Sreeharsha Udayashankar

PhD in Computer Science at the University of Waterloo

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LinkedIn: https://www.linkedin.com/in/sreeharshau/

Website: https://sreeharshau.github.io/

Skills: C, C++, Java, Python, P4, Scripting, Parallel Programming, Serverless Computing, Distributed Systems

Education

Doctorate – Computer Science University of Waterloo 2021 – Present

MMath (Thesis) - Computer Science University of Waterloo GPA: 94.5%

Selected Publications

- Draconis: Network-Accelerated
 Scheduling for Microsecond Workloads
 EuroSys 2024
- LoLKV: The Logless Linearizable Key-Value Storage System NSDI 2024
- Partial Network Partitioning ACM TOCS 2022

Selected Patents

 System and Method of Deduplication for Encrypted Content
 Patent Filed with USPTO – July 2023

Scholarships and Awards

- > Ontario Graduate Scholarship Government of Ontario, 2024-2025
- > President's Graduate Scholarship University of Waterloo, 2024-2025
- Spotlight Award Advanced Micro Devices (AMD), 2017

About Me

I am a PhD student in Computer Science at the University of Waterloo, working under the supervision of Dr. Samer Al-Kiswany. My primary research interests lie in Distributed Systems, Cloud Computing and Networking.

I earned my master's degree at the University of Waterloo in May 2021. Prior to enrolling in this program, I was a member of the CPU Performance and Workloads team at Advanced Micro Devices (AMD).

Professional Experience

Systems and Infrastructure Engineering Intern LinkedIn, June 2024 – Sept 2024

I interned with the Liquid graph database team at LinkedIn and worked on improving graph snapshotting.

Reduced network bandwidth usage by 78-95% with deduplication

Co-op Engineer - Design Engineer II

Advanced Micro Devices (AMD), January 2017 – July 2019

I held various positions at AMD as a part of the CPU Performance team. I was engaged in driving CPU architectural design using workload performance.

- Improved game performance models by 45% Published at the AMD Asia Tech Conference
- Spotlight Award July 2017

Research Experience

Graduate Research Assistant
University of Waterloo, May 2019 – Present

I have been involved in computer science research during my master's and PhD.

- > 14 top-tier conference and journal publications
- > 3 patents filed with USPTO in collaboration with Acronis Research
- > Collaborative projects with Oracle Labs and Acronis Research