

Di Duan

[✉ duandiacademic@gmail.com](mailto:duandiacademic@gmail.com) | [🌐 Personal Homepage](#) | [🔍 Google Scholar](#) | [🌐 LinkedIn](#)

Research Interests: Mobile Computing | Human-Computer Interaction | Deep Learning | Wearable Computing

Positions

The Chinese University of Hong Kong (CUHK)

Postdoctoral Fellow in Information Engineering

Work with Prof. Guoliang Xing.

Aug. 2024 – Present

Hong Kong

Education

City University of Hong Kong (CityU)

Ph.D. in Computer Science

Supervised by Dr. Weitao Xu, co-supervised by Prof. Xiaohua Jia. I also work closely with Dr. Tianxing Li at MSU.

Aug. 2020 – Jul. 2024

Hong Kong

Hong Kong University of Science and Technology (HKUST)

M.Sc. in Electronic Engineering

Aug. 2018 – Nov. 2019

Hong Kong

Harbin Engineering University (HEU)

B.Eng. in Optoelectronic Information Science and Engineering

Aug. 2014 – Aug. 2018

Harbin, Heilongjiang, China

Publications

[MobiSys'24] F²Key: Dynamically Converting Your Face into a Private Key Based on COTS Headphones for Reliable Voice Interaction

Di Duan, Zehua Sun, Tao Ni, Shuaicheng Li, Xiaohua Jia, Weitao Xu, Tianxing Li

2024

[IMWUT/UbiComp'24] EarSE: Bringing Robust Speech Enhancement to COTS Headphones

Di Duan, Yongliang Chen, Weitao Xu, Tianxing Li

2024

[PerCom'23] EMGSense: A Low-Effort Self-Supervised Domain Adaptation Framework for EMG Sensing

Di Duan, Huanqi Yang, Guohao Lan, Tianxing Li, Xiaohua Jia, Weitao Xu

Best Paper Award (1/159), 2023

[MobileHCI'24] Medusa3D: The Watchful Eye Freezing Illegitimate Users in Virtual Reality Interactions

Aochen Jiao*, Di Duan* (*co-first authors), Weitao Xu

Honorable Mention Award (3/141), 2024

[MobiCom'24] RF-Egg: An RF Solution for Fine-Grained Multi-Target and Multi-Task Egg Incubation Sensing

Zehua Sun, Tao Ni, Yongliang Chen, Di Duan, Kai Liu, Weitao Xu

2024

[TMC] Scenario-Adaptive Key Establishment Scheme for LoRa-enabled IoV Communications

Huanqi Yang, Di Duan, Hongbo Liu, Chengwen Luo, Yuezong Wu, Wei Li, Albert Y. Zomaya, Linqi Song, Weitao Xu

2024

[TOSN] mmSign: mmWave-based Few-Shot Online Handwritten Signature Verification

Mingda Han, Huanqi Yang, Tao Ni, Di Duan, Mengzhe Ruan, Yongliang Chen, Jia Zhang, Weitao Xu

2023

[CSCAIoTSys] EarDA: Towards Accurate and Data-Efficient Earable Activity Sensing

Shengzhe Lyu, Yongliang Chen, Di Duan, Renqi Jia, Weitao Xu

2024

Awards

Honorable Mention Award

MobileHCI'24, 2024

Elsevier Monetary Award

Elsevier, 2023

Mark Weiser Best Paper Award

PerCom'23, 2023

Postgraduate Studentship

CityU, 2020

Skills

Languages:	Python, Matlab, Java
Technologies:	Signal Processing (audio, EMG, IMU, gaze, mmWave), Deep Learning, Transfer Learning
Platform & Framework:	Pytorch, Tensorflow, Arduino, Android
Tools:	LaTeX, Draw.io, Powerpoint

Professional Services

Organizing Committee:

2024: Publicity Chair of BodySys Workshop (MobiSys)

Technical Program Committee:

2024: ICPADS

Artifact Evaluation Committee:

2024: MobiSys

Conference Review:

2025: MobiCom

2024: IPSN, IOTDI, ICDCS, DCOSS-IoT, SenSys

2023: IPSN

Journal Review:

2024: TMC (IEEE Trans), HEALTH (ACM Trans), TOSN (ACM Trans), Ad Hoc Networks

Reference

Guoliang Xing (Postdoc Advisor)

IEEE Fellow, HKIE Fellow

Professor

The Chinese University of Hong Kong

Email: glxing@ie.cuhk.edu.hk

Xiaohua Jia (Ph.D. Co-advisor)

IEEE Fellow, ACM Distinguished Member

Chair Professor, Head of Department of Computer Science

City University of Hong Kong

Email: csjia@cityu.edu.hk

Weitao Xu (Ph.D. Advisor)

IEEE Senior Member

Assistant Professor

City University of Hong Kong

Email: weitaoxu@cityu.edu.hk

Tianxing Li (Close Collaborator)

Assistant Professor

Michigan State University

Email: litianx2@msu.edu