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Yiwen Song

Education

2021- **Ph.D. Electrical & Computer Engineering**, *Carnegie Mellon University*, Pittsburgh, *United States*.
Advisor: Prof. Swarun Kumar

2017-2021 **B.Eng. Information Engineering**, *Shanghai Jiao Tong University*, Shanghai, *China*.
IEEE Honors Class & Zhiyuan Honors Graduate

Research Interest

My current research mainly focuses on *wireless and mobile systems*. Specifically, I am investigating how to develop *sensing, communication and IoT systems* for better productivity, mainly using the 2.4GHz ISM band and millimeter-wave band. My goal of research is to develop effective, efficient and economic wireless systems for different purposes, under different scenarios.

Publications

- Chonghuan Wang, **Yiwen Song**, Guiyun Fan, Haiming Jin, Lu Su, Fan Zhang, Xinbing Wang. "Optimizing Cross-Line Dispatching for Minimum Electric Bus Fleet", in *IEEE Trans. on Mobile Computing (TMC)*. 2021.
- **Yiwen Song**, Haiming Jin. "Minimizing Entropy for Crowdsourcing with Combinatorial Multi-Armed Bandit", in *IEEE International Conference on Computer Communications (INFOCOM)*. 2021.
- Chonghuan Wang, **Yiwen Song**, Yifei Wei, Guiyun Fan, Haiming Jin, Fan Zhang. "Towards Minimum Fleet for Ridesharing-Aware Mobility-on-Demand Systems", in *IEEE International Conference on Computer Communications (INFOCOM)*. 2021.

Experience

2019-2021 **Undergraduate Research Assistant**, *Shanghai Jiao Tong University*, Shanghai, *China*.
- Advisor: Prof. Haiming Jin.
- Topic 1: Optimization for urban traffic flows.
- Topic 2: Worker selection for crowdsourcing.
- Topic 3: WiFi sensing.

2020-2021 **Undergraduate Research Intern**, *The University of Texas at Austin*, Austin, *United States*.
- Advisor: Prof. Lili Qiu.
- Topic: IEEE 802.11ad/ay channel estimation and beamforming.

2021- **Graduate Research Assistant**, *Carnegie Mellon University*, Pittsburgh, *United States*.
- Advisor: Prof. Swarun Kumar.
- Topic: Efficient beamforming for IoT energy harvesting device.