PAVAN SWAROOP LEBAKULA

Open to Relocation | pavanswaroopL99@gmail.com | +1(689)250-9123 | Linkedin | Github | Portfolio

Software Engineer

Innovative Software Engineer with 4+ years of experience and a passion for complex problem-solving and creating impactful solutions. Experienced in collaborating with cross-functional teams to conceive, design, and deliver innovative products and services. Open-minded and passionate about learning new technologies, with a willingness to leverage them to their optimal potential.

Professional Experience

One Community Global | June 2024 – Present

Software Developer MERN Stack Volunteer

Highest Good Network Web App [React, Express, Node, MongoDB]

- Initiated development on the Highest Good Network app using the MERN stack, focusing on enhancing project management and collaboration features.
- Engaging in code reviews adhering to best practices in coding standards and utilizing Sentry for error tracking and debugging to improve application stability and reduce issue resolution time.

University of Central Florida | Jan 2023 – May 2024

Graduate Student Assistant | Software Development

Kanban Web App [React, Firebase, MUI]

- Increased task completion from 150 to 225 tasks per semester by developing a kanban board built using React for task management and collaboration among teaching assistants.
- Reduced missed deadlines from 20 to 5 per semester through real-time updates and notifications, ensuring all team members were on the same page.

Cognizant Technology Solutions | June 2019 – July 2022

Software engineer | Client: Caterpillar Inc.

CAT Minestar Solutions Core Functionality [Java, SpringBoot, Microservices, SQL, XML, Web Services, RabbitMQ]

- Designed and developed over 70+ requirements, practicing TDD with Unit testing and Mock testing throughout the Software Development Life Cycle.
- Exposed RESTful APIs with vehicle data JSON responses based on the client requirements, enhancing decision management by 20%.
- Worked under the guidance of software architects to migrate 2 monolithic applications into scalable, independent microservices.
- Processed and enriched over 50,000 messages daily by attaching additional information from various services, and routed enhanced data to different topics on RabbitMQ, improving operational efficiency.

CAT Fleet Management Dashboard [Angular, Kafka, Elastic Search, Spring Boot, Typescript, HTML]

- Developed a Fleet management dashboard, improving tracking efficiency and reduced vehicle downtime by 120 hours per month.
- Led the implementation of Apache Kafka to process over 300+ events per second from autonomous vehicles, crucial for the "MayDay Alarm" tab on the dashboard.
- Optimized search functionality within the app using Elasticsearch, resulting in a 25% increase in search throughput and allowing users to swiftly access vehicle information.

Application security enhancement [SSL, OAuth2.0, Java]

- Enhanced Web app security by implementing OAuth 2.0 for robust user authentication and authorization, and secured data transmission with SSL ensuring secure access to critical features and resources.

DevOps Collaboration [Jenkins, SonarQube, Docker, Kubernetes, Groovy]

- Collaborated with Devops engineers to implement a CI/CD pipeline, significantly improving code quality and deployment efficiency by 25%, crucial for ensuring reliable updates to the equipment monitoring feature in the Minestar application.
- Involved in deployment of Kubernetes clusters with ArgoCD for automated continuous delivery, enhancing scalability and reliability of the fleet management system.

Leadership & Cross-functional [Test Driven Development, SDLC, Bitbucket, Scrum, Jira, Agile]

- Conducted code reviews as a lead for 5 developers and led the team to a successful product release, representing the team in project demos to Business Analysts, and gave Knowledge Transfer sessions for junior developers.
- Received **Client appreciation** for successfully developing features on time and giving **on-call** assistance for **critical bug resolution** before a product release.
- As a **volunteer in Cognizant Outreach** activities, gave Interview preparation guidance for students from remote areas.

Skills

Programming: Java, C#, Python, Javascript
Development Technologies: REST API, Spring Boot, SOAP, Hibernate, JSON, Angular, jQuery, JDBC, HTML5, CSS
Databases & Cloud: My SQL, Oracle, PostgreSQL, MongoDB
Testing & Monitoring Tools: JUnit, Mockito, Jasmine, Cucumber, Postman, Swagger, Prometheus, Grafana
Build & Deployment Tools: Jenkins, Docker, Kubernetes, Helm, GitLab, ArgoCD, Maven, SonarQube, Tomcat
AWS: [AWS Certified Developer Associate](#), EC2, S3, Lambda, IAM, SQS, API Gateway
Others: Windows, Linux, VSCode, IntelliJ

Education

Master of Science in Computer Science | Aug 2022 - May 2024 (Graduated)
University of Central Florida, Orlando, FL | **CGPA: 3.9**
Related Coursework: Design & Analysis of Algorithms, Adv. Computer Architecture, Adv. Software Systems Security, Machine Learning, Computer Forensics II.
Learning: Linux Programming, WIndows Programming, Adv. Security Measures, Splunk, Data Structures, Natural Language Processing, Adv. System Design.

Academic Projects

MERN stack Food Delivery App ([Project Link](#))
Implemented a business idea with an application which **inspired me to learn Full Stack Development**, BootstrapCreated a scalable and responsive Full Stack Application with React, Node.Js, Express, JavaScript, MongoDB, optimizing user experience with React Redux across multiple platforms

Scalable Cloud-based Full Stack Deployment ([Project Link](#))
Deployed MySQL on AWS RDS linked with a Spring Boot app, streamlined via AWS Elastic Beanstalk. Hosted the frontend on an S3 bucket, enabling a dynamic web interface.

Cloud-native CI/CD Pipeline ([Project Link](#))
Developed a CI/CD pipeline for a Spring Boot application on AWS EC2, leveraging Jenkins, **Docker**, SonarQube, Kubernetes, and Argo CD.

Vehicle Reservation System ([Project Link](#))
Built a full stack web application, leveraging Angular for the frontend and bolstered by Spring Boot for the backend. Mastered both monolithic and microservices architectures and utilized JWT to ensure security.

Kubernetes Monitoring using Grafana ([Project Link](#))
Implemented a robust monitoring solution for a Kubernetes cluster using Prometheus and Grafana. Set up Minikube with Docker and managed packages with Helm. Deployed Prometheus and Grafana using Helm charts, exposing their services for browser access. Future plans include integrating Prometheus with Spring Boot applications using Micrometer for metrics and exploring OpenTelemetry for distributed tracing.

Serverless Event-Driven Web App
Engineered a serverless processing system using AWS Lambda, SQS, API Gateway, and NoSQL database service DynamoDB, enabling scalable and cost-effective web application development without servers.