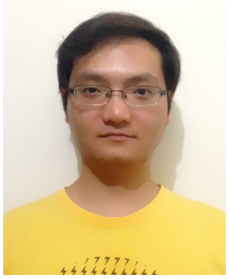

Shengkai Zhang

Curriculum Vitae

PERSONAL DETAILS

Citizenship	Chinese
Mobile	+8615827100146
Email	szhangk@hust.edu.cn
Web	https://clarencezsk.github.io/

EDUCATION

Ph.D. in Information Engineering 09/2017 - Present

Huazhong University of Science and Technology (HUST)

Advisor: Prof. Tao Jiang, School of Electronic Information and Communications.

M.Phil. in Computer Science and Engineering 09/2012 - 11/2014

Hong Kong University of Science and Technology (HKUST)

Advisor: Prof. Bo Li, Department of Computer Science and Engineering.

M.Sc. in Communication and Information System 09/2009 - 03/2012

Huazhong University of Science and Technology (HUST)

Advisor: Prof. Hongbo Jiang, School of Electronic Information and Communications.

B.Eng. in Communication Engineering 09/2005 - 06/2009

Central China Normal University (CCNU)

RESEARCH INTERESTS

Aerial Robotics, Wireless Sensing, State Estimation, SLAM, Mobile Computing

RESEARCH AND INDUSTRY EXPERIENCE

Research Assistant 09/2016 - Present

Huazhong University of Science and Technology

I led an interdisciplinary project on wireless communication and robotic state estimation. The project explores sensing capabilities of different RF signals to assist the navigation of micro aerial vehicles (MAVs).

DJI Engineer 12/2014 - 08/2016

DJI in Shenzhen, China

I worked on accurate Wi-Fi indoor state estimation for UAV (Unmanned Aerial Vehicle) navigation. I designed and implemented CSI-based Wi-Fi state estimation algorithm, fusing Wi-Fi measurements with IMU measurements.

PUBLICATIONS

- **Shengkai Zhang**, Wei Wang, Ning Zhang, Tao Jiang. *LoRa Backscatter Assisted State Estimator for Micro Aerial Vehicles with Online Initialization.* IEEE Transactions on Mobile Computing (TMC), 2020.
- **Shengkai Zhang**, Wei Wang, Sheyang Tang, Tao Jiang. *Robot-assisted Backscatter Localization for IoT Applications.* IEEE Transactions on Wireless Communications (TWC), 2020.
- **Shengkai Zhang**, Wei Wang, Ning Zhang, Tao Jiang. *RF Backscatter-based State Estimation for Micro Aerial Vehicles.* IEEE International Conference on Computer Communications (INFOCOM), 2020.
- **Shengkai Zhang**, Wei Wang, Tao Jiang. *WiFi-Inertial Indoor Pose Estimation for Micro Aerial Vehicles.* IEEE Transactions on Industrial Electronics (TIE), 2020.
- **Shengkai Zhang**, Wei Wang, Sheyang Tang, Tao Jiang. *Localizing Backscatters by a Single Robot With Zero Start-up Cost.* IEEE Global Communications Conference (GLOBECOM), 2019.
- **Shengkai Zhang**, Sheyang Tang, Wei Wang, Tao Jiang. *WINS: WiFi-Inertial Indoor State Estimation for MAVs.* ACM SenSys (Demo Session), 2018.
- Chen Chen, Wei Wang, **Shengkai Zhang**, and Bo Li. *Cluster Fair Queueing: Speeding up Data-Parallel Jobs with Delay Guarantees.* IEEE International Conference on Computer Communications (INFOCOM), 2017.
- Bing Li, **Shengkai Zhang**, and Shaojie Shen. *CSI-Based WiFi-Inertial State Estimation.* IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems (MFI), 2016.
- **Shengkai Zhang**, Bo Li, and Baochun Li. *Presto: Towards Fair and Efficient HTTP Adaptive Streaming from Multiple Servers.* IEEE International Conference on Communications (ICC), 2015.
- Jingjie Jiang, **Shengkai Zhang**, Bo Li, and Baochun Li. *Maximized Cellular Traffic Offloading via Device-to-Device Content Sharing.* Device-to-Device Communications in Cellular Networks, IEEE Journal on Selected Areas in Communications (JSAC), 2015.
- **Shengkai Zhang**, Guang Tan, Hongbo Jiang, Bo Li, and Chonggang Wang. *On the Utility of Concave Nodes in Geometric Processing of Large-Scale Sensor Networks.* IEEE Transactions on Wireless Communications (TWC), 2014.
- Hongbo Jiang, **Shengkai Zhang**, Guang Tan, Chonggang Wang. *Connectivity-based Boundary Extraction of Large-Scale 3D Sensor Networks: Algorithm and Applications.* IEEE Transactions on Parallel and Distributed Systems (TPDS), 2014.
- Guang Tan, Hongbo Jiang, **Shengkai Zhang**, Zhimeng Yin, Anne-Marie Kermarrec. *Connectivity-based and Anchor-free Localization in Large-scale 2D/3D Sensor Networks.* ACM Transactions on Sensor Networks (TOSN), 2013.

- Hongbo Jiang, **Shengkai Zhang**, Guang Tan, Chonggang Wang. *CABET: Connectivity-based boundary extraction of large-scale 3D sensor networks.* IEEE International Conference on Computer Communications (INFOCOM), 2011.

- Guang Tan, Hongbo Jiang, **Shengkai Zhang**, and Anne-Marie Kermarrec. *Connectivity-based and Anchor-Free Localization in Large-Scale 2D/3D Sensor Networks.* ACM International Symposium on Mobile Ad Hoc Networking and Computing (MOBIHOC), 2010.

HONOURS AND AWARDS

First Prize of Future Aircraft Competition in HUST	2019
Graduates' Innovation Fund of HUST	2019
HUST Ph.D. Fellowship	2017
Student Scholarships, ICC, London	2015
HKUST Fellowship	2012
HUST Fellowship	2009
Outstanding Undergraduate Student in CCNU	2009
Second-Class Scholarship in CCNU	2009
Third-Class Scholarship in CCNU	2008

PROFESSIONAL SERVICES

- Reviewer for Journal Manuscript Submissions: IEEE Transactions on Mobile Computing, IEEE Transactions on Multimedia, International Journal of Communication Systems, ACM/Springer Journal of Wireless Networks

- Reviewer for Conference Manuscript Submissions: IEEE INFOCOM, IEEE ICC, IEEE GLOBECOM, IEEE China Communications