Rohan Padhye

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Experience

Software Developer Intern Jun. 2022 – Dec. 2022
Quantiphi *Mumbai, India*

- Developed a **microservices-based architecture** for a real-time analytics platform using *Spring Boot* and *Docker*, enhancing scalability and reducing system downtime by 35%.
- Optimized database operations by implementing *PostgreSQL* indexing and caching techniques, reducing query response times by 40%.
- Designed and deployed **RESTful APIs** for seamless interaction between services, improving data synchronization and user experience.
- Migrated monolithic legacy systems to a cloud-native architecture using *AWS Lambda* and *S3*, cutting infrastructure costs by 25%.
- Conducted performance testing and debugging, ensuring system reliability with a 99.9% uptime for production environments.

Web Editor Jun. 2020 – July 2021
Computer Society of India *Mumbai, India*

- Designed and deployed a responsive **web application** using *ReactJS* and *Node.js*, improving user engagement and reducing bounce rates by 20%.
- Delivered hands-on workshops on **DevOps tools**, *Docker*, *Jenkins*, and *GitHub*, training over 100 participants to adopt modern development workflows.
- Implemented features for the organization's content management system, streamlining updates and improving user experience.
- Optimized system performance by identifying bottlenecks and refactoring code, achieving a 25% improvement in application load times.

Projects and Publications

Smart Door Keeper | Python, Firebase, Flask, CV2

- Developed an AI-powered smart doorbell system using Python, OpenCV, and Google Text-to-Speech, achieving **92% accuracy** in facial recognition with Histogram of Oriented Gradients **(HOG)** and logo detection using Oriented FAST and Rotated BRIEF **(ORB)**.
- Designed a web-based interface with Flask and integrated cloud storage for visitor management, enabling real-time notifications and seamless user control.
- Presented the project at the 5th International Conference on Energy, Power, & Environment **(ICEPE)**, published in **IEEE**.

Automatic Number-Plate Recognition | Python, YOLO V4, Firebase, CV2, Attention OCR

- Developed an automatic number plate recognition system using YOLOv4 and Darknet, achieving 94% accuracy through training on 3,000+ images.
- Integrated OpenCV and Attention OCR for efficient detection, reading, and validation of license plates.
- Enhanced system efficiency by optimizing YOLOv4 model parameters, reducing detection latency to ensure real-time processing of license plates in dynamic environments.

Skills and Technologies

Languages: Python, C++, JavaScript, SQL, Bash, JAVA.
Libraries and Frameworks: ReactJs, Tailwind, MaterialUI, Django, Flask, NodeJS, Scikit, NLTK, TensorFlow, Keras.
Tools: Kubernetes, Docker, GIT, PostgreSQL, MySQL, MongoDB, VS Code, Anaconda, Eclipse, AWS, Jupyter Notebooks, Git, Bootstrap, Spring Boot, Agile, Firebase .

Education

Western University Sept. 2023 – Sept. 2024
MSc in Computer Science, GPA: 4/4 *London,Ontario*

Vivekanand Education Society's Institute Of Technology(VESIT) Jun. 2019 – Jun. 2023
B.E. in Information Technology, GPA: 3.8/4 *Mumbai,India*

Activities & Leadership

Western University Jan. 2024 – May. 2024
Teaching Assistant for CS 1027B (CS Fundamentals II) *London,Ontario*

Vivekanand Education Society's Institute Of Technology(VESIT) Jun. 2022 – Jun. 2023
Placement Coordinator *Mumbai,India*