Pranav P

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EDUCATION

College of Engineering Trivandrum, Kerala India
Master of Computer Applications — Expected Jun 2024

CMS College Kottayam, Kerala India
BSc. Mathematics
Cumulative GPA: 9.06 — Jun 2019 – Apr 2022

Holy Family HSS Cherthala
Plus Two (PCMC)
Score: 98.5% — Jun 2017 – Mar 2019

INTERNSHIPS

FOSSEE, IIT Bombay
Semester long Internship 2023 — Feb 2023 – Jul 2023
- Selected as one of the only two candidates through a screening task.
  Result: https://fossee.in/semester-internship/2023/results
- Added four new features in eSim(an open source EDA) developed by the FOSSEE eSim team at IIT Bombay under the mentorship of project assistants Sumanto Kar and Rahul Pakniker.
- Suppressed output graphs automatically generated by ngspice during simulation and added GUI elements using PyQt.
- Implemented multithreading using slots and signals to prevent the PyQt event loop from sleeping allowing two or more tasks to be done during simulation simultaneously.

PROJECTS

GUI for Verilator — Jan 2023
- Developed a GUI for the command line tool called **Verilator** using **PyQt**.
- Built an installer for Linux using **cxfreeze** and **bash** independent of various distros.

Analysis of PageRank Algorithm (Academic project) — Apr 2022
- Modeled a sample of the internet using Django and devised a search engine that utilizes the PageRank Algorithm with a team of four.
- Analysed the computational complexities of the algorithm.
- Examined how graph theory and linear algebra played an important role in the invention of the PageRank Algorithm.

PICZA - Social media application (Freelance project) — Jul 2021
- As a team of two, co-created a social media platform for college during pandemic to improve connectivity among students.
- Incorporated features such as a low latency chat system powered by websockets, stories, media posts, voice and video calls powered by WebRTC etc.
- Wrote the mobile application using Flutter, a cross-platform framework and the backend using Django.
- Deployed the application on a Microsoft Azure VPS and performed server load testing using Apache JMeter to 90% of total capacity.

ADDITIONAL

Technical Skills: Python, Django, PyQt, Flutter, C, Linux, Bash, Git
Scholarships: *INSPIRE SHE Scholarship* | Awarded to students who secured the **top 1 percentile** in their respective boards in the 12th examination.
Activities: *Technical coordinator* | Association of Students of Computer Applications (ASCA)
Achievements: Secured **2nd rank** in MCA Entrance examination conducted by LBS
Awards: Winner of All Kerala Inter-Collegiate mathematics quiz | K.E Mannanam (2019) Winner of Inter-Collegiate mathematics quiz | Alphonsa College (2019), First runner-up in ESPOIR: All Kerala Inter-Collegiate mathematics quiz (2023)
Certificates: Discrete Mathematics | NPTEL (Topper), The Joy of Computing using Python | NPTEL (Silver badge), JavaScript Algorithms and Data Structures | FreeCodeCamp