

# GUANZHOU HU

guanzhou.hu@wisc.edu    ♦    https://josehu.com

## EDUCATION

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

## PUBLICATIONS

<b>In subm.</b>	[Title fuzzed] Effective coordination for cloud databases. First Author and <u>G. Hu</u> et al.
<b>In subm.</b>	[Title fuzzed] A consensus protocol achieving remarkably strong read semantics. <u>G. Hu</u> et al.
<b>In subm.</b>	[Title fuzzed] A replication protocol for an unaddressed type of workloads. <u>G. Hu</u> et al.
<b>FAST ’23</b>	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.
<b>OSDI ’21</b>	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.
<b>FAST ’21</b>	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.
<b>SC ’20</b>	BORA: A Bag Optimizer for Robotic Analysis. J. Zhang, T. Xie, Y. Jing, Y. Song, <u>G. Hu</u> , S. Chen, and S. Yin.
<b>Preprint</b>	A Unified and Practical Summary of Non-transactional Consistency Levels in Distributed Replication. <u>G. Hu</u> , A. Arpaci-Dusseau, R. Arpaci-Dusseau. arXiv 2024.
<b>Preprint</b>	Foreactor: Exploiting Storage I/O Parallelism with Explicit Speculation. <u>G. Hu</u> , A. Arpaci-Dusseau, R. Arpaci-Dusseau. arXiv 2024.
<b>Patent</b>	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

<b>Applied Scientist Intern</b> in Amazon S3 Team, Amazon Web Services <ul style="list-style-type: none"><li>Managers: James Bornholt, Andrew Warfield</li><li>Topic: Cloud Storage Systems &amp; Automated Reasoning, Cloud Storage for AI Workloads</li></ul>	<i>May 2024 - Aug 2024 Seattle, WA, USA</i>
<b>Research Intern</b> in SOLAR Lab, CSST Program, UCLA <ul style="list-style-type: none"><li>Advisors: John Thorpe, Prof. Guoqing Harry Xu</li><li>Topic: Affordable &amp; Scalable Serverless ML Training Systems (awarded Outstanding Research)</li></ul>	<i>Jun 2019 - Sep 2019 Los Angeles, CA, USA</i>

## TEACHING EXPERIENCE

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

## 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<sup>+</sup>, Dafny, asm, shell, async
- General: Cloud compute & storage, AI/ML pipeline, Systems/protocols design & impl., Kernel dev., Linux dev/ops