HARSH GUPTA

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Education

Vellore Institute of Technology, Vellore

Jul 2020 - May 2024 (Expected)

B. Tech in Computer Science and Engineering

9.10, CGPA

Experience

Luganodes (Software Development Engineer)

Sep 2023 – Present

- Developed robust indexers for Ethereum, Solana (open-sourced), Polkadot, Polygon, MultiversX, and Kava, ensuring efficient and accurate data indexing.
- Developed a custom deposit tracker for our Ethereum staking API, with over \$1 billion in client stakes, eliminating reliance on Beaconcha.
- Engineered a sophisticated reporting dashboard, with end-to-end deployment (inc. CI/CD integration), providing accurate financial reports for clients with over \$2.5 billion in stakes.
- Automated monthly asset reports across 20 blockchains, improving efficiency and report reliability.

Dyte (Software Engineering Intern)

May 2023 – Aug 2023

- Conducted load testing on socket services, achieving 100K simultaneous socket connections to verify its reliability and robustness.
- Developed unit tests for 2 major socket services in Go, with a 90% test coverage, automating the report generation using a CI/CD pipeline.
- Developed a health probe to monitor the status of socket services and generate automated reports sent to Slack.

Projects

RBAC Authentication Service

- Developed an extensive, containerized task management system featuring customizable, dynamic role-based access control (RBAC).
- Ensured robust security with advanced user authentication, data integrity, and privacy measures.

Email Extractor

- Automated IEEE VIT's sponsorship workflow using Selenium WebDriver and Python3, achieving a 300% increase in sponsorship revenue compared to the previous year
- Managed a high-volume email system, integrating AWS SES, SendGrid, and Mailgun to efficiently send over 10,000 emails per event for organization events.

Círculo

- Built an API for retrieving recent YouTube videos by tag/search query, in a paginated response
- Innovated an optimized algorithm based on exponential backoff, dynamically adjusting request intervals using Celery and Celery Beat.
- Enhanced database performance with BRIN indexing, and partially implemented Elasticsearch for advanced search.

FFCS

- Developed a TypeScript backend for a University Credit and Timetable Management System, enhancing efficiency and preventing scheduling conflicts.
- Utilized PostgreSQL for reliable data management, adhering to OpenAPI standards for API integration.

Leadership / Extracurricular

Technical Lead, IEEE-VIT

Dec 2020 - Dec 2023

- Responsible for Technical growth of 75+ members in the organization inculcating and promoting the Open Source Software culture and good development practices.
- Developed software for events and projects used by 1500+ participants in 100+ countries.
- Speaker at "Techloop Introduction to MERN", guiding 400+ students in Web Development.

Achievements

• Awarded the Merit Scholarship for Outstanding Performance in academics by VIT Vellore, twice.

Skills and Interests

Programming Languages: Go, JavaScript, TypeScript, NodeJS, Python3, Java, C, C++ Relevant Coursework: Data Structures and Algorithms, Database Management Systems, Objected Oriented Programming, Operating Systems, Computer Networks, Computer Architecture and Organization, Theory of Computation, Cryptography Fundamentals, Cyber Security, Network Security, Web Security Miscellaneous: Linux, Git, GitHub, Jira, Postman, PostgreSQL, MongoDB, MySQL, Azure, AWS, GCP Qualities: Confident, Multitasker, Quick-learner, Adaptive, Team player, Problem Solving