

# Dr. Wei Guo

Room 3116A, HKUST  
Clear Water Bay, Kowloon  
Hong Kong SAR, P.R. China

Homepage: <https://weiigu.github.io>  
Email: [eweigu@ust.hk](mailto:eweigu@ust.hk)  
Phone numbers: (86) 182-0018-6285  
(852) 9487-6561

## Academic Positions

---

<b>Hong Kong University of Science and Technology</b> Postdoctoral Fellow. Advisors: <a href="#">Prof. Khaled B. Letaief</a> and <a href="#">Prof. Jun Zhang</a>	Sept. 2023 – Present Hong Kong SAR, China
---	--

## Education

---

<b>The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen)</b> Ph.D., Computer and Information Engineering. Advisor: <a href="#">Prof. Chuan Huang</a>	Jan. 2020 – Jul. 2023 Shenzhen, China
<b>University of Electronic Science and Technology of China (UESTC)</b> B.Eng., Electrical Engineering	Sept. 2013 – Jun. 2017 Chengdu, China

## Academic Visits

---

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

## Current Research Interests

---

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

## Publications

---

### Journals:

- **Wei Guo**, Chuan Huang, Xiaoqi Qin, Lian Yang, and Wei Zhang, “[Dynamic Clustering and Power Control for Two-Tier Wireless Federated Learning](#),” *IEEE Trans. Wireless Commun.* (TWC), early access, doi: 10.1109/TWC.2023.3288606, 2023.
- **Wei Guo**, Ran Li, Chuan Huang, Xiaoqi Qin, Kaiming Shen, and Wei Zhang, “[Joint Device Selection and Power Control for Wireless Federated Learning](#),” *IEEE J. Sel. Areas Commun.* (JSAC), 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 Things J.* (IoT-J), 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 *Proc. IEEE Glob. Commun. Conf. (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 *Proc. IEEE/CIC Int. Conf. Commun. China (ICCC)*, Aug. 2022.
- **Wei Guo** and Chuan Huang, “[Energy Efficiency of Full-Duplex Two-Way Channels](#),” in *Proc. Glob. Conf. Signal Inf. Process. (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): 2019-2023
- IEEE/CIC International Conference on Communications in China (ICCC): 2019-2023

##### Journal Referee:

- IEEE Transactions on Wireless Communications
- IEEE Wireless Communications Letters
- IEEE Systems Journal
- IEEE Transactions on Machine Learning in Communications and Networking
- IEEE Internet of Things Magazine
- IEEE Journal on Selected Areas in Information Theory
- 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

---

Updated on: January 9, 2024