Dhruv Sujatha

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I am looking for an in-person/remote internship for Spring and Summer 2024. I am interested in working on software projects related to distributed systems and high performance computing, specifically software development and performance analysis.

Education

Purdue University — ***West Lafayette, IN***
Bachelor's of Science - Computer Science — ***Expected Graduation: May 2025***
Bachelor's of Science - Data Science

Proficient Languages: Python 3.x, C++, Java, Javascript, R, SQL

Professional Experience

Hewlett Packard Enterprise — ***Durham, NC***
Systems Software Engineering Intern — ***May 2023 - August 2023***

- Worked under the HPE Primary Storage team to develop a tool to analyze the performance of the NimbleOS and FleetOS and formulate regression reports on a dashboard.
- Developed a Signature Collection and Log Analysis tool to unify bug triaging through parsing logs and extracting relevant information reducing the time taken to debug a failed run from days to minutes.
- Used by multiple teams to triage logs generated by MinIO's WARP and OG as well as unstructured logs.

Skills Developed: Python3, ReactJS, Elastic Stack (ELK), Git, PyTest, Agile Development

Rosen Center for Advance Computing (ITaP) — ***West Lafayette, IN***
Student High Performance Computing Engineer — ***January 2022 - Present***

- Responsible for the planning, inventorying, deployment, and maintenance of 9 supercomputing clusters on campus. Developed pipelines to automate cluster management tasks such as logging and monitoring.

Skills Developed: Python, Bash Scripting, NetBox, Redfish, xCAT, SLURM, Asana, xALT

Other Experience

Student Cluster Competition - SC 2022 — ***November 2022 - Dallas, TX***

- Part of the SCC team representing Purdue University and Indiana University at the Supercomputing Conference 2022.
- Worked on the development of a mini supercomputing cluster capable of running scalable HPC applications such as PHASTA and LAMMPS. Optimized and compiled state of the art benchmarks such as HPL, HPCG, and MLPerf.
- Created a dynamic power management interface to monitor and control the power consumption of the cluster by underclocking and limiting the GPUs and CPUs.

Skills Developed: C++, Linux Kernel, Python, Bash Scripting, Spack, OpenMPI, CUDA, Git

Autonomous Robotics Club of Purdue — ***January 2022 - West Lafayette, IN***
Piano Hand Project - Software Team Lead

- Leading the software team to develop a serial API to control a biomechanical hand to play the piano. Using deep learning frameworks to train a model which can recognize music to dynamically control the hand.

Skills Developed: Arduino C, MicroPython, Mosquitto

Certifications and Awards

ASA Datafest 2022 - "Best in Show" — ***American Statistical Association***
· Recognized by the American Statistical Association for my work in finding meaning from a large and complex data set to aid in data-driven decisions. — ***March 2022***

AITP Computing Challenge Day 2022 — ***Association of Information Technology Professionals***
· First in the *ITaP Super Computing Challenge* where we had to optimize rendering of a simulation of our universe utilizing ffmpeg, OpenMPI, and Intel MPI. — ***April 2022***

· First in the *DataMine ML Challenge* where we had to derive the conditional probabilities of target features in a dataset and visualize it as a graph.