

# Wei Guo

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

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

## Education

---

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

## Academic Visits

---

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

#### Teachings

---

##### 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