Pavvan Pradeep

Experienced Software QA and Automation Intern, and full stack developer, proficient in coding, web development, and testing with a keen interest in leveraging cloud and distributed computing technologies.

EXPERIENCE

NASDAQ June 2024 – Present

Software QA and Automation Intern

- Testcraft AI: Engineered an advanced LLM-based test tool leveraging LLaMA 3-70b, incorporating Retrieval-Augmented Generation (RAG) and similarity search for processing test documents. This innovative solution generated manual test cases and automated feature files, resulting in a quarterly time savings of 40 hours for the QA team.
- Dynamic Versioning: Automated the versioning process of the pom.xml file, ensuring the correct version is pushed to production, thereby reducing manual errors and streamlining the deployment process.
- Developed a comprehensive logging mechanism and integrated report generation into the internal test automation framework, enhancing visibility and traceability of automated tests for financial exchange protocols such as FIX, ITCH and OUCH by 80
- Collaborated with cross-functional teams using Agile methodologies, and utilized tools like Gitlab pipelines for CI/CD, Jira for project management, and Junit5 for testing.

PES INNOVATION LABS

June 2023 - August 2023

Research Intern

- Project: Terrabot Robotics for Terrain Navigation
- Pioneered a prototype robot for terrain navigation using ROS, Reinforcement Learning, Stable Baselines3, Python, Gazebo, and Arduino.
- Implemented Proximal Policy Optimization (PPO), a state-of-the-art reinforcement learning algorithm, to achieve efficient navigation in hazardous terrains, resulting in a significant improvement in navigation efficiency.
- Developed and launched the official PES Innovation Labs website, showcasing the lab's projects, research activities, and team members. Utilized modern web development technologies such as NEXT.js, Framer motion and Material UI to create a responsive and user-friendly interface, enhancing the lab's online presence and accessibility.

SKILLS

- Programming Languages: Python, Java, JavaScript, Go
- Tools and Frameworks: React, NEXT.js, Django, Spring Boot, GraphQL, Kafka, JUnit 5, Selenium, Pytest
- Cloud Technologies: Docker, Kubernetes, AWS, Istio, Terraform, Prometheus

PROJECTS

Swiss-Watches an E-commerce Website for Luxury Watches

- Engineered a responsive e-commerce platform based on a microservices architecture, showcasing luxury watches from 20+ brands. The platform features high-resolution images, comprehensive product descriptions, and utilizes RabbitMQ for inter-service communication. Deployed the application on Kubernetes for efficient orchestration and scalability.
- Tech Stack: Frontend Vite, React, Tailwind, Framer Motion | Backend Django Rest Framework, RabbitMQ, Docker, Kubernetes | Database MySQL

Distributed Load Tester for Kafka

- Developed a scalable load-testing infrastructure using Kafka, orchestrating several driver nodes for comprehensive web server stress tests; achieved a 50% boost in load-testing efficiency provided by metrics such as latency, requests per second(RPS) and average throughput.
- Tech Stack: Backend Kafka, Flask, Node.js | Database SQLite3

EDUCATION

Bachelor of Computer Science and Engineering, PES University, Bangalore

• CGPA: 8.1 (for 6 semesters) | 2021 - 2025