Vamshidhar Reddy Parupally

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LinkedIn
Portfolio

Education

- **San Jose State University [GPA : 3.9]** — San Jose, California
  Master of Science in Software Engineering. — Jan 2022 - Dec 2023
- **Anurag Group of Institutions [GPA : 3.74]** — Hyderabad, India
  Bachelor of Engineering in Information Technology. — Aug 2016 - June 2020

Skills Summary

- **Programming Languages:** Java, Javascript, Python, SQL, TypeScript.
- **Web Development:** AngularJS, ReactJS, NodeJS, REST API, HTML/CSS, Flask, Spring Boot.
- **Data Base:** Relational DB, Mongo DB, Vertica DB, Cassandra, and No SQL.
- **Others:** AWS, Azure, GCP, DevOps, Docker, CICD, SonarQube, JUnit, Jenkins, Pandas.

Experience

- **Amazon** — Sunnyvale, California
  SDE Intern — Summer 2023
  - Designed a solution for in-memory session management to enhance Alexa's speech request session handling.
  - Through the implementation of in-memory session management, successfully reduced the reliance on Dynamo DB calls and helped the Multitasking team save **$30,000** per annum on DB reads and writes.
  - **Tools and Technologies**: Spring boot, Java, Google Guice, AWS (EC2), Dynamo DB.

- **Tata Consultancy Services** — Hyderabad, India
  Software Developer — 2020 - 2022
  - Developed **Kafka** and **Spark pipeline** to handle the large number of orders during NPI(New Product Introduction), and developed **RESTful APIs** using **Java Spring Boot framework**.
  - Reduced data administration time by 30% by building an end-to-end data management tool to assist **Apple** sales team, using **React JS, Java, Cassandra** and **Vertica db**.
  - Handled User management, authentication by 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 the appointments at an Apple store.
  - **Tools and Technologies**: 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
  - Built anomaly detection system using YOLO V8 and integrated ISAAC ROS image preprocessing pipeline.
  - Created an image annotator for efficient annotation of images in YOLO format using Python and Streamlit.
  - Used jetson developer kit and integrated camera, enabling users to stream and monitor panel defects.
  - **Technologies used:** Python, YOLO V8, NVIDIA ROS Platform, Jetson Developer Kit, React JS, Node JS, AWS S3.

- Autonomous Drone System for Agriculture
  - Developed an autonomous drone system, providing farmers with a streamlined farm monitoring and maintaining solution.
  - Utilized cloud mission planner and Ardupilot simulation to simulate the flight path and ensure efficient drone operation.
  - 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 and Accomplishments

- **Tau Beta Pie :**
  - Initiation Officer and member at Tau Beta Pie, a national engineering honor society
  - Public relations manager at India Student Organization, SJSU
  - Member of IEEE student chapter, Hyderabad

- **Accomplishments :**
  - Ranked 251 (national wide) in CodeVita 2017,a programming contest hosted by TCS