Zhehui (Kelsey) Zhang

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EDUCATION

University of California, Los Angeles (UCLA) **Los Angeles, CA**
Ph.D. Student in Computer Science *September 2016 - Present*
Advisor: Prof. Songwu Lu
Research Interests: *wireless networks, mobile systems, mobile computing, network security*

Shanghai Jiao Tong University (SJTU) **Shanghai, China**
B.S. in Computer Science & Technology *June 2016*

SELECTED PUBLICATIONS

In total, I have seven papers published, One US patent filed, Five Chinese patents granted

Zhehui Zhang, Duowen Liu, Sujie Zhu, Shangjie Chen, Xiaohua Tian. *Squeeze More from the Fingerprints Reporting Strategy for Indoor Localization.* Proc. IEEE SECON, 2016

Zhaowei Tan, Yuanjie Li, Qianru Li, **Zhehui Zhang**, Zhehan Li, Songwu Lu. *Enabling Mobile VR in LTE Networks: How Close Are We?* SIGMETRICS, 2018.

Mei Wang, **Zhehui Zhang**, Xiaohua Tian, Xinbing Wang. *Temporal Correlation of the RSS Improves Accuracy of Fingerprinting Localization.* Proc. IEEE INFOCOM, 2016.

SKILLS

Programming Languages: Python, C/C++, Java, MATLAB, Verilog

Tools and Framework: Android, Network simulators (NS2, NS3, OMNeT++), IDA Reverse Engineering, Flask, Flink

EXPERIENCE

University of California, Los Angeles **Los Angeles, CA**
Graduate Research Assistant | Python, C/C++, Android, IDA *September 2016 – Present*
- Designed a device side cellular analytics tool for cross-layer network diagnosis
- Investigated radio latency for VR/AR applications and co-designed a low latency solution under LTE
- Co-developed MobileInsight, an extensible cellular network monitoring and analysis tool
- Built a modem log extractor based on MediaTek chipsets, supporting LTE control plane protocols

AT&T Labs **Bedminster, NJ**
Student Technician II | C/C++, Android *June 2018 – August. 2018*
- Integrated an edge cloud based VR system and a remote server based 360 video streaming system
- Examined how radio configurations impact VR latency on a LTE-integrated edge cloud testbed
- Reduced end-to-end latency by 57% with field-of-view prediction and GPU acceleration

Ohio State University **Columbus, OH**
Visiting Scholar | Python, Android *June 2017 – August. 2017*
- Studied LTE network accessibility, mobility, integrity and availability KPIs quantitatively
- Implemented 10+ run-time network statistics visualization tools for smartphones
- Developed analyzers to extract LTE/ UMTS/ WCDMA protocol dynamics including data/call service

Shanghai Jiao Tong University **Shanghai, China**
Undergraduate Research Assistant | Android, Flask, MATLAB *June 2013 – July 2016*
- Lead a team of 20+ junior students to implement an indoor positioning system for Foxconn company
- Conducted extensive research on radio frequency based indoor localization and intelligent vehicular systems
- Published five papers on flagship conferences/ journals in networking and system field

Intel Corporation **Shanghai, China**
Software Engineer Intern | Docket, Flink *April 2016 – July 2016*
- Co-developed Arda, a Docker based infrastructure auto-management for big data systems
- Implemented test use cases for Flink, MongoDB and load balance web services

SERVICES AND HONORS

Organizing Committee member at N2Women *2017*
External reviewer at ACM MobiCom, IEEE INFOCOM *2015-2018*
Student Travel Gran - SIGMETRICS'18, SECON'16 *2016, 2018*
Chun-Tsung Scholar (only 13 in SJTU, funded by Nobel Prize Winner Tsung-Dao Lee) *2014*