GUNTAKALA LAVANYA

(937)-432-8341 | lavanyag1@udayton.edu | https://www.linkedin.com/in/lavanya-guntakala/

EDUCATION

University at Dayton — **Buffalo, NY**
Master of Science, Computer Science — *Aug 2023 – Aug 2025*

- **Relevant Courses:** Distributed Operating System Principles, Machine Learning, Deep Learning, Computer Network, Analysis of Algorithms, Advanced Data Structures, Human-Computer Interaction, Natural Language Processing.

EXPERIENCE

Lorhan Corporation Inc - *Software Engineer* — **Middlesex, NJ**
***Tech Stack**: SpringBoot, Apache Kafka, Java, Jenkins, Docker, JIRA, Grafana, Kibana, TestNG.* — *Mar 2024 – Present*

- Developed a scalable, production-level Order Management microservice using Java, Spring Boot, and Kafka, directly processing real-time customer orders, ensuring inventory accuracy, and enabling efficient procurement.
- Drove a 40% reduction in deployment times by implementing a custom CI/CD pipeline with Jenkins, Docker, and BitBucket, while contributing to back-end logic, testing, and managing projects via JIRA.
- Implemented robust logging mechanisms using Splunk and Kibana and created dynamic Grafana dashboards, translating data into actionable insights. Coordinated with onsite and offshore teams to ensure seamless collaboration

Shiash Info Solutions Private Limited - *Software Engineer* — **Chennai, India**
***Tech Stack**: React.js, Redux, Node.js, Express.js, RESTful APIs, MongoDB, Docker, Kubernetes, Jenkins, Git.* — *May 2021 – June 2022*

- Led the development of a real-time data automation system for cloth factories using the MERN stack, improving operational efficiency by 30% and enabling data-driven decision-making.
- Implemented real-time communication via WebSockets and Socket.io, ensuring instant updates between factory floors and management dashboards.
- Integrated JWT authentication, HTTPS, and RBAC for secure access and compliance with data privacy standards.
- Deployed the system using Docker containers and orchestrated with Kubernetes for scalability and high availability.
- Built a CI/CD pipeline with Jenkins and GitLab CI, automating build, test, and deployment processes.

Synergist Software Solutions Private Limited - *Software Engineer Intern* — **Hyderabad, India**
***Tech Stack**: C ++, Python, Tcl/Tk, Shell scripting, Quality Testing, Unit test, Distributed Systems, OpenCV.* — *May 2020 – April 2021*

- Developed a scalable claim processing microservice using Java, Spring Boot, and Kafka, ensuring accurate data management and efficient resolution of real-time customer claims.
- Reduced deployment times by 40% by implementing a custom CI/CD pipeline with Jenkins, Docker, and BitBucket, and contributed to back-end development, testing, and task coordination using JIRA.
- Improved system performance by integrating Redis caching and optimizing data persistence with Hibernate and JPA, reducing database queries by 20%.
- Improved system integrity with stateless JWT authentication, reducing security incidents by 30%, and facilitated collaboration using Splunk, Kibana, and Grafana for effective logging and monitoring.

PROJECTS

Human Computer Interaction project | *MERN stack, Figma, HCI Principles, Product Design, React, Node.js, MongoDB*

- Designed and implemented a new real-estate app that reduced the time taken to find a property by 50%, after gathering feedback from 50+ users and addressing all the pain points.

Self-Checkout shopping *system* | *Flask, AWS, React, TensorFlow, Product Design*

- Engineered an innovative shopping cart system using a custom-trained AWS Recognition model, halving checkout times and dramatically improving the shopping experience.

An AI-driven NPC with Visual Awareness | *Python, OpenCV, ChatGPT Large Language Models (OpenAI), Multi-threading*

- Developed a desktop Minesweeper game that integrates with *LLM*'s like ChatGPT to dynamically respond and strategize according to the game state, significantly enhancing user engagement and gameplay innovation.

Twitter Engine Clone | *C++, Multi-Threading, Distributed Systems.*

- Engineered a high-performance Twitter replica in C++, adeptly managing thousands of users and tweets, with a focus on multi-threading and optimizing resource utilization for efficient operations across distributed systems.
- Leveraged C++ concurrency, fault tolerance, and advanced load balancing techniques to ensure stable performance and scalability for handling 10,000+ users across multiple machines.

SKILLS

Programming Languages: Python, C/C++, C#, R, Ruby, Java, JavaScript, TypeScript, GoLang, Shell Scripting, Rust.

Web: React, Redux, Angular, webpack, Bootstrap, Spring Boot, Node.js, Express, Django, Flask, Kafka, CSS, HTML, Selenium, Docker, Jenkins, Kubernetes.
Databases: MySQL, PostgreSQL, Oracle, MongoDB, NoSQL, SQLite.
Cloud: AWS, DynamoDB, RDS, Lambda, CloudFront, S3, ElastiCache, CloudWatch, SQS, SNS, CloudFormation, CodePipeline.
Tools and Platforms: JIRA, Aptest, OpenStack, UNIX/Linux (Red Hat, Ubuntu), Terraform, Git CLI, GitHub, IOT, Spark, Hadoop, Redis, Nginx, Flink, Figma, Postman, VS Code, WordPress.