

Junyi(Kyle) Shu

404 Westwood Plaza, Engineering VI, Room 496 – Los Angeles, CA 90095

🌐 kyleshu.github.io

✉ shujunyi@gmail.com

🔗 kyleshu

☎ (1)-213-264-4111

EMPLOYMENT

University of California at Los Angeles

Postdoctoral Researcher

Los Angeles, CA, USA

Oct 2025 – Ongoing

- Working with Prof. Harry Xu
- Building efficient data management systems for large models and agentic AI.

Amazon Web Services

Software Development Engineer

Seattle, WA, USA

Feb 2014 – Aug 2015

- Built a high-performance, scalable, transactional distributed database with fellow team members.

EDUCATION

Peking University

Ph.D. in Computer Software and Theory

Beijing, China

Sep 2021 – Jun 2025

- Advised by Prof. Xin Jin and Prof. Xuanzhe Liu
- Dissertation: Performance Optimization towards Disaggregated Cloud Storage Systems (Outstanding Dissertation Award of PKU CS)

Peking University

Master of Engineering Management

Beijing, China

Sep 2019 – Jul 2021

- Advised by Prof. Xiangqun Chen
- Received the Outstanding Graduation Thesis Award.

University of California at Berkeley

B.A. in Applied Mathematics and Computer Science

Berkeley, CA, USA

Aug 2010 – Dec 2013

- Graduated with distinction, and was on Dean's List for several times.
- Member of Upsilon Pi Epsilon (UPE), honor society for the computing and information disciplines.

PUBLICATIONS

Junyi Shu, Xiaolong Huang, Gang Huang, Hong Mei, Xuanzhe Liu, and Xin Jin. Serverless Replication of Object Storage across Multi-Vendor Clouds and Regions. In *Proceedings of the Twenty-First European Conference on Computer Systems*, EuroSys 2026, New York, NY, USA, 2026. Association for Computing Machinery. To appear.

Junyi Shu, Kun Qian, Ennan Zhai, Xuanzhe Liu, and Xin Jin. Burstable Cloud Block Storage with Data Processing Units. In *18th USENIX Symposium on Operating Systems Design and Implementation (OSDI 24)*, pages 783–799, Santa Clara, CA, July 2024. USENIX Association.

Junyi Shu, Ruidong Zhu, Yun Ma, Gang Huang, Hong Mei, Xuanzhe Liu, and Xin Jin. Disaggregated RAID Storage in Modern Datacenters. In *Proceedings of the 28th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 3*, ASPLOS 2023, page 147–163, New York, NY, USA, 2023. Association for Computing Machinery.

Junyi Shu, Xin Jin, Yun Ma, Xuanzhe Liu, and Gang Huang. Cost-effective data analytics across multiple cloud regions. In *Proceedings of the SIGCOMM '21 Poster and Demo Sessions*, SIGCOMM '21, page 1–3, New York, NY, USA, 2021. Association for Computing Machinery.

SERVICES

- **Program Committee:** ACM International Conference on Architectural Support for Programming Languages and Operating Systems - ASPLOS (2026)
- **Journal Reviewer:** ACM Transactions on Storage (2025); ACM Transactions on Architecture and Code Optimization (2025)
- **Shadow Program Committee:** ACM European Conference on Computer Systems - EuroSys (2026)

INTERNSHIP

Alibaba Cloud

Research Intern

Beijing, China

May 2023 – Jul 2024

- Designed and developed a software module that supports burstable I/Os while limiting tenant interference.

Amazon Instant Video

Software Development Engineer Intern

Seattle, WA, USA

Jun 2013 – Aug 2013

- Explored available metrics for evaluation video quality and developed a library to extract them.