

# YUQI XUE

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[xzman.github.io/yuqixue](https://xzman.github.io/yuqixue)

## RESEARCH INTERESTS

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Computer Architecture and Systems. AI Infrastructure. Machine Learning Accelerators.

## EDUCATION

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**University of Illinois at Urbana-Champaign**

*Aug 2021 – Present*

Ph.D. in Electrical and Computer Engineering

Advised by Prof. Jian Huang

**University of Illinois at Urbana-Champaign**

*Aug 2017 – May 2021*

Bachelor of Science in Computer Engineering with High Honors

Bachelor of Science in Mathematics with Highest Distinction

## PUBLICATION

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**G10: Enabling An Efficient Unified GPU Memory and Storage Architecture with Smart Tensor Migrations.** Haoyang Zhang\*, Yirui Eric Zhou\*, Yuqi Xue, Yiqi Liu, and Jian Huang. In *Proceedings of the 56th Annual IEEE/ACM International Symposium on Microarchitecture (MICRO'23)*. 2023.

\*Co-primary authors.

**RackBlox: A Software-Defined Rack-Scale Storage System with Network-Storage Co-Design.** Benjamin Reidys, Yuqi Xue, Daixuan Li, Bharat Sukhwani, Wen-mei Hwu, Deming Chen, Sameh Asaad, and Jian Huang. In *29th ACM Symposium on Operating Systems Principles (SOSP'23)*. 2023.

**System Virtualization for Neural Processing Units.** Yuqi Xue, Yiqi Liu, and Jian Huang. In *Proceedings of the 19th Workshop on Hot Topics in Operating Systems (HotOS'23)*. 2023.

**V10: Hardware-Assisted NPU Multi-tenancy for Improved Resource Utilization and Fairness.** Yuqi Xue, Yiqi Liu, Lifeng Nai, and Jian Huang. In *Proceedings of the 50th International Symposium on Computer Architecture (ISCA'23)*. 2023.

**IceClave: A Trusted Execution Environment for In-Storage Computing.** Luyi Kang\*, Yuqi Xue\*, Weiwei Jia\*, Xiaohao Wang, Jongryool Kim, Changhwan Youn, Myeong Joon Kang, Hyung Jin Lim, Bruce Jacob, and Jian Huang. In *Proceedings of the 54th Annual IEEE/ACM International Symposium on Microarchitecture (MICRO'21)*. 2021.

\*Co-primary authors.

## WORK EXPERIENCE

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**Systems Platform Research Group, UIUC**

*May 2021 - Present*

Graduate Research Assistant

*Urbana, IL*

**Google LLC**

*Fall 2023*

Student Researcher

*Remote*

**Google LLC**

*Summer 2023*

Research Intern

*Sunnyvale, CA*

## TEACHING

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<b>ECE 511: Computer Architecture, UIUC, Graduate TA</b>	<i>Spring 2024, Fall 2022</i>
<b>ECE 522: Emerging Memory and Storage Systems, UIUC, Graduate TA</b>	<i>Spring 2023</i>
<b>ECE 411: Computer Organization and Design, UIUC, Graduate TA</b>	<i>Fall 2023, Spring 2022</i>
<b>ECE 310: Digital Signal Processing, UIUC, Undergraduate Grader</b>	<i>Jan 2020 - Jul 2020</i>

## **SERVICE**

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### **Artifact Evaluation Committee**

- IEEE/ACM International Symposium on Microarchitecture (MICRO), 2022
- USENIX Symposium on Operating Systems Design and Implementation (OSDI), 2022, 2023
- USENIX Annual Technical Conference (ATC), 2022, 2023
- IEEE International Symposium on High-Performance Computer Architecture (HPCA), 2023

### **Reviewer**

- IEEE Computer Architecture Letters, 2022, 2023, 2024

### **Organizing Committee**

- The 1st Workshop on Hot Topics in System Infrastructure (HotInfra'23), Web Chair, 2023

## **AWARD**

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- Dan Vivoli Endowed Fellowship, 2024
- Oral Presentation Award, CSL Student Conference, 2024