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, JavaScript, P4, Parallel Programming, Serverless Computing, Distributed Systems

Education

PhD – Computer Science University of Waterloo, 2021-Present

Masters (Thesis) - Computer Science University of Waterloo, 2019-2021 GPA: 94.5%

Selected Publications

- Draconis: Network-Accelerated
 Scheduling for Microsecond Workloads
 EuroSys 2024
- LoLKV: The Logless Linearizable Key-Value Storage System NSDI 2024
- SeqCDC: Hashless Content Defined Chunking
 Middleware 2024

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

Professional Experience

Systems and Infrastructure Engineering Intern LinkedIn, June – September 2024

- Reduced Liquid graph DB's bandwidth and disk usage by 78-95% during snapshots using data deduplication.
- Achieved end-to-end chunking and reconstruction functionality with a Java-based design.

Co-op Engineer - Design Engineer II

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

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

Summer Intern

Philips, June - August 2016

- Achieved 95%+ accuracy in defect prediction using multi-variate linear analysis and PCA.
- Awarded for rapid implementation of a KPI dashboard.

Research Experience

Graduate Research Assistant
University of Waterloo, September 2019 – Present

- > 14 publications in top-tier conferences and journals.
- > 3 patents filed with USPTO in collaboration with Acronis Research.
- > Collaborative projects with Oracle Labs and Acronis Research.
- > International presentations in US, Greece and Poland.

Community Service and Volunteering

Regional Head

Igniting Young Minds (An NGO for underprivileged children), 2014 - 2017

- Increased outreach from 4 to 10 orphanages.
- Co-ordinated various activities such as donation drives, curriculum design, and volunteer recruitment.