Zhang Dapeng, David, Niu Xuan, Lu Guang Ming, Kong Wai-Kin Adams, and Wong Ming Keung. “Method and apparatus for palmprint identification”, Japanese Patent No. 4246154 (IP-061D), 2009.