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- 2019** [J.5] **Tengxiang Zhang**, Xin Yi, Ruolin Wang, Jiayuan Gao, Yuntao Wang, Chun Yu, Simin Li, Yuanchun Shi. Facilitating Temporal Synchronous Target Selection through User Behavior Modeling. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, 2,4:159.
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- [O.3] Jianfei Shen, **Tengxiang Zhang**, and Yiqiang Chen. Tap2Pair: Associating Wireless Devices with Tapping. *Adjunct Proceedings of UbiComp/ISWC '19*, Pages 346-349.
- 2018** [J.3] **Tengxiang Zhang**, Xin Yi, Ruolin Wang, Yuntao Wang, Chun Yu, Yiqin Lu, and Yuanchun Shi. 2018. Tap-to-Pair: Associating Wireless Devices with Synchronous Tapping. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.* 2, 4: 201.
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- 2017** [J.2] **Tengxiang Zhang**, Xin Yi, Chun Yu, Yuntao Wang, Nicholas Becker, and Yuanchun Shi. 2017. TouchPower: Interaction-based Power Transfer for Power-as-needed Devices. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.* 1, 3: 121:1–121:20. *(Discussion Paper)*
- [C.1] **Tengxiang Zhang**, Nicholas Becker, Yuntao Wang, Yuan Zhou, and Yuanchun Shi. 2017. BitID: Easily Add Battery-Free Wireless Sensors to Everyday Objects. *In 2017 IEEE International Conference on Smart Computing (SMARTCOMP)*, 1–8. *(Best Paper Runner-up)*
- 2013** [J.1] Huifeng Ma, Bengeng Cai, **Tengxiang Zhang**, Yan Yang, Weixiang Jiang, and Tiejun Cui. 2013. Three-Dimensional Gradient-Index Materials and Their Applications in Microwave Lens Antennas. *IEEE Transactions on Antennas and Propagation* 61, 5: 2561–2569.

PATENTS

- 2022** [P.11] **Tengxiang Zhang**, Yanrong Li ,Yiqiang Chen. Smart Glasses-based Facial Action Unit Detection Method and Apparatus (*pending*)
- [P.10] **Tengxiang Zhang**, Zitong Lan, Yanrong Li, Yiqiang Chen. A Device Selection System and Method: CN 202211410562.4 (*pending*)
- [P.9] **Tengxiang Zhang**, Xin Zeng, Yiqiang Chen. An AR Device Felicitated Multi-Device Interaction System and Method: CN 202211490160.X (*pending*)
- 2021** [P.8] **Tengxiang Zhang**, Xin Zeng, Yiqiang Chen. A Semantic-based Device Association Method: CN 202110359565.9 (*pending*)
- 2020** [P.7] **Tengxiang Zhang**, Xin Zeng, Yiqiang Chen. A Smart Ring Based Gesture Recognition Method and System: CN 202010411317.X
- [P.6] **Tengxiang Zhang**, Jiayuan Gao, Yiqiang Chen. Apparatus and Method for Cognitive Load Analysis Based on Near-infrared Imaging of Subcutaneous Veins: CN 202010459503.0
- [P.5] **Tengxiang Zhang**, Jiayuan Gao, Yiqiang Chen. A Movement Symmetry Based Smart Prosthesis Control Method and System: CN 202010425034.0
- 2018** [P.4] Yuanchun Shi, Yinshuai Zhang, **Tengxiang Zhang**. One type of Smart Ring: CN 201821371671.9
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- [P.2] Yuanchun Shi, **Tengxiang Zhang**, Xin Yi, Yuntao Wang and Chun Yu. Pairing method and wireless device for pairing using wireless signals. International Patent No. PCT/CN2018/094468.
- [P.1] Yuanchun Shi, **Tengxiang Zhang**, Xin Yi, Yuntao Wang, Chun Yu. An association method and apparatus to pair devices based on wireless signals: CN 201810723952.4

GRANTS

- 2022** [I.5] **Principal Investigator:** Research on Pervasive Touch Interface and Interaction Design for IoT Device Control (300K CNY). NSFC Fund for Young Scholars.
- 2021** [I.4] **Principal Investigator:** Ultra-low-power Bluetooth-compatible Ubiquitous Touch Interface (20K CNY). Open project, Beijing Key Laboratory of Mobile Computing and Pervasive Device.
- 2020** [I.3] **Principal Executing Investigator:** A Movement Symmetry Based Smart Prosthesis Control Method (650K CNY). ICT, CAS Innovation Fund.
- [I.2] **Co-Principal Investigator:** Resources Cross-modality Association and Matching Techniques (2.28 Million CNY), sub-project of Key Technologies for Modern Service Resource Management, National Key Research and Development Plan.
- [I.1] **Co-investigator:** Hearing Aid Automatic Fitting Models (270K CNY), Key Technologies of Proactive Health and Aging Population, National Key Research and Development Plan.

HONORS AND AWARDS

2019	Graduate with Honor (CS), Tsinghua University, China
2018	Finalist, Global Innovation Competition'18
2017	Best Paper Runner-up, SMARTCOMP'17
2017	Discussion Paper, UbiComp'17

PROFESSIONAL EXPERIENCE

2021-	Associate Research Scientist, Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China
2019-2021	Assistant Research Scientist, Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China <ul style="list-style-type: none">• Conduct research on pervasive sensing and interactive systems and pervasive interaction techniques• Published papers on top-tier journals and conferences like CHI and IMWUT• Granted research funds ~3 million CNY with 2 National Key Research and Development Plan funds
2015-2016	RF Engineer/Product Manager, Tomoon Technology, Beijing, China <ul style="list-style-type: none">• Smartwatch and Bluetooth tracker antenna design• Bluetooth tracker product definition, project management, field deployment
2013-2015	Product and Test Engineer, Silicon Labs, Austin, Texas, USA <ul style="list-style-type: none">• IoT MCU chips (e.g. Sub-GHz、 ZigBee) RF calibration and test• Test program (C/Perl) development, hardware design and layout• Developed on-chip test program that saved over 30% test time for EM357

SERVICES

Committee Member	SIGCHI Sustainability Committee CCF HCI Technical Program Committee CCF UbiComp Technical Program Committee
Chair	HHME (largest conference for HCI and ubicomp in China) 2022 Tutorial UbiComp 2023 Workshop Track
Review	CHI'20'21'22, IMWUT'21'22, UIST'20, MobileHCI'20, ISS'20, IUI'20, TEI'20, EICS'19, TEI'21 WIP Program Committee
Volunteer	ACM UBICOMP/ISWC 2018, Singapore; The 4th UN World Urban Forum 2008, Nanjing, China
Academic Speaker	Microsoft Research (Redmond) GIX ACSP (Access Computing Summer Program) 2020
Mentor	GIX ACSP '21'22, GIX 2019 Winter Camp

STUDENT SUPERVISION AND MENTORSHIP

Xin Zeng	UCAS Ph.D (CS). Co-supervising with Prof. Yiqiang Chen
Jiayuan Gao	UCAS Ph.D (CS). Co-supervising with Prof. Yiqiang Chen
Yanrong Li	UCAS Master (CS). Co-supervising with Prof. Yiqiang Chen
Xiaoyu Wang	Peking University Undergraduate (CS)

Zhengtai Gou Tsinghua Undergraduate (Automation)
***Zitong Lan** SEU Undergraduate (CS)
***Xinran Chen** UESTC Undergraduate (CS)
***Yaobin Su** University of Copenhagen Master (CS)
***Xinyi Yang** BJTU Undergraduate (CS); Now Master at CUHK
***Jiayin Wang** Tsinghua Undergraduate (CS); Now Master at Tsinghua (CS)
***Simin Li** Beihang Undergraduate (CS); Now Master at Georgia Tech (CS)
***Zi Qian** Tsinghua Undergraduate (CS); Now Master at U of Toronto (CS)
***Hsuan-Wei Fan** Tsinghua Undergraduate (CS); Now Master at Cornell Tech (CS)
***Hanwei Wang** Tsinghua Undergraduate (Physics); Now Ph.D at UIUC (EE)
** Alumni*

SKILLS

Programming languages: Python, C, C++, C#, Java, Matlab
Prototyping: Arduino, Processing, Altium, 3D printing
Software: Matlab, CST, Keras, Scikit-learn
Hardware: Signal generator, Vector network analyzer, Spectrum analyzer

REFEREES

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