Mukul Mehta

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Education

Indian Institute of Technology Kharagpur   **Kharagpur, West Bengal, India**
B.Tech in Computer Science & Engineering, CGPA: 8.81/10   *2018 - 2022 (Expected)*

Experience

Oracle   **May 2021 - July 2021**
Project Intern | OCI Block Storage SRE Team
- Block Storage is a core service of the OCI ecosystem, providing durable and elastic volumes. The SRE team is responsible for maintaining and monitoring the block storage service
- Designed a new service to reduce manual activity present in runbooks, by auto-triaging and auto-remediating JIRA tickets as they arrive, by searching for relevant runbook and executing it with Rundeck
- Involved in writing multiple clients to connect to internal services to fetch disk and host information, pulling specific events from kernel logs, and execute commands remotely
- Built a PoC of the new service with the most commonly used runbooks, including setting up a load balancer for multiple rundeck instances, a logs agent and writing an exporter for monitoring using Prometheus

Projects

Grameen-Setu | *InterIIT Tech Meet 9.0*   **March 2021**
- Built Grameen Setu, an e-commerce platform to connect SMEs and self-help groups in rural India
- Designed the database schemas, and implemented the backend of the platform, integrated API calls with the frontend, and deployed it on AWS
- Worked in a team of 4 to develop the platform in 3 weeks and tested the robustness among real producers and consumers
- Developed as a part of IIT Kharagpur's gold-winning submission in the 'Drishtee's Tech-led Innovation for Rural Entrepreneurs' event

Listen to this KGP | lttkgp.com   **April 2020 - Present**
- Listen to this KGP is a facebook group where people share songs they find interesting. LTTKGP webapp provides a way to browse and listen to the songs posted with a better interface and queued playlists
- Participated in the development of two major service - To fetch posts from Facebook API into a NoSQL DB, and to parse and extract metadata and store in a PostgresQL database that is served using a REST API

PintOS & Eudyptula Challenge   **Jan 2021 - April 2021**
- Completed the 4 PintOS projects involving making changes to the PintOS kernel. Tested and validated with the standard PintOS tests and debugged with GDB
- Projects included implementing an alarm, virtual memory, stack growth, priority donation, multi-level feedback scheduling, user mode programs and a simple inode based filesystem
- Worked on the first 6 levels of the Linux Eudyptula challenge, which involved writing basic kernel modules, understanding the kernel coding guidelines and building a device driver for a character device

Technical Skills

Programming Languages: Python, C, Go, JavaScript, Java (Beginner)
Web Libraries / Frameworks: Flask, Django, BS4, Selenium, ReactJS
Databases: MySQL, PostgreSQL, MongoDB, Elasticsearch, Redis
Systems/Platforms: Docker/runc, Nginx, Linux, AWS, Git, Prometheus, Grafana, Rundeck, CI/CD Tools

Position of Responsibility

Kharagpur Open Source Society | *Executive Head*   **February 2019 - Present**
- Organized workshops and internal sessions on Python, Git, Linux and Shell scripting
- Conducted Kharagpur Winter of Code (KWoC), a month-long program for college students aimed at familiarizing them with contributing to open source projects. KWoC 2020 saw the participation of more than 2000 students

Technology Coordinator | *TSG, IIT Kharagpur*   **Session: 2020-21**
- Highest nominated technical position in the institute. Responsible for maintaining and updating the Gymkhana website, grievance portal, and working with other office bearers to execute their proposals
- Worked with a team of 2 developers to revamp the Gymkhana website, moving from PHP to NextJS, adding multiple pages and removing redundant information in the process