

Xuhao Luo

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Education

University of Illinois Urbana-Champaign Ph.D. Candidate in Computer Science	Aug. 2021 - May. 2026 (Expected)
University of California San Diego M.S. in Computer Science	Sep. 2019 - Mar. 2021
University of Science and Technology of China B.S. in Applied Physics	Sep. 2015 - Jun. 2019

Research Publication

- **Xuhao Luo**, Shreesha G. Bhat*, Jiyu Hu*(*equal contribution), Ramnatthan Alagappan, Aishwarya Ganesan, **LazyLog: A New Shared Log Abstraction for Low-Latency Applications** (*SOSP 2024*)
- **Xuhao Luo**, Ramnatthan Alagappan, Aishwarya Ganesan, **SplitFT: Fault Tolerance for Disaggregated Datacenters via Remote Memory Logging** (*EuroSys 2024*)
- **Xuhao Luo**, Weihai Shen, Shuai Mu, Tianyin Xu, **DepFast: Orchestrating Code of Quorum Systems** (*USENIX ATC 2022*)
- Zhiyuan Guo*, Yizhou Shan*(*co-first author), **Xuhao Luo**, Yutong Huang, Yiyang Zhang, **Clio: A Hardware-Software Co-Designed Disaggregated Memory System** (*ASPLOS 2022*)

Experience

Amazon Web Service <i>Applied Scientist Intern, Mentor: Prof. George Amvrosiadis, Visiting Scholar</i>	May. 2024 - Aug. 2024 Seattle, WA, USA
· Investigated and improved ShardStore reclamation policy.	
Amazon Web Service <i>Applied Scientist Intern, Mentor: Shen Li, Principle Engineer</i>	May. 2022 - Aug. 2022 Seattle, WA, USA
· Improved the reliability of the volume metadata updating workflow for AWS S3 volume metadata cache service.	
University of Illinois Urbana-Champaign <i>Research Assistant</i>	May. 2021 - Now Urbana, IL, USA
· DepFast: Built a framework to implement and reason about fail-slow tolerant distributed systems in an easy and effective way.	
· SplitFT: Built a new fault-tolerant approach for storage-centric cloud databases by replicating WAL on remote nodes using RDMA.	
· LazyLog: Built a new shared-log service for low-latency applications by lazily ordering log entries.	
Microsoft Research <i>Research Intern</i>	Jun. 2020 - Sep. 2020 Beijing, China
· Designed and implemented task scheduling and dispatching system for distributed machine learning using C++.	
· Designed and implemented CUDA-based high-performance inter-GPU communication channel for distributed ML.	
University of California San Diego <i>Research Assistant, advised by Prof. Yiyang Zhang</i>	Sep. 2019 - Dec. 2020 La Jolla, CA, USA
· Designed and implemented a <i>go-back-N</i> based reliable network stack on both FPGA and host Linux server.	
· Designed and implemented an RPC-semantic connectionless network stack.	
Agora.io <i>Software Engineer Intern</i>	Jul. 2019 - Sep. 2019 Shanghai, China
· Participated in the development of CapSync, a distributed capability negotiation system.	

Honors and Awards

• EuroSys'24 Student Travel Grant	Apr 2024
• ASPLOS'22 Student Travel Grant	Feb 2022
• USTC Class of 2019 Outstanding Graduates	May 2019

Services

- OSDI'23 Artifact Evaluation Committee May 2023
- USENIX ATC'23 Artifact Evaluation Committee May 2023