Yibo Huang

CONTACT INFORMATION

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The University of Texas at Austin
Austin, TX 78712 USA

RESEARCH INTERESTS

Building efficient and scalable distributed databases on CXL pods.

EDUCATION

The University of Texas at Austin, Austin, USA   June 2023 - Current

Ph.D. in Computer Science
Advisors: Prof. Emmett Witchel and Prof. Dixin Tang

Shanghai Jiao Tong University, Shanghai, China   Sept 2020 - Mar 2023

M.Eng in Software Engineering

Xidian University, Xi'an, China   Sept 2016 - June 2020

B.Eng in Telecommunications Engineering

PUBLICATIONS

Pasha: An Efficient, Scalable Database Architecture for CXL Pods
Yibo Huang, Newton Ni, Vijay Chidambaram, Emmett Witchel, Dixin Tang
The 15th Annual Conference on Innovative Data Systems Research (**CIDR '25**), Jan 2025
Also appeared as a poster in **SOSP '24 Poster Session**

Lupin: Tolerating Partial Failures in a CXL Pod
Zhiting Zhu, Newton Ni, **Yibo Huang**, Yan Sun, Zhipeng Jia, Nam Sung Kim, Emmett Witchel
The 2nd Workshop on Disruptive Memory Systems (**DIMES '24**), Nov 2024

EXPERIENCE

The University of Texas at Austin, Austin, USA

Research Assistant   June 2023 - Current

- Built a distributed database that uses CXL memory to coordinate cross-host data accesses.
- Built system support for applications running on a CXL pod to tolerate partial failures.

Institute of Parallel and Distributed Systems (IPADS), Shanghai, China

Operating System Developer (Master's Student)   Sept 2020 - Mar 2023

I worked with a team on the development of a microkernel operating system. I ported it from AArch64 to RISC-V, enhanced the kernel to support PCID/ASID for reducing TLB shootdowns during context switch, and implemented some user-level device drivers.

TEACHING

CS 380L: Advanced Operating Systems
Teaching Assistant, The University of Texas at Austin, Fall 2023

CS 1501: Programming - Ideas and Methods
Teaching Assistant, Shanghai Jiao Tong University, Fall 2021

SERVICE

- Artifact Evaluation Committee: ASPLOS '24, OSDI/ATC '24
- Student Volunteer: SOSP '24