VIVEK PUSTI

Education

MIT School of Engineering, Pune	Sep. $2019 - May 2023$
Bachelor of Technology in Computer Science	CGPA : 8.21/10
Motilal Nehru Public School, Jamshedpur	2019
12th/ISC	78%
Motilal Nehru Public School, Jamshedpur	2017
10th/ICSE	71%

Experience

CME Group

Software Engineer 1

July 2023 – Present

June 2022 – July 2022

Remote

Bangalore, Karnataka

- Refactored Spring Boot-based regulatory alert services, achieving a 30% reduction in response times and ensuring full compliance with industry standards.
- Developed an end-to-end validation framework for external firm file uploads, automating error detection, compliance checks, and rejections—enhancing data accuracy and processing efficiency.
- Designed and deployed the **Firm Summary Portal** to visualize all regulatory upload data with advanced **filtering** and **tracking** features, improving **auditability** and user experience.
- Optimized the file ingestion pipeline by streamlining processing logic and resource management, reducing execution time by 40%.
- Applied **Redux**-based state management in the Firm Summary Portal, enabling **real-time updates** and boosting user productivity by **30%**.
- Enforced **API performance enhancements** through strategic **caching** and **SQL query tuning**, significantly improving **response times under load**.
- Executed a dynamic **email templating system** to automatically notify firms with detailed upload summaries (Successful, Rejected, or Partially Processed), improving communication and traceability.
- Collaborated cross-functionally with QA and DevOps teams to streamline CI/CD pipelines and improve deployment reliability for regulatory microservices, reducing release issues by 25%.

Lets Grow More

Web Development Internship

- Streamlined back-end processes, improving website loading speed by 35% and reliability by 20%, directly enhancing user satisfaction.
- Developed interactive front-end interfaces that increased user engagement, contributing to higher customer satisfaction.

Projects

 TENOR Python, Numpy, Pandas, Convolutional Neural Networks (CNN), Flask, OpenCV Developed a Music Recommendation System that suggests songs based on facial expressions. Utilized CNN models to detect emotions (happy, sad, angry, etc.) from facial expressions. Deployed the system using Flask, enabling real-time emotion-based music suggestions. 	January 2022
 HBV MORTALITY PREDICTION Python, Machine Learning, Streamlit Built a web app that predicts Hepatitis B virus mortality using machine learning models. Integrated prediction algorithms to provide user-specific recommendations based on health data. Implemented the app with Streamlit for an intuitive and interactive user experience. 	November 2021
 PERSONAL PORTFOLIO <i>HTML</i>, <i>CSS</i>, <i>JavaScript</i>, <i>Git</i> Created a personal website to highlight my skills, projects, and internships. Built an interactive portfolio to demonstrate my full-stack development capabilities. Published the website on GitHub for seamless access and continuous updates. 	October 2022
Technical Skills	