Mahesh Maddhuru

✉ mahesh21319@gmail.com | 📞 +1 (304) 215-2613 | 👤 Personal Website | 🔗 LinkedIn | </> Leetcode

EDUCATION

VIRGINIA TECH
MEng in Computer Science
May 2024 | Blacksburg, VA

BMS
College of Engineering
BE in Computer Science
GPA: 8.87 / 10
Grad. May 2019 | Bangalore, IN

VIKAAS
High School
Grade: 95.16%
Grad. May 2015 | Mangalore, IN

COURSEWORK

GRADUATE
Networks and Protocols
Network Security
Information Security
Blockchain
Machine Learning
AI Tools Software Development

PUBLICATION

PATENT
Intellectual Property India
"System and method for implementation of inter-network transaction process in blockchain distribution networks" | 🔗

SKILLS

LANGUAGES
Java • JavaScript • Python • C++

FRAMEWORKS
Dropwizard • Dagger 2.0 • SpringBoot • Terraform • Express JS • Android • Hibernate • JUnit • Mockito • Flask • Selenium

DATABASES
Oracle DB • MongoDB • MySQL

SOFTWARE TOOLS
Oracle Cloud • CI/CD tools • DevOps • Docker • GIT • Maven • Gradle

WEB DEVELOPMENT
VueJS • AngularJS • JQuery • Bootstrap • D3.js

EXPERIENCE

ORACLE CLOUD INFRASTRUCTURE (OCI) | Member of Technical Staff IC2 (SDE-2)
October 2021 – December 2022 | Bangalore, IN

- Led a project aimed at applying rapid patches to live hypervisors and developed its entire infrastructure, effectively bringing down the **patching time to under 15 minutes**.
- Successfully navigated the project through the **CSSAP security review process**.
- Redesigned and developed modules for Yum management, Linux system file modification, custom package installation, and validations.
- These Modules **optimized the 'image build pipeline'**, reducing build time by approximately 25% and enhancing its stability.
- Developed a versatile Maven plugin for parallel **Docker image retrieval** on all build hosts, thus reducing the test suit execution time by 20%.
- As the **Release coordinator**, deployed the updated Hypervisor base image on the Virtual Machine Infrastructure fleet on **various OCI regions**.
- As an **On-Call engineer**, successfully resolved a multitude of customer issues.

AKAMAI | Software Engineer II + Software Engineer + Intern
January 2019 – September 2021 | Bangalore, IN

- Designed and developed the "Activation" algorithm, which **automated the product launch lifecycle** with a **smart retry mechanism** and reduced the product operations team's efforts by 50%. It efficiently handled complex business logic, including the **calculation of product pricing** based on factors like region, rate card, and partner discount.
- **Developed Authorization layer** from the ground up with granular data access control.
- Developed a robust **lock mechanism** to prevent product data changes in a non-draft state during configuration workflow.
- Implemented **inter-service communication** and **data caching** for client and partner APIs to ensure fast response times (<1 second).
- **Streamlined integration processes** to facilitate seamless connectivity between our services and multiple client systems.
- Built many reusable **UI components on AngularJS** for configuring product metadata.

LEANOVATE SOLUTIONS | Fullstack Engineer Intern
June 2018 - November 2018 | Bangalore, IN

- Assisted in designing a **MongoDB** database for a building management system.
- Developed **REST APIs in ExpressJS** to manage meeting room booking.
- Devised **automation tests** in Python using **Selenium**.
- **Generated PDF reports** for booking statistics on a **Flask microservice**.

PROJECTS

POWERCHAIN | NodeJS, DatSwarm DHT | 🗖
A portable **blockchain system** that uses a custom protocol to enable **internetwork transactions** without middlemen and uses **custom packets** to reduce network congestion in blockchain-based systems.

BMS.NET | Android, Firebase, Google Map API
An Android social media app that lists and **notifies the university's circulars**, lists upcoming live events, **pins live events** like workshops, etc. on the university map, and features student community **group live chat**.