GNANA DEEPIKA VEERAPANENI

Software Engineer

Lubbock, Texas, USA
Phone: 806-702-5200
Gmail
LinkedIn
Portfolio:

SKILLS

PROGRAMMING LANGUAGES:
Python, JavaScript, SQL, Bash, Linux Shell

WEB & BACKEND TECHNOLOGIES:
Django, Flask, React, HTML5, CSS, REST APIs, Microservices

PYTHON LIBRARIES:
NumPy, Pandas, Matplotlib, Scikit-Learn, BeautifulSoup

DATABASES & STORAGE:
PostgreSQL, MongoDB, MySQL, Amazon RDS

TESTING & AUTOMATION:
Pytest, PyUnit, Selenium, Unit Testing, Integration Testing

DEVOPS & TOOLS:
Docker, Kubernetes, Git, Jenkins, Maven, JIRA, GitHub

CLOUD & DEPLOYMENT:
AWS (S3, EC2, Lambda), CI/CD Pipelines

IDE & UTILITIES :
VS Code, PyCharm, MS Office Suite

EDUCATION

TEXAS TECH UNIVERSITY
Lubbock, USA | 2023 - 2025
Master of Science in Computer Science | *CGPS: 3.75/4.0*

SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN
Andhra Pradesh, India | 2017 - 2021
B.Tech in Electronics and Communication Engineering | *CGPA: 9.14/10.0*

CERTIFICATIONS

- **AWS CERTIFIED CLOUD PRACTITIONER**
- **GOOGLE CYBERSECUIRTY CERIFICATE**

SUMMARY

Software Engineer with a strong foundation in computer science and **3+** years of experience designing, developing, and deploying applications using Python and Django. Skilled in Agile and SDLC methodologies for efficient project execution and delivery. Experienced in building scalable, microservices-based backend systems with seamless integration. Proficient in deploying applications on AWS, setting up CI/CD pipelines, managing MySQL databases, and developing RESTful APIs. Knowledgeable in Python libraries such as NumPy, Pandas and Matplotlib for data analysis, visualization, and machine learning tasks. Committed to delivering high-quality solutions through continuous improvement, with a record of completing projects on time.

PROFESSIONAL EXPERIENCE

STUDENT ASSISTANT, *TEXAS TECH UNIVERSITY, USA* OCT 2023– MAY 2025

- Developed and maintained scalable backend applications for hospitality management systems using Python and Django, supporting internal operations such as event scheduling, guest services, and booking management.
- Designed and optimized SQL databases (using Amazon RDS with PostgreSQL) to efficiently store and manage guest, event, and service data, ensuring high performance and data integrity.
- Following SDLC best practices to gather requirements, design system architecture, implement features, perform unit and integration testing, and manage deployments.
- Deployed Django-based applications using AWS services such as Lambda, EC2 and S3, ensuring 99% uptime and seamless scaling during peak usage periods.
- Utilized Python libraries like NumPy and Pandas to process, analyze, and generate insights from operational and service usage data, supporting data-driven decision-making.
- Collaborated with staff and management to continuously improve backend functionality, streamline service workflows, and enhance overall system reliability and performance.

SOFTWARE ENGINEER, *L&T TECHNOLOGY SERVICES, INDIA* MAY 2021– JUNE 2023

- Developed and maintained Python scripts for automation of validation and verification tasks in automotive embedded systems, improving test efficiency and reducing manual errors.
- Created and executed automated functional and regression tests using Pytest and Selenium, validating software components for vehicle control units.
- Implemented CI/CD pipelines for automotive software projects by containerizing applications with Docker and orchestrating deployments using Kubernetes, ensuring scalable, reliable, and fast delivery cycles.
- Led a proof-of-concept (POC) to containerize automotive testing frameworks by building Docker images for in-vehicle communication simulators and deploying them via Kubernetes clusters, optimizing test resource management and scalability.
- Collaborated with cross-functional teams to troubleshoot software integration issues, enhance validation cycles, and ensure compliance with automotive quality standards.

PROJECTS

Air Quality Monitoring Web Application

- Developed a responsive web application using HTML, CSS, and JavaScript to fetch air pollution data based on user-input coordinates or current location.
- Displayed pollutant concentrations and air quality status using an interactive modal popup, enhancing usability across devices.

Windstorm Prediction Using Machine Learning

- Built and deployed a machine learning model using Python and scikit-learn to predict windstorm likelihood based on humidity, pressure, and temperature inputs.
- Deployed the model through a JavaScript-based web app with real-time user input and dynamic result display.