

Bodun Hu

CONTACT INFORMATION

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The University of Texas at Austin
Austin, TX 78712 USA

RESEARCH INTERESTS

Systems for ML, Operating System, heterogeneity, ML SW-HW Co-design, Distributed System

EDUCATION

The University of Texas at Austin

Ph.D. in Computer Science
Advisor: Aditya Akella

The University of Texas at Austin

M.S. in Computer Science, May 2021
Advisor: Christopher J. Rossbach

The University of Texas at Austin

B.S. in Computer Science, May 2020 (Research Distinction)

PUBLICATIONS

Henrique Fingler, Isha Tarte, Hangchen Yu, Ariel Szekely, **Bodun Hu**, Aditya Akella, Christopher J. Rossbach. Towards a Machine Learning-Assisted Kernel with LAKE. *Proceedings of the International Conference on Architectural Support for Programming Languages and Operating System (ASPLOS)*.

Bodun Hu and Christopher J. Rossbach. 2020. Altis: Modernizing GPGPU Benchmarks. *Proceedings of the IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS)*.

RESEARCH EXPERIENCE

Intel, San Jose, TX, USA.

Research Intern

2022

TCP-INT: Improved Network Telemetry in TCP Transport for better e2e visibility and improved closed-loop control of TCP workloads.

The University of Texas at Austin (UT Austin), Austin, TX, USA.

Research Assistant

2017 - 2021

LAKE: Built a generic API remoting system to expose accelerator APIs to OS kernel with close-to-native performances.

ALTIS: Designed a benchmark with improved diversity over existing GPU benchmarks by extending application domains with modern CUDA features.

The University of Texas at Austin (UT Austin), Austin, TX, USA.

Research Assistant

2020

TAS: Ported TAS into P4 to facilitate TCP fast-path migration to programmable NICs.

The University of Texas at Austin (UT Austin), Austin, TX, USA.

Research Assistant

2016 - 2017

G-Code-gen: Designed an automated detection system utilizing readily available hardware, which detects and terminates 3D printing processes upon identification of object defects.

INDUSTRY EXPERIENCE	<p>H3C, Chengdu, China. <i>Software Engineering Intern</i> 2018 Devised and implemented a highly effective caching strategy, resulting in a significant reduction of video streaming processing latency on Kubernetes cluster by a factor of 3x.</p> <p>Wisesoft, Chengdu, China. <i>Software Engineering Intern</i> 2017 Developed a data preprocessing pipeline for improved audio classification in an air traffic control system.</p>
HONORS AND AWARDS	<p>ISPASS Student Travel Award, 2020 Research Distinction by the College of Natural Sciences (UT Austin), 2020.</p>
TEACHING	<p>CS378: Multicore Operating System Implementation (undergraduate) Teaching Assistant, UC Austin, Spring 2020</p>
TALKS	<ul style="list-style-type: none"> • <i>Altis: Modernizing GPGPU Benchmarking</i>, ISPASS'20 (August 2020) • <i>Accelerating Kernel Access to Hardware Acceleration</i>, Texas Systems Symposium (November 2020)
SERVICE	<ul style="list-style-type: none"> • Junior Graduate Admissions Committee, UT Austin (January 2021)