Ningxin Su

PRESENT APPOINTMENT

Ph.D. Candidate
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PERSONAL INFORMATION

Citizenship Chinese

RESEARCH INTERESTS

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

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

PUBLICATIONS

♢ **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)

[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