

Yandao Huang | Curriculum Vitae

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Education

- 2016.9—2020.6** **Computer Science, Shenzhen University (GPA: 3.83, 27/194;)** **Bachelor**
Graduated with “Excellent Star of SZU”——The highest honor for students in SZU (Top 6 out of all students)
- 2021.9—present** **Hong Kong University of Science and Technology** **Ph.D. Candidate**
Supervised by Prof. Kaishun Wu and Prof. Qian Zhang

Entrepreneurship

- 2017.09 – 2018.12** **4 + Internet entrepreneurship project competitions**
- The projects involved unmanned book vending machines, K12 education, smart homes, smart hardware, and smart watches. Designed two product prototypes.
 - As the leader, participated in the 10th China College Students' Service Outsourcing Inno. & Entrep. Competition, stood out among 4,000 teams and won the national second prize; participated in the 2nd "Shenzhen Cup" International College Students' Inno. & Entrep. Competition, stood out among over 1,400 projects worldwide and entered the top 16 finals, winning the third prize; participated in the 4th "Internet+" College Students' Inno. & Entrep. Competition, stood out among 32,000 projects in the province, entered the top 119 finals, and won the provincial silver award.
- 2018.07** **Established Shenzhen Kaiying Technology Co., Ltd.** **CEO**
- Our company was admitted to the Shenzhen University Entrepreneurship Park after roadshow evaluation and received 100,000 yuan in virtual incubation funding; the team had 10 people and 6 related national invention patents.

Internship

2019.6.20 – 8.27 **Huawei Technologies Co., Ltd.** **Network Technical Engineer**

I was in the RPA Product AntRobot Team [Carrier BG]. The Robot Process Automation (RPA) product was in the introduction stage. The seed users were the first-line employees in the company. My job responsibilities were support, empowerment, development, and testing:

Support: Providing technical guidance for first-line users, feedback the collected bugs and user demands to the development team. In total, 400+ consultation problems are solved;

Empowerment: Held 4 training seminars for new employees, India, Romania, and Xi'an teams, totaling about 105 participants; Recorded 26 training course videos in both CN and ENG.

Development: Responsible for the development of 10 specific business scenario automation projects;

Testing: Testing new and old functions, writing 15 test cases (including nearly 100 sub-functions)

Publications

Conference Paper:

[1] RIScan: RIS-aided Multi-user Indoor Localization Using COTS Wi-Fi Devices
Chengao Li, Qianyi Huang, Yuxuan Zhou, **Yandao Huang**, Qingyong Hu, Huangxun Chen, and Qian Zhang
ACM Conference on Embedded Networked Sensor Systems (**SenSys, 2023**)

[2] Mealcoach: Contact Microphone-Based Meal Supervision For Post-Stroke Dysphagia Patients
Yanbin Gong, Jia Qiao, **Yandao Huang**, Qian Zhang and Zulin Dou
International Conference of the IEEE Engineering in Medicine and Biology Societym (**EMBC, 2023**)

- [3] MagEar: Eavesdropping via Audio Recovery using Magnetic Side Channel
Qianru Liao, Yongzhi Huang, **Yandao Huang**, Yuheng Zhong, Huitong Jin, and Kaishun Wu
ACM International Conference on Mobile Systems, Applications and Services (**MobiSys, 2022**)
- [4] “Vi-scosity: Unknown Liquid Testing with Your Smartphone”
Yongzhi Huang, Kaixin Chen, **Yandao Huang**, Lu Wang, and Kaishun Wu
ACM International Conference on Mobile Computing and Networking (**MobiCom 2021**)
- [5] “G-Fall: Device-free and Training-free Fall Detection with Geophones”
Yandao Huang, Wenqiang Chen, Hongjie Chen, Lu Wang, and Kaishun Wu.
IEEE International Conference on Sensing, Communication and Networking (**SECON 2019**)
- [6] “FacelInput: A Hand-Free and Secure Text Entry System through Facial Vibration”
Maoning Guan, Wenqiang Chen, **Yandao Huang**, R. Ruby, and Kaishun Wu.
IEEE International Conference on Sensing, Communication and Networking (**SECON 2019**)
- [7] “Taprint: Secure Text Input for Commodity Smart Wearables”
Wenqiang Chen, Lin Chen, **Yandao Huang**, Xinyu Zhang, Lu Wang, R. Ruby, and Kaishun Wu
ACM International Conference on Mobile Computing and Networking (**MobiCom 2019**)
- [8] “ViType: A Cost Efficient On-body Typing System through Vibration”
Wenqiang Chen, Maoning Guan, **Yandao Huang**, Lu Wang, R. Ruby, Wen Hu, and Kaishun Wu
IEEE International Conference on Sensing, Communication and Networking (**SECON 2018, Best Paper**)
- Journal Paper:**
- [9] MM-Tap: Adaptive and Scalable Tap Localization on Ubiquitous Surfaces with mm-level Accuracy
Yandao Huang, Cong Li, Fuwen Chen, Qian Zhang, and Kaishun Wu
IEEE Internet of Things Journal (**IoTJ**), Volume: 10, Issue: 23, Pages 20789-20802, 2023
- [10] NF-Heart: A Near-field Non-contact Continuous User Authentication System via Ballistocardiogram
Yandao Huang, Minghui Qiu , Lin Chen , Zhencan Peng , Qian Zhang , and Kaishun Wu
ACM Interact. Mob. Wearable Ubiquitous Technol (**IMWUT**). Volume 7, Issue 1, Article 16, Pages 1-24, 2023
- [11] An Eavesdropping System Based on Magnetic Side-Channel Signals Leaked by Speakers
Qianru Liao, Yongzhi Huang, **Yandao Huang**, Yuheng Zhong, Huitong Jin, and Kaishun Wu
ACM Transactions on Sensor Network (**TOSN**), Volume 20, Issue 2, Article 39, Pages 1-30, 2023
- [12] EdgeActNet: Edge Intelligence-enabled Human Activity Recognition using Radar Point Cloud
Fei Luo, Salabat Khan, Anna Li, Yandao Huang, and Kaishun Wu
To appear IEEE Transactions on Mobile Computing (**TMC**)
- [13] Activity-Based Person Identification Using Multimodal Wearable Sensor Data
Fei Luo, Salabat Khan, **Yandao Huang** and Kaishun Wu
IEEE Internet of Things Journal (**IoTJ**), Volume: 10, Issue: 2, Pages 1711-1723, 2023
- [14] Towards Device-free and User-independent Fall detection using Floor Vibration
Kaishun Wu, **Yandao Huang**, Minghui Qiu, Zhencan Peng, and Lu Wang
ACM Transactions on Sensor Network (**TOSN**), Volume 19, Issue 1, Article 5, Pages 1-20, 2023
- [15] A Portable and Convenient System for Unknown Liquid Identification with Smartphone Vibration
Yongzhi Huang, Kaixin Chen, **Yandao Huang**, Lu Wang, and Kaishun Wu
IEEE Transactions on Mobile Computing (**TMC**), Volume 22, Issue 4, Pages 1894 - 1911, 2023
- [16] Binarized neural network for edge intelligence of sensor-based human activity recognition
Fei Luo, Salabat Khan, **Yandao Huang**, and Kaishun Wu
IEEE Transactions on Mobile Computing (**TMC**), Volume 22, Issue 3, Pages 1356 - 1368, 2023

[17] "Power Saving and Secure Text Input for Commodity Smart Watches"

Kaishun Wu, **Yandao Huang**, Wenqiang Chen, Lin Chen, Xinyu Zhang, Lu Wang, and Rukhsana Ruby
IEEE Transactions on Mobile Computing (TMC), Volume 20, Issue 6, Pages 2281 - 2296, 2021

[18] "Vibration-based Pervasive Computing and Intelligent Sensing"

Yandao Huang, Kaishun Wu.

CCF Transactions on Pervasive Computing and Interaction (TPCI), Volume 2, Issue 4, Pages 219–239, 2020

[19] "A Low Latency On-body Typing System through Single Vibration Sensor"

Wenqiang Chen, Maoning Guan, **Yandao Huang**, Lu Wang, R. Ruby, Wen Hu, and Kaishun Wu.

IEEE Transactions on Mobile Computing (TMC), Volume 19, Issue 11, Pages 2520–2532, 2020

Honors & Awards

July, 2014	Wisecity: Pearl River Delta Business Simulation Competition (1/250)	MVP
July, 2015	The 15 th Nationwide Computer Design Activities (SICTIC)	National Second-class
Oct. 2016	College Freshman Cup Debate Competition	Champion
Dec. 2016	Five College Cup Debate Competition of Shenzhen University	Champion
Apr. 2018	Mathematical Contest in Modeling (MCM) (COMAP)	Honorable Mention
May, 2018	Virtual Incubation Funding from Shenzhen University Pioneer Park (100,000 CNY)	
Jun. 2018	IEEE SECON 2018 Best Paper Award (1/211)	International Class
July, 2018	Founded Shenzhen Kaiying Technology Co. Ltd.	CEO
Aug. 2018	The 11 th CN University Students Computer Design Competition	National First Prize
Aug. 2018	The 2 nd "SHEN CHUANG CUP" Intl. Univ. Students' Inno. & Entrep. Competition	Third Prize
Aug. 2018	The 4 th China Univ. Students' "Internet+" Inno. & Entrep. Competition	Provincial Silver Prize
Nov. 2018	The 8 th Educational Robot Competition in China	National Second Prize
Jun. 2019	The 10 th CN Univ. Service Outsourcing Inno. & Entrep. Competition	National Second Prize
May. 2019	SECON 2019 Student Travel Grant (2/18)	
Aug. 2019	The 12 th CN University Students Computer Design Competition	National Second Prize
Dec. 2019	Tencent Innovation Scholarship (Top 10 / all students)	
Dec. 2019	Excellent Start of SZU (Top 6 / all students)	

Skills & Interests

Hardware: Arduino, Raspberry Pi, STM32, Android mobile phones, Android smartwatch

Software: Word, Excel, Power Point, After Effect, Photoshop, Corel VideoStudio, Lightroom

Computer Languages: C, C++, Java, MATLAB, Python, PHP, SQL, HTML5, CCS3, JavaScript

Research Interests: Internet of Things, Mobile and Ubiquitous Computing, Human Activities Recognition, Human-computer Interaction, and Smart Healthcare

Hobbies: Photography, Cooking, Travel, Reading, Debate, Movies & Music, Table Tennis, Badminton