

GUANZHOU HU

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EDUCATION

University of Wisconsin–Madison Ph.D. Candidate, ADSL, Computer Sciences	GPA: 4.00 / 4.00	<i>Aug 2020 - Present</i> <i>Madison, WI, USA</i>
<ul style="list-style-type: none">• Advisors: Prof. Andrea Arpaci-Dusseau and Prof. Remzi Arpaci-Dusseau• Research area: Distributed Systems, Fault-tolerance, Cloud Infrastructure, Operating Systems• Thesis title: Cloud Consensus Protocols with Optimistic Connectivity		
Massachusetts Institute of Technology Special Student, Electrical Engineering & Computer Science	GPA: 4.00 / 4.00	<i>Sep 2019 - Jul 2020</i> <i>Cambridge, MA, USA</i>
<ul style="list-style-type: none">• Honors: Overseas Study Scholarship (2019)		
ShanghaiTech University B. Eng., Computer Science & Technology	GPA: 3.90 / 4.00	<i>Sep 2016 - Jul 2020</i> <i>Shanghai, China</i>
<ul style="list-style-type: none">• Honors: President’s Scholarship (2017, 2018), Dean’s Scholarship (2019)		

PUBLICATIONS

In submn.	[Title fuzzed] A consensus protocol achieving remarkably strong read semantics. <u>G. Hu</u> et al.
In submn.	[Title fuzzed] A replication protocol for an unaddressed type of workloads. <u>G. Hu</u> et al.
SIGMOD ’26	Efficient Coordination for Autoscaling Cloud DBMS. (to appear) W. Hu, <u>G. Hu</u> , M. Balakrishnan, X. Yu.
FAST ’23	MadFS: Per-File Virtualization for Userspace Persistent Memory Filesystems. S. Zhong, C. Ye, <u>G. Hu</u> , 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, <u>G. Hu</u> , 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, <u>G. Hu</u> , 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, <u>G. Hu</u> , S. Chen, and S. Yin.
Preprint	A Unified and Practical Model of Non-transactional Consistency Levels in Distributed Replication. <u>G. Hu</u> , A. Arpaci-Dusseau, R. Arpaci-Dusseau. arXiv 2024.
Preprint	Foreactor: Exploiting Storage I/O Parallelism with Explicit Speculation. <u>G. Hu</u> , A. Arpaci-Dusseau, R. Arpaci-Dusseau. arXiv 2024.
Patent	A Storage System Management Policy Based on Data Content Locality. S. Yin and <u>G. Hu</u> . 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	<i>May 2024 - Aug 2024</i> <i>Seattle, WA, USA</i>
<ul style="list-style-type: none">• Managers: James Bornholt, Andrew Warfield• Topic: Cloud Storage Systems & Automated Reasoning, Cloud Storage for AI Workloads	
Research Intern in SOLAR Lab, CSST Program, UCLA	<i>Jun 2019 - Sep 2019</i> <i>Los Angeles, CA, USA</i>
<ul style="list-style-type: none">• Advisors: John Thorpe, Prof. Guoqing Harry Xu• Topic: Affordable & Scalable Serverless ML Training Systems (awarded Outstanding Research)	

TEACHING EXPERIENCE

Teaching Assistant at UW–Madison	<i>Fa 2020, Sp 2021, Sp 2025</i> <i>Madison, WI, USA</i>
<ul style="list-style-type: none">• Courses: Computer Architecture, Operating Systems, Advanced Distributed Systems	
Teaching Assistant at ShanghaiTech University	<i>Sp 2018, Fa 2018, Sp 2019</i> <i>Shanghai, China</i>
<ul style="list-style-type: none">• Courses: Discrete Math, Computer Architecture, Operating Systems (awarded Outstanding TA)	

SERVICES & AWARDS

• ACM Student Member & ACM SIGOPS Member	<i>Sep 2021 - Present</i>
• Information & Computation Journal Reviewer	<i>Nov 2024</i>
• FAST ’23 Student Travel Grant	<i>Feb 2023</i>
• FAST ’22 External Reviewer	<i>Oct 2021</i>
• ASC Supercomputing Competition Second Prize (GeekPie_HPC team leader)	<i>Mar 2019</i>
• Artifact Evaluation Committee: OSDI ’25, USENIX ATC ’25, FAST ’25, SOSP ’24, OSDI ’24, USENIX ATC ’24	

SKILLS

- Programming: System programming, Rust, Go, C/C++, Java, Python, Julia, SQL, TLA⁺, Dafny, asm, shell, async
- General: Cloud compute & storage, AI/ML pipeline, Systems/protocols design & impl., Kernel dev., Linux dev/ops