GAUTAMBUDDHA NAGARAJ MEESHI

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OBJECTIVE

I am keen to pursue an MS in Computing Systems to expand my knowledge and skills in high-performance computing, driven by my passion for exploring how technology can make everyday systems more efficient. I look forward to working on cloud infrastructure, focusing on improving speed and reliability.

EDUCATION

Indian Institute of Technology Delhi, New Delhi, India
B.Tech in Computer Science and Engineering, 2019 – 2023, CGPA: 8.136/10
Selected Coursework: Computer Architecture, Computer Networks, Operating Systems, Parallel and Distributed Programming, Virtualization and Cloud Computing

SKILLS

Coding: Python, C++, React.js, VHDL
Technologies, Frameworks: OpenMP, MPI, CUDA, gem5

EXPERIENCE

AMD Pensando Systems, Bengaluru, India ***SDE-1*** **June 2023 – Present**

- Developed CLIs using GoLang (Cobra library) and C++ to display data processing unit (DPU) configuration
- Contributed to the packet testing framework for the DPU simulator in Python
- Wrote P4 code for computing and verifying checksums (UDP, TCP, ICMP, IPv4) for packets received on the DPU

DENSO International India, IMT Manesar, India ***Software Developer Intern*** **June 2022 – July 2023**

- Developed a tool to automate the testing of the communication interface of Electronic Control Units (ECU) using Python, Vector CANoe and ETAS INCA

PROJECTS

Research project, National Institute of Technology Trichy (February 2024 - Present)
Supervised by Prof. R. Mohan

- Working on a neural network-based scheduler for optimizing power consumption in high-performance computing (HPC) clusters

Minor Design Project (January 2023 – May 2023)
Supervised by Prof. Preeti Ranjan Panda

- Implemented space partitioning of multi-bank last level cache (LLC) for multi-core SOC in the gem5 computer architecture simulator
- Analyzed the impact of LLC partitioning on cache misses and overall performance

B.Tech Project (August 2022 – November 2022)
Supervised by Prof. Preeti Ranjan Panda

- Implemented bandwidth partitioning for multi-core SOC in the gem5 simulator to enhance CPU performance
- Validated research on request arbitration at the last level cache for multi-bank LLC

Course Project in Virtualization and Cloud Computing (October 2022 – November 2022)

- Led a team of five to develop the front end of a VM management website for class assignments
- The front end was built using React.js and Typescript, querying a Python Flask backend

Course Project in Distributed and Parallel Programming (March 2022 – April 2022)

- Implemented template search in an image using CUDA on Nvidia GPU
- Achieved a significant reduction in runtime, from 20 minutes on a single-core of Intel i5 processor to 20 seconds on an Nvidia V100 GPU