

Yuyue Wang

404 Westwood Plaza, Los Angeles, CA 90095

(424)440-5723/yuyue@cs.ucla.edu

Education

Ph.D. - Computer Science Sept. 2021 - present
University of California, Los Angeles, CA

Bachelor of Science - Computer Science Sept. 2017 - June 2021
Peking University, Beijing, China

Research Interests

Area: Storage and memory systems, heterogeneous computing architecture

Focus: Computational storage, CXL systems

Research Experience

Virginia Tech, Blacksburg, VA
- Host: Huaicheng Li Sept. 2023 - present

UCLA, Los Angeles, CA
- Advisor: Glenn Reinman Sept. 2021 - present

University of Edinburgh, UK
- Host: Boris Grot June. 2020 - Aug. 2020

Peking University, Beijing, CN
- Host: Yun (Eric) Liang Mar. 2018 - June. 2021

Publications

Yuyue Wang, Xiurui Pan, Huaicheng Li, Jie Zhang, Glenn Reinman. **Isaac: In-Storage Video-Analytics Acceleration with Tile-Level Filtering and In-Flash I/O Reduction**. Submitted to ASPLOS 2024.

Yuyue Wang, Xiurui Pan, Yuda An, Jie Zhang, Glenn Reinman. **BeaconGNN: Large-Scale GNN Acceleration with Asynchronous In-Storage Computing**. In Proceedings of the *30th International Symposium on High-Performance Computer Architecture (HPCA)*, 2024.

Liancheng Jia, **Yuyue Wang**, Jingwen Leng, Yun Liang. **EMS: Efficient Memory Subsystem Synthesis for Spatial Accelerators**. In Proceedings of the *59th ACM/IEEE Design Automation Conference (DAC)*, 2022.

Liqiang Lu, Naiqing Guan, **Yuyue Wang**, Liancheng Jia, Zizhang Luo, Jieming Yin, Jason Cong, Yun Liang. **TENET: A Framework for Modeling Tensor Dataflow Based on Relation-centric Notation**. In Proceedings of the *48th International Symposium on Computer Architecture (ISCA)*, 2021.

Skills

- *Programming Languages*: C, Modern C++, Python, Scala, Rust
- *Deep learning framework/compiler*: PyTorch, TVM
- *System simulation/prototyping*: QEMU/KVM, Gem5, HLS, SpinalHDL

Talks and presentations

- **BeaconGNN: Large-Scale GNN Acceleration with Asynchronous In-Storage Computing**, Peking University, Beijing, CN, December 2023 (remote talk).
- **EMS: Efficient Memory Subsystem Synthesis for Spatial Accelerators**, Design Automation Conference, San Francisco, CA, July 2022.

Awards

- FAST 24' Student Travel Grant