Tri Vikram Dharmavarapu

+1 (850) 212-3790 | trivikram.dharmavarapu@gmail.com | Tallahassee, Florida, 32304

LinkedIn | GitHub

Education

Florida State University, Tallahassee, FL   Jan 2024 – May 2025
Master's Degree in Computer Science   GPA: 3.8/4.0
Birla Institute of Technology and Science, Pilani   Jul 2021 – Jun 2023
Master's Degree in Software Systems (Data Analytics)   GPA: 3.0/4.0
Koneru Lakshmaiah Education Foundation, Guntur   Jul 2016 – Jun 2020
Bachelor's Degree in Electronics and Communications Engineering   GPA: 3.7/4.0

Experience

Graduate Research Assistant, Florida State University   Jan 2025 - Present

Contributing to research in the **Systems domain**, *focusing on optimizing file systems, containerization performance, and scalable multi-GPU and multi-node training methodologies.*

File Systems:
- Conducted research on integrating ExtFUSE with CNTR, leveraging eBPF to optimize file system performance by reducing user-kernel context switches and improving metadata handling for containerized workloads.
- Re-architected the CNTR framework to enable dynamic handling of "slim" and "fat" container images, improving container startup times and file access speeds, validated through benchmarking in high-performance scenarios.

Distributed Training and Parallelism:
- Conducted experiments in Parallelized training setups, leveraging Data Parallelism (DDP) and Data-Model Parallelism (DMP) to improve scalability and performance for large-scale machine learning models.
- Designed and optimized training workflows for the TinyImageNet dataset, addressing challenges in **model parallelism** to enhance resource utilization and reduce training bottlenecks on high-performance computing systems.

Graduate Teaching Assistant, Florida State University   Jan 2024 - Present
- Assisted in teaching Parallel and Distributed Programming, including Python, Flask, and MySQL assignments.
- Conducted office hours to support students with coding, debugging, and graded assignments and exams. with faculty and mentored students to ensure clarity in coursework best coding practices.

Software Engineer, ServiceNow, Hyderabad   Jan 2020 – Dec 2023
- Developed user interfaces and implemented server-side logic using JavaScript, enhancing usability and reducing response times by 15%.
- Followed Agile methodologies, collaborating with cross-functional teams to deliver high-quality software solutions with a focus on continuous improvement.
- Contributed to test automation, achieving 80% coverage, and significantly reducing post-release defects and manual testing efforts.
- Integrated DevOps tools such as JIRA and Azure DevOps, optimizing project management workflows and automating deployment pipelines.
- Designed and integrated RESTful APIs, ensuring seamless communication between frontend and backend services.
- Worked on Slack and ServiceNow integrations, including API testing of GraphQL, improving monitoring and alerting functionalities.
- Automated and managed functional test cases, enhancing testing efficiency and consistency, which reduced manual testing time by 40%.
- Mentored junior engineers and conducted code reviews to maintain high coding standards and best practices.

Engineering Intern, OpenText, Bengaluru   Jul 2019 – Nov 2019
- Created a web application using Angular7, contributing to enhanced data visualization and improved UI experience.
- Built content extraction functionality to streamline document processing, improving efficiency and accuracy.
- Led a POC on a document classification system, increasing categorization accuracy by 25%, which optimized document search and retrieval processes.

Technical Skills

Programming Languages: C, C++, Java, Python, JavaScript, LISP
Frameworks: React, GraphQL, Selenium, Playwright
Tools: Git, VS Code, ServiceNow Platform, MATLAB, Jenkins, Docker, Postman
Operating Systems: Unix, Linux
Scripting: Shell Scripting (Bash)
Other: HTML, CSS

Certifications

- CCDSAP (CodeChef Certified Data Structure Algorithms Programmer)
- ServiceNow Application Developer

Awards and Recognitions

- **LAMA Award** - Recognized with the prestigious quarterly LAMA award, given to outstanding individuals who have demonstrated exceptional performance..
- **Represented University in national level coding contest ACM- ICPC 2018.** Selected for Amritapuri and Gwalior onsite round. (The ACM ICPC is considered as the "Olympics of Programming Competitions". It is quite simply, the oldest, largest, and most prestigious programming contest in the world.)