KONG CHENQI

 $(65)88649291 \Leftrightarrow chenqi.kong@ntu.edu.sg$ School of EEE, 50 Nanyang Ave S2-B4b-13, 639798, Singapore

EDUCATION & EXPERIENCE

Research Fellow at ROSE Lab

Nov 2023-present

Nanyang Technological University (NTU), Singapore

Supervisor: Prof. Alex Chichung Kot.

Research Associate at ROSE Lab

Jun 2023-Nov 2023

Nanyang Technological University (NTU), Singapore

Supervisor: Prof. Alex Chichung Kot.

Ph.D. in Computer Science

Aug 2019-Jun 2023

City University of Hong Kong (CityU), Hong Kong, China GPA: 4.00/4.30. Supervisor: Asso. Prof. WANG Shiqi.

M.S. in Electrical Engineering & Automation

Sep 2017-Jul 2019

Harbin Institute of Technology (HIT), Harbin, China GPA ranking: 3/143. Supervisor: Prof. LIU Jian.

B.S. in Photoelectric Information Science & Engineering

Sep 2013- Jul 2017

Harbin Institute of Technology (HIT), Harbin, China

GPA ranking: 8/74. Supervisor: Prof. SHI Hongyan.

PUBLICATIONS

Chenqi Kong, Kexin Zheng, Yibing Liu, Shiqi Wang, Anderson Rocha, and Haoliang Li. "M3FAS: An Accurate and Robust MultiModal Mobile Face Anti-Spoofing System," *IEEE Transactions on Dependable and Secure Computing* (TDSC), 2024.

Chenqi Kong, Kexin Zheng, Shiqi Wang, Anderson Rocha, and Haoliang Li. "Beyond the Pixel World: A Novel Acoustic-based Face Anti-Spoofing System for Smartphones," *IEEE Transactions on Information Security and Forensics* (TIFS), 2022.

Chenqi Kong, Baoliang Chen, Haoliang Li, Shiqi Wang, Anderson Rocha, and Sam Kwong. "Detect and Locate: Exposing Face Manipulation by Semantic and Noise-level Telltales," *IEEE Transactions on Information Security and Forensics* (TIFS), 2022.

Chenqi Kong, Baoliang Chen, Wenhan Yang, Haoliang Li, Peilin Chen, and Shiqi Wang. "Appearance Matters, So Does Audio: Revealing the Hidden Face via Cross-Modality Transfer," *IEEE Transactions on Circuits and Systems for Video Technology* (TCSVT), 2021.

Chenqi Kong, Shiqi Wang, and Haoliang Li. "Digital and Physical Face Attacks: Reviewing and One Step Further," *APSIPA Transactions on Signal and Information Processing*, 2023.

Chenqi Kong, Haoliang Li, and Shiqi Wang. "Enhancing General Face Forgery Detection via Vision Transformer with Low-Rank Adaptation," *IEEE International Conference on Multimedia Information Processing and Retrieval*, 2023.

Anwei, Luo, **Chenqi Kong**, Jiwu Huang, Yongjian Hu, Xiangui Kang, and Alex C. Kot. "Beyond the Prior Forgery Knowledge: Mining Critical Clues for General Face Forgery Detection," *IEEE Transactions on Information Security and Forensics* (TIFS), 2023.

Jiaxing Li, Chenqi Kong, Shiqi Wang, and Haoliang Li. "Two-branch Multi-scale Deep Neural Network for Generalized Document Recapture Attack Detection," *IEEE International Conference on Acoustics, Speech, and Signal Processing* (ICASSP), 2023.

Jian Liu, **Chenqi Kong**, Qiang Li, Weisong Zhao, Mengzhou Li, Shan Gao, Chenguang Liu, and Jiubin Tan. "Artifact-free, penetration-adjustable elliptical-mirror-based TIRF microscopy," *Optics Express* (OE), 2018.

Rizhao Cai, Zitong Yu, **Chenqi Kong**, Haoliang Li, Changsheng Chen, Yongjian Hu, and Alex C. Kot. "S-Adapter: Generalizing Vision Transformer for Face Anti-Spoofing with Statistical Tokens," *IEEE Transactions on Information Security and Forensics* (TIFS), 2024.

Baoliang Chen, Lingyu Zhu, **Chenqi Kong**, Hanwei Zhu, Shiqi Wang, and Li Zhu. "No-Reference Image Quality Assessment by Hallucinating Pristine Features," *IEEE Transactions on Image Processing* (TIP), 2022.

Yibing Liu, Haoliang Li, Yangyang Guo, **Chenqi Kong**, Jing Li, and Shiqi Wang. "Rethinking Attention-Model Explainability through Faithfulness Violation Test," *International Conference on Machine Learning* (ICML), 2022.

Jian Liu, Weisong Zhao, Chenguang Liu, **Chenqi Kong**, Yixuan Zhao, Xumin Ding, and Jiubin Tan. "Accurate aberration correction in confocal microscopy based on modal sensorless method," *Review of Scientific Instruments*, 2019.

Under Review

Chenqi Kong, Anwei Luo, Shiqi Wang, Haoliang Li, Anderson Rocha, and Alex C. Kot. "Pixel Inconsistency Modeling for Image Manipulation Localization," Submitted to *IEEE Transactions on Pattern Analysis and Machine Intelligence* (TPAMI), 2023. (Major Revision)

Chenqi Kong, Anwei Luo, Song Xia, Yi Yu, Haoliang Li, and Alex C. Kot. "MoE-FFD: Mixture of Experts for Generalized and Parameter-Efficient Face Forgery Detection," Submitted to *IEEE Transactions on Dependable and Secure Computing* (TDSC), 2024.

Chenqi Kong, Anwei Luo, Peijun Bao, Haoliang Li, Renjie Wan, Anderson Rocha, and Alex C. Kot. "Open-Set Deepfake Detection: A Parameter-Efficient Adaptation Method with Forgery Style Mixture," Submitted to *IEEE Transactions on Information Security and Forensics* (TIFS), 2024.

Kecheng Chen, Tiexin Qin, **Chenqi Kong**, Yan Hong, and Haoliang Li. "Online Test-time Adaptation for Object Detection via Joint Object Entropy Minimization," Submitted to *IEEE Transactions on Pattern Analysis and Machine Intelligence* (TPAMI), 2024.

Peijun Bao, **Chenqi Kong***, Zihao Shao, Wenhan Yang, Boon Poh Ng, and Alex C. Kot. "DAG: A Large-Scale Domain Adaptation Benchmark for Video Grounding," Submitted to *ACM Multimedia* (MM), 2024.

Anwei Luo, Rizhao Cai, **Chenqi Kong**, Yakun Ju, Xiangui Kang, Jiwu Huang, and Alex C. Kot. "Forgery-Aware Adaptive Vision Transformer for Generalized Face Forgery Detection," Submitted to *ACM Multimedia* (MM), 2024.

Yi Yu, Song Xia, Xun Lin, **Chenqi Kong**, Wenhan Yang, Shijian Lu, Yap-peng Tan, and Alex C. Kot. "Towards Model Resistant to Transferable Adversarial Examples via Trigger Activation," Submitted to *ACM Multimedia* (MM), 2024.

Hui Liu, Wenya Wang, Hao Sun, Chris Xing Tian, **Chenqi Kong**, Xin Dong, Haoliang Li. "Unraveling the Mechanics of Learning-Based Prompt Retriever for In-Context Learning," Submitted to *Neural Information Processing Systems Conference* (NeurIPS), 2024.

Patents

Chenqi Kong, Haoliang Li, Shiqi Wang, Kexin Zheng. Echo-FAS: A Novel Acoustic-based Face Anti-Spoofing System for Smartphones, 2022.

Baoliang Chen, **Chenqi Kong**, Haoliang Li, Shiqi Wang. A More General And Robust Face Manipulation Detection Approach via Noise Modeling, 2022.

SELECTED HONORS AND AWARDS

National Scholarship (Top 1%). Ministry of Education of the People's Republic of China, 2018.

Gold Medal. International Exhibition of Inventions, Geneva, 2023.

Research Tuition Scholarship (RTS). Chow Yei Ching School of Graduate Studies, City University of Hong Kong, 2021.

Outstanding Academic Performance Award (OAPA). Chow Yei Ching School of Graduate Studies, City University of Hong Kong, 2021, 2022.

National Encouragement Scholarship, Ministry of Education of the People's Republic of China, 2016.

First-Class People's Scholarship, HIT, (2014, 2015, 2016, 2017, 2018).

Merit student of Harbin Institute of Technology, HIT, (2016, 2017).

PROFESSIONAL SERVICES

Reviewer for IEEE Transactions on Information Forensics and Security (TIFS)

Reviewer for IEEE Transactions on Image Processing (TIP)

Reviewer for IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)

Reviewer for IEEE Transactions on Multimedia (TMM)

Reviewer for IEEE Transactions on Cybernetics (TCYB)

Reviewer for IEEE Conference on Computer Vision and Pattern Recognition (CVPR)

Reviewer for Neural Information Processing Systems Conference (NeurIPS)

Reviewer for ACM Multimedia (ACM MM)

Reviewer for IEEE International Conference on Multimedia and Expo (ICME)

Reviewer for IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)

TEACHING ASSISTANT

Introduction to Computer Studies, CS1102, City University of Hong Kong.

Computer Programming, CS2313, City University of Hong Kong.

Computer Vision and Image Processing, CS4186, City University of Hong Kong.

Vision and Image, CS5187, City University of Hong Kong.

MISCELLANEOUS

Selected Courses

Machine Learning, Vision and Image, Computer Graphics, Research in Computer Science.

Programming Skills

Python, Pytorch, Tensorflow, Matlab, C, Zemax.