

# Yetong Cao

COMPUTER SCIENCE AND TECHNOLOGY · PH.D

Wireless Network and Mobile Computing Lab, Center Building, Beijing Institute of Technology, Beijing, China

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## Personal Information

**Gender** Female

**Data of Birth** March 28, 1995

**Research Interests** Smart Health, Mobile Computing, Security and Privacy

## Education

### School of Computer Science, Beijing Institute of Technology

PH.D STUDENT IN COMPUTER SCIENCE AND TECHNOLOGY

Advisor: Prof. Fan Li

Beijing, China

Sept. 2019 - Jun. 2023

### School of Computer Science and Engineering, Nanyang Technological University

VISTING PH.D IN COMPUTER SCIENCE

Advisor: Prof. Jun Luo

Singapore

Nov. 2021 - Nov. 2022

### School of Computer Science, Beijing Institute of Technology

SUCCESSIVE POSTGRADUATE AND DOCTORAL PROGRAMS IN COMPUTER SCIENCE AND TECHNOLOGY

Advisor: Prof. Fan Li

Beijing, China

Sept. 2017 - Jun. 2019

### School of Computer Science and Technology, Shandong University

B.S. IN COMPUTER SCIENCE AND TECHNOLOGY

Shandong, China

Sept. 2013 - Jun. 2017

## Publications

### EarACE: Empowering Versatile Acoustic Sensing via Eearable Active Noise Cancellation Platform

YETONG CAO, CHAO CAI, ANBO YU, FAN LI, JUN LUO

ACM UbiComp 2023

CCF-A

### HeartPrint: Passive Heart Sounds Authentication Exploiting In-Ear Microphones

YETONG CAO, CHAO CAI, FAN LI, ZHE CHEN, JUN LUO

IEEE INFOCOM 2023

CCF-A

### I Can Hear You Without a Microphone: Live Speech Eavesdropping From Earphone Motion Sensors

YETONG CAO, FAN LI, HUIJIE CHEN, XIAOCHEN LIU, CHUNHUI DUAN, YU WANG

IEEE INFOCOM 2023

CCF-A

### Tongue-Jaw Movement Recognition Through Acoustic Sensing on Smartphones

YETONG CAO, FAN LI, HUIJIE CHEN, XIANCHEN LIU, YU WANG

IEEE TMC 2022

CCF-A

### Guard Your Heart Silently: Continuous Electrocardiogram Waveform Monitoring with Wrist-Worn Motion Sensor

YETONG CAO, FAN LI, HUIJIE CHEN, XIANCHEN LIU, LI ZHANG, YU WANG

ACM UbiComp 2022

CCF-A

### Leveraging Wearables for Assisting the Elderly With Dementia in Handwashing

YETONG CAO, FAN LI, HUIJIE CHEN, XIANCHEN LIU, SONG YANG, YU WANG

IEEE TMC 2022

CCF-A

### Towards Nonintrusive and Secure Mobile Two-Factor Authentication on Wearables

YETONG CAO, FAN LI, QIAN ZHANG, SONG YANG, YU WANG

IEEE TMC 2021

CCF-A

### **Crisp-BP: Continuous Wrist PPG-based Blood Pressure Measurement**

YETONG CAO, FAN LI, HUIJIE CHEN, YU WANG

[ACM MobiCom 2021](#)

CCF-A

### **AWash: Handwashing Assistance for the Elderly With Dementia via Wearables**

YETONG CAO, HUIJIE CHEN, FAN LI, SONG YANG, YU WANG

[IEEE INFOCOM 2021](#)

CCF-A

### **CanalScan: Tongue-Jaw Movement Recognition via Ear Canal Deformation Sensing**

YETONG CAO, HUIJIE CHEN, FAN LI, YU WANG

[IEEE INFOCOM 2021](#)

CCF-A

### **PPGPass: Nonintrusive and Secure Mobile Two-Factor Authentication via Wearables**

YETONG CAO, QIAN ZHANG, FAN LI, SONG YANG, YU WANG

[IEEE INFOCOM 2020](#)

CCF-A

### **Towards Reliable Driver Drowsiness Detection Leveraging Wearables**

YETONG CAO, FAN LI, XIANCHEN LIU, SONG YANG, YU WANG

[ACM TOSN 2022](#)

### **PPGSign: Handwritten Signature Authentication using Wearable PPG Sensor**

ABM MOHAIMENUR RAHMAN, YETONG CAO, XINLIANG WEI, PU WANG, FAN LI, YU WANG

[IEEE WCNC 2021](#)

### **On the Feasibility of Handwritten Signature Authentication Using PPG Sensor**

ABM MOHAIMENUR RAHMAN, YETONG CAO, XINLIANG WEI, PU WANG, FAN LI, YU WANG

[IEEE CCNC 2021](#)

### **airFinger: Micro Finger Gesture Recognition via NIR Light Sensing for Smart Devices**

QIAN ZHANG, YETONG CAO, HUIJIE CHEN, FAN LI, SONG YANG, YU WANG, ZHENG YANG, YUNHAO LIU

[IEEE ICDCS 2020](#)

## **Honors & Awards**

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2020 **Student Conference Award**, IEEE INFOCOM 2020

[IEEE ComSoc](#)

2021 **Student Conference Award**, IEEE INFOCOM 2021

[IEEE ComSoc](#)

## **Skills**

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**Programming** Python, C/C++, Matlab, LaTeX

**Expertise** Mathematical Analysis, Topology, Algorithms, Machine Learning

**Languages** Mandarin Chinese (native), English

## **Professional Activities**

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### **Technical Reviewers**

- IEEE GLOBAL COMMUNICATIONS CONFERENCE (GLOBECOM)
- INTERNATIONAL PERFORMANCE COMPUTING AND COMMUNICATIONS CONFERENCE (IPCCC)
- IEEE TRANSACTIONS ON MOBILE COMPUTING (TMC)
- PROCEEDINGS OF THE ACM ON INTERACTIVE, MOBILE, WEARABLE AND UBIQUITOUS TECHNOLOGIES (IMWUT)

### **Service**

- TPC MEMBER FOR ACM S<sup>3</sup> 2022 WORKSHOP