GUANZHOU HU

EDUCATION

University of Wisconsin-Madison GPA: 4.00 / 4.00

Ph.D. Candidate, ADSL, Computer Sciences

Aug 2020 - Present Madison, WI, USA

• Advisors: Prof. Andrea Arpaci-Dusseau and Prof. Remzi Arpaci-Dusseau

• Research area: Distributed Systems, Fault-tolerance, Operating Systems, Cloud Storage & Data Processing

Massachusetts Institute of Technology Special Student, Electrical Engineering & Computer Science Sep 2019 - Jul 2020

Cambridge, MA, USA

• Honors: Overseas Study Scholarship (2019)

ShanghaiTech University B. Eng., Computer Science & Technology GPA: 3.90 / 4.00

GPA: 4.00 / 4.00

Sep 2016 - Jul 2020

Shanghai, China

• Honors: President's Scholarship (2017, 2018), Dean's Scholarship (2019)

PUBLICATIONS

In subm. [Title fuzzed] Effective coordination for cloud databases. First Author and G. Hu et al.

In subm. [Title fuzzed] A consensus protocol achieving remarkably strong read semantics. G. Hu et al.

In subm. [Title fuzzed] A replication protocol for an unaddressed type of workloads. G. Hu et al.

FAST '23 MadFS: Per-File Virtualization for Userspace Persistent Memory Filesystems.

S. Zhong, C. Ye, G. Hu, S. Qu, A. Arpaci-Dusseau, R. Arpaci-Dusseau, M. Swift.

OSDI '21 Dorylus: Affordable, Scalable, and Accurate GNN Training with Distributed CPUs and Serverless Threads. J. Thorpe, Y. Qiao, J. Eyolfson, S. Teng, G. Hu, Z. Jia, J. Wei, K. Vora, R. Netravali, M. Kim, and G. Xu.

FAST '21 The Storage Hierarchy is Not a Hierarchy: Optimizing Caching on Modern Storage Devices with Orthus. K. Wu, Z. Guo, G. Hu, K. Tu, R. Alagappan, R. Sen, K. Park, A. Arpaci-Dusseau, and R. Arpaci-Dusseau.

SC '20 BORA: A Bag Optimizer for Robotic Analysis.

J. Zhang, T. Xie, Y. Jing, Y. Song, G. Hu, S. Chen, and S. Yin.

A Unified and Practical Summary of Non-transactional Consistency Levels in Distributed Replication. Preprint

G. Hu, A. Arpaci-Dusseau, R. Arpaci-Dusseau. arXiv 2024.

Preprint Foreactor: Exploiting Storage I/O Parallelism with Explicit Speculation.

G. Hu, A. Arpaci-Dusseau, R. Arpaci-Dusseau. arXiv 2024.

A Storage System Management Policy Based on Data Content Locality.

S. Yin and G. Hu. 2019. CN. Patent number ZL 2019 1 0499391.9, licensed November 25, 2022.

WORK EXPERIENCE

Applied Scientist Intern in Amazon S3 Team, Amazon Web Services

May 2024 - Aug 2024

• Managers: James Bornholt, Andrew Warfield

Seattle, WA, USA

• Topic: Cloud Storage Systems & Automated Reasoning, Cloud Storage for AI

Research Intern in SOLAR Lab, CSST Program, UCLA

Jun 2019 - Sep 2019

• Advisors: John Thorpe, Prof. Guoqing Harry Xu

Los Angeles, CA, USA

• Topic: Affordable & Scalable ML Training Systems (awarded Outstanding Research)

TEACHING EXPERIENCE

Teaching Assistant at UW-Madison

Fa 2020, Sp 2021, Sp 2025

• Courses: Computer Architecture, Operating Systems, Advanced Distributed Systems

Madison, WI, USA

Teaching Assistant at ShanghaiTech University

Sp 2018, Fa 2018, Sp 2019

• Courses: Discrete Math, Computer Architecture, Operating Systems (awarded Outstanding TA) Shanghai, China

SERVICES

• ACM Student Member & ACM SIGOPS Member

Sep 2021 - Present

• FAST '25 Artifact Evaluation Committee

Dec 2024

• Information & Computation Journal Reviewer

Nov 2024

• SOSP '24 Artifact Evaluation Committee

Sep 2024

• OSDI '24 & USENIX ATC '24 Artifact Evaluation Committee

May 2024

• FAST '22 External Reviewer

Oct 2021