

Vamshidhar Reddy Parupally

Linkedin
Portfolio

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Education

- **San Jose State University [GPA : 3.9]** San Jose, California
Master of Science in Software Engineering.
Courses: Cloud Technologies, Data Mining, Machine Learning, Enterprise Distributed System, Networking, Virtualization Technologies.
Jan 2022 - Dec 2023
- **Anurag Group of Institutions [GPA : 3.74]** Hyderabad, India
Bachelor of Engineering in Information Technology.
Courses: Object Oriented Programming, MVC design pattern, Software Development Processes.
Aug 2016 - June 2020

Skills Summary

- **Programming Languages:** Java, Javascript, Python, SQL, TypeScript, C, C++.
- **Web Development:** MERN Full Stack, AngularJS, ReactJS, NodeJS, REST API / SOAP, HTML, CSS, Flask, Spring Boot.
- **Technologies:** Kafka, Spark, GIT, JIRA, ETL, Kubernetes, distributed systems, OOPS, AJAX.
- **Data Base:** Relational DB, MongoDB, Vertica DB, Cassandra, No SQL and Redis.
- **Others:** AWS, Azure, GCP, DevOps, Docker, CICD, SonarQube, JUnit, Jenkins, Pandas, VS Code, Eclipse, Vagrant, Ansible.

Experience

- **Amazon** Sunnyvale, California
SDE Intern
2023 - Current
 - Involved in working on Alexa API Gateway to support AVS Smart Home APIs and improved Alexa Gateway resiliency by adding a non-blocking mechanism
 - **Tools and Technologies:** Spring boot, Java, Google Guice, React JS, AWS (EC2, S3, Load Balancers), Memcached, Dynamo DB, Redis cache.
- **Tata Consultancy Services - Client Apple** Hyderabad, India
Software Developer
2020 - 2022
 - Reduced data administration time by 30% by building an end-to-end data management tool for product sales to assist Apple sales team, using **React JS, Java, Cassandra** and **Vertica db**.
 - Developed **Kafka** and **Spark pipeline** to handle a large number of orders during NPI, and developed **RESTful APIs** using **Java Spring Boot framework** for accessing the details on the internal sales dashboard
 - Handled User management, authentication leveraging **JSON Web token**, and session management with **Redis cache**.
 - Developed a time series model using **LSTM** algorithms to analyze the no-show rate of appointments at an Apple store.
 - Implemented **Docker containers** and **CI/CD pipelines** in the project, resulting in a 35% reduction in deployment time and a 25% improvement in application performance while effectively utilizing **AWS** and **DevOps** practices to ensure seamless integration and delivery.
 - Assisted in planning, analyzing, designing, and implementing project modules using **Agile (Scrum) Methodology**.
 - Used **Git, Maven, Jenkins**, and **Splunk** for version control, build tool, continuous integration, and error log handling respectively.
 - **Tools and Technologies:** Open AI GPT Models, Spring boot, Java, React JS, Angular, Kafka, AWS (EC2, S3, Load Balancers), Git, Maven, Jenkins, Cassandra DB, Spark streaming, Docker, Redis cache, JSON Web token.

Academic Projects

- **Anomaly detection in PV panels using YOLO**
 - Developed an anomaly detection system that utilized the YOLO V8 model, resulting in a 15% increase in detection accuracy.
 - Implemented the ISAAC ROS Image pipeline for image pre-processing and a S3 bucket to store images, enabling easy access.
 - Created an image annotator for efficient annotation of images in YOLO format using Python and Streamlit.
 - Developed a real-time defect monitoring system for solar panels using a Jetson developer kit and integrated camera, enabling users to stream and monitor panel defects via a user-friendly interface
 - **Technologies used:** Python, YOLO V8, NVIDIA ROS Platform, Jetson Developer Kit, React JS, Node JS, AWS S3.
- **Autonomous Drone System for Agriculture**
 - Developed and implemented an autonomous drone system, providing farmers with a streamlined farm surveying and pesticide spraying solution.
 - Utilized cloud mission planner and Ardupilot simulation to simulate the flight path and ensure efficient drone operation.
 - Designed the system to allow farmers to easily book drone services by registering their farmland geo coordinates.
 - Utilized the UDP, UDPCI ports, and MAV Link module for communication between drones and the ground control system.
 - **Technologies used:** Cloud Mission Planner, Ardu Pilot Simulator, React JS, Spring Boot, Bootstrap, Sockets, C++.

- Open AI Integration - Salary Analysis Dashboard
 - Created salary analysis dashboard using Stack Overflow Developer Survey data and OpenAI GPT turbo model.
 - Leveraged data preprocessing techniques to clean and transform survey data, ensuring high-quality and reliable analysis.
 - Implemented data visualization techniques to create visually compelling charts, and graphs, for effective salary insights.
 - Collaborated with team to design and optimize the salary analysis dashboard, delivering actionable insights to stakeholders.
 - **Tools and Technologies used:** Python, Open AI Model, Regression Model, GPT Turbo 3.5, Google Co-Lab, Streamlit.

Clubs

- **Tau Beta Pie :**
 - Initiation Officer at Tau Beta Pie national engineering honor society
 - Member of Tau Beta Pie national engineering honor society

Hobbies

- Badminton, and Bowling