Bodun Hu

Research Interests

Operating Systems, Heterogeneity, Virtualization, Distributed Systems, Networking, ML Systems

Education

2020-present M.S. in Computer Science, The University of Texas at Austin, Austin TX.

2016–2020 B.S. in Computer Science, The University of Texas at Austin, Austin TX.

Papers

- [1] **Bodun Hu** and Christopher J. Rossbach. Altis: Modernizing GPGPU Benchmarks. In *Proceedings of the 2020 IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS*), August 2020. 14p 29.5%.
- [2] Hangchen Yu, **Bodun Hu**, Ariel Szekely, and Christopher J. Rossbach. AKATHA: Accelerating Kernel Access to Hardware Acceleration. Currently on submission to EuroSys 2021, October 2020.

Awards

- 2020 2020 ISPASS Student Travel Award.
- 2020 Research Distinction by the College of Natural Sciences.

Experiences

- 2018 2020 UTCS System Research Lab, Austin TX, Research Assistant, ADVISOR: CHRISTOPHER ROSSBACH.
- 2019 2020 UTCS System Research Lab, Austin TX, Research Assistant, ADVISOR: SIMON PETER.
- 2016 2017 UTCS AI Research Lab, Austin TX, Research Assistant, ADVISOR: CEM TUTUM.
 - 2018 H3C, Chengdu, China, Software Engineering Intern.
 - 2017 Wisesoft, Chengdu, China, Junior Software Engineer.
 - 2015 Lenovo, Chengdu, China, Marketing Intern.

Teaching Experience

Spring 2020 TA: Multicore Operating System Implementation (378), The University of Texas at Austin.

Instructor: Simon Peter

Talks

Aug 2020 Altis: Modernizing GPGPU Benchmarking, presented at ISPASS'20

Selected Projects

Altis, https://github.com/utcs-scea/altis.

• A new benchmark suite for modern GPGPU benchmarking.

AKATHA, https://github.com/yuhc/kava.

Automatic kernel accelerator support construction.

Multicore Operating System Implementation, a capability-based research OS by ETH Zurich.

• Implemented core infrastructures including physical memory management, capability initialization, ELF parser, LRPC, RDMA based on Barrelfish OS.

bdOS.

• A microkernel based OS written in Rust.

Skills

 $\begin{tabular}{lll} Tools & Python, $C/C++$, Java, Go, Rust, Haskell, Matlab \\ Frameworks & OpenMP, MPI, PyTorch, Tensorflow, CUDA, Jekyll \\ \end{tabular}$

Languages English (fluent), Chinese(fluent)