

Wei Guo

Zhixin Bldg, 202B
Longxiang Road 2001
Shenzhen, Guangdong, P.R. China

Homepage: <https://weiguogithub.io>
Email: weiguol@link.cuhk.edu.cn
Phone: (86) 182-0018-6285

Education

The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen) <i>Ph.D., Computer and Information Engineering. Advisor: Prof. Chuan Huang</i>	Jan. 2020 – Present Shenzhen, China
University of Electronic Science and Technology of China (UESTC) <i>B.Eng., Electronic Engineering</i>	Sept. 2013 – Jun. 2017 Chengdu, China

Academic Visits

Purple Mountain Laboratories <i>Involving in National Key Research and Development Program of China</i>	Sept. 2021 – Nov. 2021 Nanjing, China
The Future Network of Intelligence Institute (FNii), CUHK-Shenzhen <i>Visiting student. Advisors: Prof. Chuan Huang and Prof. Shuguang Cui</i>	Jun. 2019 – Dec. 2019 Shenzhen, China
Shenzhen Research Institute of Big Data (SRIBD) <i>Visiting student. Advisors: Prof. Wenye Li and Prof. Shuguang Cui</i>	Feb. 2017 – Jun. 2017 Shenzhen, China

Current Research Interests

Wireless Communications, Over-the-Air Computing, Federated Learning, Wireless AI

Publications

Preprints:

- **Wei Guo**, Chuan Huang, Xiaoqi Qin, Lian Yang, and Wei Zhang, “Dynamic Clustering and Power Control for Two-Tier Wireless Federated Learning,” ([arXiv: 2205.09316](https://arxiv.org/abs/2205.09316)) submitted to *IEEE Transactions on Wireless Communications*.

Journals:

- **Wei Guo**, Ran Li, Chuan Huang, Xiaoqi Qin, Kaiming Shen, and Wei Zhang, “Joint Device Selection and Power Control for Wireless Federated Learning,” *IEEE Journal on Selected Areas in Communications*, vol. 40, no. 8, pp. 2395-2410, Aug. 2022.
- **Wei Guo**, Han Zhang, and Chuan Huang, “Energy Efficiency of Two-Way Communications under Various Duplex Modes,” *IEEE Internet of Things Journal*, vol. 8, no. 3, pp. 1921-1933, Feb. 2021.

Conference Proceedings:

- **Wei Guo**, Ran Li, Chuan Huang, Xiaoqi Qin, Kaiming Shen, and Wei Zhang, “Optimized Device Selection and Power Control for Wireless Federated Learning,” in *IEEE Global Communications Conference (GlobeCom)*, Dec. 2022.
- **Wei Guo**, Chuan Huang, Xiaoqi Qin, Lian Yang, and Wei Zhang, “Dynamic Clustering and Power Control for Two-Tier Over-the-Air Federated Learning,” in *IEEE/CIC International Conference on Communications in China (ICCC)*, Aug. 2022.

- **Wei Guo** and Chuan Huang, “Energy Efficiency of Full-Duplex Two-Way Channels,” in *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Nov. 2019.

Patents:

- CN patent: “一种面向无线联邦学习的用户协同传输方法”, 黄川, 崔曙光, 郭玮. 专利申请号: 202211032064.0, 2022.

Teaching

Teaching assistant at CUHK-Shenzhen

- EIE4006 Performances Evaluation of Communication Networks Sum’ 2020-21
- CIE6126 Performances Analysis of Computer and Communication Networks Sum’ 2020-21
- EIE3001 Signals and Systems Spr’ 2021

Awards

- | | |
|---|------|
| Exemplary Reviewer of IEEE Wireless Communications Letters | 2020 |
| Outstanding Bachelor’s Degree Thesis in UESTC | 2017 |

Academic Services

TPC Member:

- IEEE Global Communications Conference (Globecom): 2019-2022
- IEEE/CIC International Conference on Communications in China (ICCC): 2019-2022

Journal Referee:

- IEEE Transactions on Wireless Communications
- IEEE Wireless Communications Letters
- China Communications
- Journal of Communications and Information Networks

Presentations

- 2022 IEEE Globecom, Rio de Janeiro, Brazil, virtual presentation
 2022 IEEE/CIC ICC, Foshan, China, Oral presentation
 2019 IEEE GlobalSIP, Ottawa, Canada, Oral presentation