Looking for a job in a research lab beginning 2020

Huanle Zhang

1422 Drake Drive, Apt B
Davis, CA 95616

Email: dtczhang@ucdavis.edu
Web: https://www.huanlezhang.com
Phone: (530) 760-5938

EDUCATION

University of California, Davis, California — Sep. 2016 – Present
Ph.D. in Computer and Information Sciences
Advisor: Prasant Mohapatra

University of Electronic Science and Technology of China, Chengdu, China — Sep. 2011 – June 2014
M.S. in Communication and Information System
Advisor: Jian Liu

Hangzhou Dianzi University, Hangzhou, China — Sep. 2007 – June 2011
B.S. in Communication Engineering
Advisor: Na Ying

UNIVERSITY PROGRAM

AT&T Labs – Research, Bedminster, New Jersey — Feb. 2019 – Present
Project: Deep Learning for Mobile Immersive Computing
Mentor: Bo Han
- A long-term collaboration with AT&T Labs – Research. My copyrights are transferred from UC Davis to AT&T.
- Focused on 3D mixed reality and volumetric videos.

WORK AND INTERNSHIP EXPERIENCE

AT&T Labs, Bedminster, New Jersey — June 2019 – Aug. 2019
Summer Intern, Mentor: Bo Han
- Developed a technique to reduce the computation and memory overheads of 3D segmentation and meanwhile increase the accuracy
- Conduct measurements of 3D mixed reality DNN models on smartphones

Bell Labs, Murray Hill, New Jersey — June 2018 – Aug. 2018
Summer Intern, Mentor: Mostafa Uddin, Fang Hao, Sarit Mukherjee
- Developed a mobile system for onboarding IoT devices using received signal strength
- Developed an algorithm to associate visual identity with signals

Microsoft Research Asia, Beijing, China — March 2018 – June 2018
Spring Intern, Mentor: Yunxin Liu
- Conducted research on distributed models, model compression and image super-resolution
- Became familiar with machine learning frameworks and concepts

Simula Research Laboratory, Fornebu, Norway — July 2017 – Sep. 2017
Summer Intern, Mentor: Ahmed Elmokashfi
- Developed a WiFi system to reduce latency using multiple IEEE 802.11ac NICs
- Became familiar with MPTCP, IEEE 802.11ac driver code

Nanyang Technological University, Singapore — Aug. 2014 – June 2016
Project Officer, Mentor: Mo Li
- Developed an acoustic system for encounter profiling
- Developed a visible light communication system using string lights
- Built a sensor network system for fast data dissemination by leveraging constructive interference

RESEARCH INTEREST

Mobile Systems & Applications; Internet of Things; Virtual Reality; Augmented Reality; Machine Learning

PATENTS

- US Patent App. *Accelerating 3D Segmentation with Point Cloud Simplifications*
  Bo Han, Cheuk Yiu Ip, and **Huanle Zhang**
- US Patent App. 16/247,797. *Augmented Onboarding of Internet-of-Things Devices*
  Fang Hao (25%), Sarit Mukherjee (25%), Mostafa Uddin (25%) and **Huanle Zhang** (25%)

AWARDS

Nokia National Patent Filing Award	2019
Best Demo Runner-up Award, ACM Workshop on Mobile Computing Systems and Applications (ACM HotMobile)	2019
NSF Student Travel Grant, ACM Workshop on Mobile Computing Systems and Applications (ACM HotMobile)	2019
Best Paper Award, ACM Conference on Embedded Networked Sensor Systems (ACM SenSys)	2015
IEEE Student Travel Grant, IEEE Global Communication Conference (IEEE GLOBECOM)	2013

PUBLICATIONS

- Pengfei Hu, Parth H. Pathak, **Huanle Zhang**, Zhicheng Yang and Prasant Mohapatra. *High Speed LED-to-Camera Communication using Color Shift Keying with Flicker Mitigation*. IEEE Transactions on Mobile Computing (**TMC**), 2019

- **Huanle Zhang**, Mostafa Uddin, Fang Hao, Sarit Mukherjee and Prasant Mohapatra. *AIDE: Augmented Onboarding of IoT Devices at Ease*. ACM Workshop on Mobile Computing Systems and Applications (**HotMobile**), Santa Cruz, USA, 2019

- **Huanle Zhang**, Ahmed Elmokashf and Prasant Mohapatra. *WiFi and Multiple Interfaces: Adequate for Virtual Reality?*. IEEE Conference on Parallel and Distributed Systems (**ICPADS**), Singapore, 2018

- **Huanle Zhang**, Wan Du, Mo Li, Kaishun Wu and Prasant Mohapatra. *StrLight: An Imperceptible Visible Light Communication System with String Lights*, IEEE Transactions on Mobile Computing (**TMC**), 2018

- **Huanle Zhang**, Wan Du, Pengfei Zhou, Mo Li and Prasant Mohapatra. *An Acoustic-based Encounter Profiling System*, IEEE Transactions on Mobile Computing (**TMC**), 2018

- Wan Du, Jansen Christian Liando, **Huanle Zhang** and Mo Li. *Pando: Fountain-Enabled Fast Data Dissemination with Constructive Interference*, IEEE/ACM Transactions on Networking (**TON**), 2017

- **Huanle Zhang**, Wan Du, Pengfei Zhou, Mo Li and Prasant Mohapatra. *DopEnc: Acoustic-based Encounter Profiling Using Smartphones*, ACM Conference on Mobile Computing and Networking (**MobiCom**), New York, USA, 2016

- Wan Du, Jansen Christian Liando, **Huanle Zhang** and Mo Li. *When Pipelines Meet Fountain: Fast Data Dissemination in Wireless Sensor Network*, ACM Conference on Embedded Networked Sensor Systems (**SenSys**), Seoul, South Korea, 2015

- **Huanle Zhang**, Jian Liu and Haili Shi. *Analysis of Accessing to the Nearest and to the Strongest Base Station in Femtocell Networks*, International Journal of Communication Systems (**IJCS**), 2014

- **Huanle Zhang**, Jian Liu, Yupeng Jia and Yulu Ma. *Analysis of Femtocell Coverage Fraction and Isolated Probability Using Stochastic Geometry*, IEEE Global Communications Conference (**GLOBECOM**), Atlanta, USA, 2013

- **Huanle Zhang**, Jian Liu, Yu Fu and Niangeng Guo. *OFDMA Femtocell Gateway Scheduling Based on Coloring*, Advances in Information Sciences and Service Sciences (**AISS**), 2013

- **Huanle Zhang**, Yu Fu and Jian Liu. *Optimal Transmission Distance of Mean Progress and Mean Transport in Device-to-device Networks*, International Conference on Cyberspace Technology (**CCT**), Beijing, China, 2013

- **Huanle Zhang**, Jian Liu and Niangeng Guo. *A Tractable Framework for Power Consumption in Femtocell Networks*, International Conference on Multimedia Information Networking and Security (**MINES**), Beijing, China, 2013

- **Huanle Zhang** and Jian Liu. *Policy on Downlink Access of Femtocell Based on OFDMA in Dense Employment Residential Environment*, International Conference on Software Engineering and Information System (**SEIS**), Shijiazhuang, China, 2013

PAPERS UNDER REVIEW

- **Huanle Zhang**, Mostafa Uddin, Fang Hao, Sarit Mukherjee, and Prasant Mohapatra. *MAIDE: Mobile Augmented Onboarding of IoT Devices at Ease*, IEEE International Conference on Pervasive Computing and Communications (**PerCom**), 2020

- **Huanle Zhang**, Bo Han, Cheuk Yiu Ip, and Prasant Mohapatra. *All Points Are Not Equal – Accelerating 3D Segmentation with Point Cloud Simplification*, AAAI Conference on Artificial Intelligence (**AAAI**), 2020

- **Huanle Zhang**, Ahmed Elmokashfi, Zhicheng Yang and Prasant Mohapatra. *Wireless Access to Ultimate Virtual Reality 360-Degree Video At Home*, arXiv:1812.01777

POSTERS

- Zhicheng Yang, Parth H. Pathak, Muchen Wu, Tingting Zhu, Junai Gan, **Huanle Zhang**, Jingyuan Zheng and Prasant Mohapatra. *Non-invasive Soluble Sugar Content Estimation using Millimeter-wave*, Aligning the Food System for Improved Nutrition in Animal Source Foods, 2019

- **Huanle Zhang**, Zhicheng Yang and Prasant Mohapatra. *Wireless Access to Ultimate Virtual Reality 360-Degree Video*, ACM/IEEE International Conference on Internet of Things Design and Implementation (**IoTDI**), 2019

- Zhicheng Yang, Parth H Pathak, Jianli Pan, Mo Sha, **Huanle Zhang** and Prasant Mohapatra. *Blockage-aware Deployment of 60 GHz Millimeter-wave WLANs*, NSF Millimeter-Wave Research Coordination Network Workshop (**mmW RCN workshop**), 2019

INVITED TALKS

- Mobile Support for Deep-Learning based Augmented Reality. University of California, Merced (**UC Merced**), 2019

REVIEWER

- IEEE Transactions on Mobile Computing (**EEE TMC**), 2019
- IEEE Transactions on Services Computing (**IEEE TSC**), 2019
- IEEE Transactions on Vehicular Technology (**IEEE TVT**), 2019
- EURASIP Journal on Wireless Communications and Networking (**JWCN**): 2015
- IEEE Global Communications Conference (**IEEE GLOBECOM**): 2014
- IEEE Internet of Things Journal (**IEEE IoT**): 2013, 2014

SKILLS

Android/Java; Tensorflow/Keras; Pytorch; Python; Matlab; C/C++; Linux Utility