# TAO CHEN

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 210 S. Bouquet Street, Pittsburgh, PA 15260

#### RESEARCH INTEREST

Mobile and Wearable Computing; Acoustic Signal Processing; Embedded System Design

#### **EDUCATION**

City University of Hong Kong, Hong Kong

September, 2017 - October, 2021

Doctor of Philosophy (Advisor: Prof. Zhenjiang Li)

Department of Computer Science

Northwestern Polytechnical University, Xi'an, China

September, 2013 - July, 2017

Bachelor of Engineering

Department of Acoustic and Information Engineering

#### **EXPERIENCE**

University of Pittsburgh, Pittsburgh, USA

September, 2022 - Present

Postdoc (Advisor: Prof. Longfei Shangguan) Department of Computer Science

City University of Hong Kong

Dongguan Research Institute, Dongguan, China

October, 2021 - August, 2022

Assistant Researcher

Center for Computer Science and Information Technology

### **PUBLICATION**

**Tao Chen**, Longfei Shangguan, Zhenjiang Li and Kyle Jamieson. "SoundSticker: In-band Acoustic Channels to Enhance the Room-Area Network Connectivity." *In Submission*, 2022.

Tao Chen, Longfei Shangguan, Zhenjiang Li and Kyle Jamieson. "Metamorph: Injecting Inaudible Commands into Over-the-air Voice Controlled Systems." In Proceedings of the Network and Distributed System Security Symposium (NDSS), 2020.

Zhen Xiao, **Tao Chen**, Yang Liu, Zhenjiang Li. "Mobile Phones Know Your Keystrokes through the Sounds from Finger's Tapping on the Screen." In Proceedings of IEEE International Conference on Distributed Computing Systems (ICDCS), 2020.

Zhen Xiao, **Tao Chen**, Yang Liu, Jiao Li, Zhenjiang Li. "Keystroke Recognition With the Tapping Sound Recorded by Mobile Phone Microphones." *IEEE Transactions on Mobile Computing*, 2021.

Jiao Li, Yang Liu, **Tao Chen**, Zhen Xiao, Zhenjiang Li, Jianping Wang. "Adversarial Attacks and Defenses on Cyber-Physical Systems: A Survey." *IEEE Internet of Things Journal*, 2020.

## POSTERS & DEMOS

**Tao Chen**, Longfei Shangguan, Zhenjiang Li, Kyle Jamieson. "Poster: Room-Scale Over-the-Air Audio Adversarial Examples." *NDSS symposium Poster*, 2020

#### AWARDS AND HONORS

Student Travel Grant Award, NDSS	2020
Research Tuition Scholarship, CityU	2020
UGC PhD Scholarship, CityU	2017-2021
Best New Team, RoboSub (sponsored by AUVSI and ONR), San Diego, CA, US	SA 2016
First Prize, Singapore AUV Challenge, Singapore	2016
Second Prize, National Undergradate Electornic Design Contest	2015
National Endeavor Scholarship, China	2015-2016
CATIC Special Scholarship (only 10 students selected), NWPU	2017
Wu Yajun Special Scholarship, NWPU	2016
FAST AUTO DRIVE Special Scholarship, NWPU	2015
First Class Scholarship, NWPU	2015-2017
Excellent Student Awards, NWPU	2014-2017
TEACHING	
CS2313 Computer Programming, CityU	Sem B, 2020-2021
CS2313 Computer Programming, CityU	Sem A, 2020-2021
CS2313 Computer Programming, CityU	$Sem \ B, \ 2019-2020$
CS2313 Computer Programming, CityU	Sem A, 2019-2020
CS2310 Computer Programming, CityU	Sem B, 2018-2019
CS5487 Machine Learning, CityU	Sem A, 2018-2019
${ m CS4280~Advanced~Internet~Applications~Development,~CityU}$	Sem B, 2017-2018
CS2115 Computer Organization, CityU	$Sem \ A, \ 2017-2018$
PROFESSIONAL SERVICES	

**TPC**: IEEE ICPADS 2022; EAI MobiQuitous 2022; ACM SenSys 2022 (shadow PC)

Reviewer: ACM IMWUT 2021; Frontiers Artificial Intelligence of Things