Ningxin Su

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PERSONAL Citizenship Chinese

INFORMATION

RESEARCH Federated

Federated learning, Metaverse, Distributed machine learning, Networking

EDUCATION University of Toronto, Toronto, Ontario, Canada

Department of Electrical and Computer Engineering

♦ Ph.D. Candidate, Electrical and Computer Engineering, Sepetember 2020 – now Advisor: Baochun Li

The University of Sheffield, Sheffield, South Yorkshire, England

Department of Data Communications

♦ M.Sc., Master of Science in Engineering, November 2020

Beijing University of Posts and Telecommunications (BUPT), Beijing China

International School (Joint Programme co-held by BUPT & Queen Mary University of London)

♦ **B.Engr. & B.Management**, E-Commerce Engineering with Law, June 2019

HONOURS AND AWARDS

INTERESTS

♦ Best Paper Award, the 1st IEEE International Conference on Metaverse Computing, Networking and Applications (MetaCom 2023)

PUBLICATIONS \Diamond Refereed Journal Papers

- [J1] **Ningxin Su**, Baochun Li. "MLOps in the Metaverse: Human-Centric Continuous Integration," in *IEEE Journal on Selected Areas in Communications (JSAC)*, Special issue on Human-Centric Communication and Networking for Metaverse over 5G and Beyond Networks.
- ♦ **Refereed Papers in Conference Proceedings** (in reverse chronological order)
- [C8] **Ningxin Su**, Baochun Li, Bo Li. "Democratizing the Federation in Federated Learning," in the Proceedings of the *IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS)*, Seoul, South Korea, September 23 25, 2024.
- [C7] Sijia Chen, **Ningxin Su**, Baochun Li. "Calibre: Towards Fair and Accurate Personalized Federated Learning with Self-Supervised Learning," in the Proceedings of the *IEEE International Conference on Distributed Computing Systems (ICDCS)*, Jersey City, USA, July 23 26, 2024 (acceptance ratio: 21%).

- [C6] Sijia Chen, **Ningxin Su**, Baochun Li. "Relic: Federated Conditional Textual Inversion with Prototype Alignment," in the Proceedings of the *IEEE/ACM International Symposium on Quality of Service (IWQoS)*, Guangzhou, China, June 19 21, 2024 (acceptance ratio: 34%).
- [C5] **Ningxin Su**, Chenghao Hu, Baochun Li, Bo Li. "Titanic: Towards Production Federated Learning with Large Language Models," in the Proceedings of the *IEEE International Conference on Computer Communications (INFOCOM)*, Vancouver, Canada, May 20 23, 2024 (acceptance ratio: 19%).
- [C4] Baochun Li, **Ningxin Su**, Chen Ying, Fei Wang. "Plato: An Open-Source Research Framework for Production Federated Learning," in the Proceedings of the *ACM Turing Award Celebration Conference (TURC)*, Wuhan, China, July, 2023.
- [C3] **Ningxin Su**, Baochun Li, Bo Li. "Multi-Server Stable Rendezvous for the Metaverse," in the Proceedings of the *IEEE International Conference on Metaverse Computing, Networking and Applications (MetaCom)*, Kyoto, Japan, June 26 28, 2023 (acceptance ratio: 35%, **Best Paper Award**).
- [C2] **Ningxin Su**, Baochun Li. "Asynchronous Federated Unlearning," in the Proceedings of the *IEEE International Conference on Computer Communications (INFOCOM)*, New York, USA, May 17 20, 2023 (acceptanceratio: 19%).
- [C1] **Ningxin Su**, Baochun Li. "How Asynchronous can Federated Learning Be?" in the Proceedings of the *IEEE/ACM International Symposium on Quality of Service (IWQoS)*, Virtual Conference, June 10 12, 2022 (acceptance ratio: 24%).

PROFESSIONAL EXPERIENCE

Teaching Assistant, University of Toronto, APS105: Computer Fundamentals, Jan — May 2022

Research Assistant, City University of Hong Kong, Jun — Aug, 2023.

Web Chair, *IEEE International Conference on Metaverse Computing, Networking, and Applications (IEEE MetaCom)*, 2024.

Reviewers for

IEEE Transactions on Dependable and Secure Computing

ACM Transactions on Sensor Networks

IEEE Transactions on Big Data

IEEE Transactions on Computational Social Systems

IEEE Transactions on Cloud Computing

IEEE Transactions on Network Science and Engineering