

Xiangfeng Zhu

CONTACT INFORMATION	650-660-0918 xfzhu@cs.washington.edu	xzhu27.me www.linkedin.com/in/xzhu
RESEARCH INTERESTS	Systems and Networking, with a focus on microservices, service mesh, and application-level networking.	
EDUCATION	University of Washington Ph.D., Computer Science Advisors: Prof. Arvind Krishnamurthy and Prof. Ratul Mahajan University of Michigan, Ann Arbor B.S., Computer Science(with honors) Advisor: Prof. Mosharaf Chowdhury	Expected: June 2026 May 2021
RESEARCH EXPERIENCE	Graduate Research Assistant Systems Lab, University of Washington Advisors: Prof. Arvind Krishnamurthy and Prof. Ratul Mahajan Research Assistant Symbiotic Lab, University of Michigan Advisor: Prof. Mosharaf Chowdhury Research Assistant Disorderly Lab, UC Santa Cruz Advisor: Prof. Peter Alvaro	Sep. 2021- Now Dec. 2018 - Aug. 2021 Mar. 2018 - Sep. 2019
PUBLICATIONS	<ol style="list-style-type: none">1. Xiangfeng Zhu, Weixin Deng, Banruo Liu, Jingrong Chen, Yongji Wu, Thomas Anderson, Arvind Krishnamurthy, Ratul Mahajan, Danyang Zhuo, "Application Defined Networks", <i>Proceedings of the 22nd ACM Workshop on Hot Topics in Networks (HotNets 2023)</i>, Cambridge, MA, 20232. Xiangfeng Zhu, Guozhen She, Bowen Xue, Yu Zhang, Yongsu Zhang, Xuan Kelvin Zou, XiongChun Duan, Peng He, Arvind Krishnamurthy, Matthew Lentz, Danyang Zhuo, Ratul Mahajan, "Dissecting Overheads of Service Mesh Sidecars", <i>Proceedings of the 14th Symposium on Cloud Computing (SoCC 2023)</i>, Santa Cruz, CA, 20233. Fan Lai, Yinwei Dai, Sanjay S. Singapuram, Jiachen Liu, Xiangfeng Zhu, Harsha Madhyastha, Mosharaf Chowdhury, "FedScale: Benchmarking Model and System Performance of Federated Learning at Scale", <i>Proceedings of the 39th International Conference on Machine Learning (ICML 2022)</i>, Baltimore, MD, 20224. Sebastian Burckhardt, Badrish Chandramouli, Chris Gillum, David Justo, Konstantinos Kallas, Connor McMahon, Christopher S. Meiklejohn, Xiangfeng Zhu, "Netherite: Efficient and Reliable Execution for Stateful Serverless Applications", <i>Proceedings of the 48th International Conference on Very Large Databases (VLDB 2022)</i>, Sydney, Australia, 20225. Fan Lai, Yinwei Dai, Xiangfeng Zhu, Harsha Madhyastha, Mosharaf Chowdhury, "FedScale: Benchmarking Model and System Performance of Federated Learning", <i>Proceedings of the First Workshop on Systems Challenges in Reliable and Secure Federated Learning (ResilientFL 2021)</i>, Virtual, 2021, Best Paper Award	

6. Fan Lai, **Xiangfeng Zhu**, Harsha Madhyastha, Mosharaf Chowdhury, "Oort: Informed Participant Selection for Scalable Federated Learning", *Proceedings of the 15th USENIX Symposium on Operating Systems Design and Implementation (OSDI 2021)*, Virtual, 2021 (Acceptance Rate: 18.79%), **Distinguished Artifact Award**
7. Fan Lai, Jie You, **Xiangfeng Zhu**, Harsha Madhyastha, Mosharaf Chowdhury, "Sol: Fast Distributed Computation Over Slow Networks", *Proceedings of the 17th USENIX Symposium on Networked Systems Design and Implementation (NSDI 2020)*, Santa Clara, CA, 2020 (Acceptance Rate: 18.36%)
8. Lennart Oldenburg, **Xiangfeng Zhu**, Kamala Ramasubramanian, Peter Alvaro, "Fixed It For You: Protocol Repair Using Lineage Graphs", *Proceedings of the 9th biennial Conference on Innovative Data Systems Research (CIDR 2019)*, Asilomar, CA, 2019

TALKS

Application Defined Networks

- May 2023: FOCI Application Networking Workshop
- May 2023: CSE 461: Introduction to Computer Communication Networks (Guest Lecture)
- Oct 2023: FOCI Annual Symposium
- Nov 2023: HotNets 2023

Dissecting Overheads of Service Mesh Sidecars

- Nov 2023: Istio Day North America 2023
- Nov 2023: SoCC 2023

WORK EXPERIENCE

Uber

PhD Software Engineer Intern, Service Mesh Team
Mentor: Dr. Hongqiang (Harry) Liu

June 2023 - Sep. 2023

VMware Research

Research Intern
Mentor: Dr. Radhika Niranjana Mysore

June 2022 - Sep. 2022

Microsoft Research

Research Intern, RiSE Group
Mentor: Dr. Sebastian Burckhardt

May 2021 - Aug. 2021

Databricks

Software Engineer Intern, Serverless Team

May 2020 - Aug. 2020

Dropbox

Software Engineer Intern, Filesystem Team

May 2019 - Aug. 2019

PROFESSIONAL ACTIVITIES

- **Virtual Chair:** WORDS 2022
- **Program Committee:** NeurIPS(Datasets and Benchmarks Track) 2022, EuroSys 2022 (Shadow PC), IMC 2022 (Shadow PC)
- **Student Volunteer:** SoCC 2021, SIGCOMM 2021
- **Artifact Evaluation Committee:** SIGCOMM 2021, OSDI 2021, EuroSys 2021, JSys 2021

- OTHER ACTIVITIES
- **Area Chair (System):** UW CSE PhD Admissions Committee, 2022
 - **Reader:** UW CSE PhD Admissions Committee, 2021
 - **Mentor:** UW CSE PhD Pre-Application Mentorship Service (PAMS), 2021
- HONORS & AWARDS
- **Best Paper Award**, ACM SOSP ResilientFL, 2021
For *FedScale: Benchmarking Model and System Performance of Federated Learning*
 - **Distinguished Artifact Award**, USENIX OSDI, 2021
For *Oort: Efficient Federated Learning via Guided Participant Selection*
 - **Allen School Computer Science & Engineering Research Fellowship**, 2021
 - **Conference Student Grant**, HotNets '22, OSDI '20, FAST '21, NSDI '21, OSDI '21
- MENTORING
- **Banruo Liu**, Tsinghua University, 2022 - Now
– Project: Application Defined Networks
 - **Yuyao Wang**, Nanjing University, 2023 - Now
– Project: Application Defined Networks
 - **Fenet Guyassa**, Bonney Lake High School, 2023 - Now
– Project: Characterizing Service Mesh Overheads
 - **Ami Oka**, University of Washington, 2023 - 2023
– Project: Characterizing Service Mesh Overheads