GUANZHOU HU

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

EDUCATION

University of Wisconsin–Madison GPA: 4.00 / 4.00 *Aug 2020 - Present*
Ph.D. Candidate, Computer Sciences *Madison, WI, USA*
- Advisors: Andrea Arpaci-Dusseau and Remzi Arpaci-Dusseau
- Research areas: Distributed storage systems, Replication protocols, Operating systems

Massachusetts Institute of Technology GPA: 4.00 / 4.00 *Sep 2019 - Jul 2020*
Special Student, Electrical Engineering & Computer Science *Cambridge, MA, USA*

ShanghaiTech University GPA: 3.90 / 4.00 *Sep 2016 - Jul 2020*
B. Eng., Computer Science & Technology *Shanghai, China*
- Honors: President's Scholarship (2017, 2018), Dean's Scholarship (2019)

PUBLICATIONS

In subm. A replication protocol for a new, untreated type of workload. Guanzhou Hu et al.

FAST '23 MadFS: Per-File Virtualization for Userspace Persistent Memory Filesystems. Shawn Zhong, Chenhao Ye, Guanzhou Hu, Suyan Qu, Andrea Arpaci-Dusseau, Remzi Arpaci-Dusseau, Michael Swift.

OSDI '21 Dorylus: Affordable, Scalable, and Accurate GNN Training with Distributed CPU Servers and Serverless Threads. John Thorpe, Yifan Qiao, Jonathan Eyolfson, Shen Teng, Guanzhou Hu, Zhihao Jia, Jinliang Wei, Keval Vora, Ravi Netravali, Miryung Kim, and Guoqing Harry Xu.

FAST '21 The Storage Hierarchy is Not a Hierarchy: Optimizing Caching on Modern Storage Devices with Orthus. Kan Wu, Zhihan Guo, Guanzhou Hu, Kaiwei Tu, Ramnatthan Alagappan, Rathijit Sen, Kwanghyun Park, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau.

SC '20 BORA: A Bag Optimizer for Robotic Analysis. Jian Zhang, Tao Xie, Yuzhuo Jing, Yanjie Song, Guanzhou Hu, Si Chen, and Shu Yin.

Patent A Storage System Management Policy Based on Data Content Locality. Yin, Shu. and Hu, Guanzhou. 2019. CN. Patent number ZL 2019 1 0499391.9, licensed November 25, 2022.

ONGOING PROJECTS

Modernizing Replication Protocols for the Cloud, Project Leader *Sep 2022 - Present*
- Propose, design, implement, and evaluate new consensus and replication protocols to tackle new challenges.
- Design and implement *Summerset*, a distributed and protocol-generic key-value store written in async Rust.

TEACHING EXPERIENCE

Teaching Asst. in Operating Syst. & Computer Arch. *Aug 2020 - May 2021*
Department of Computer Sciences, UW–Madison *Madison, WI, USA*

Teaching Asst. in Operating Syst., Computer Arch., & Discrete Math. *Mar 2018 - Apr 2019*
School of Information Science & Technology, ShanghaiTech University *Shanghai, China*

PRIZES & AWARDS

- Outstanding Research Award, CSST Program Research Intern, UCLA *Sep 2019*
- Second Prize, ASC Supercomputing Competition (GeekPie_HPC team leader) *Mar 2019*
- Outstanding Teaching Assistant Award, ShanghaiTech University *Jan 2019*
- Meritorious Winner, Mathematical Contest in Modelling (MCM) *Apr 2018*

SERVICES

- FAST '22 External Reviewer *Oct 2021*
- OSDI '24 Artifact Evaluation Committee *May 2024*

SKILLS

- Programming: Systems programming, Rust, C/C++, Go, Java, SQL, Python, Julia, Shell scripts, x86 asm
- Others: Systems modeling, Kernel development, Linux dev/ops, Cloud platforms, ML pipeline, TLA$^+$, Dafny