

RACHANA VALLAPALLI

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PROFESSIONAL SUMMARY

Results-driven Software Engineer and Quality Engineering Analyst with a proven ability to design, develop, and automate solutions for data processing, API testing, and performance monitoring. Adept in Python, MySQL, Java, Power BI, and Tableau, with a strong background in quality assurance, automation, and cloud deployment. Skilled in optimizing data workflows, streamlining testing processes, and improving system reliability. Seeking opportunities to apply analytical and problem-solving skills to develop innovative software solutions.

TECHNICAL SKILLS

- Programming Languages: Python, Java, SQL, JavaScript
- Databases: MySQL, PostgreSQL, SQLite, Redis
- Testing & Automation: Pytest, Unittest, Selenium, JMeter
- Data Analysis & Visualization: Pandas, NumPy, Matplotlib, Power BI, Tableau
- Cloud & DevOps: AWS, Azure, GitHub, Docker, Kafka
- Tools & Frameworks: Flask, Django, Celery, OpenPyXL, BeautifulSoup, NLTK, Spacy
- Soft Skills: Problem-Solving, Team Collaboration, Agile Methodologies

PROFESSIONAL EXPERIENCE

Python Developer | PamTen Inc | 06/2025 – Present

- Architected scalable ETL and streaming solutions using PySpark, Kafka Streams, and Databricks for processing over 1M candidate and job records.
- Implemented advanced data-matching algorithms with spaCy and sentence-transformers to accurately rank resumes against job descriptions.
- Built reconciliation pipelines between PostgreSQL and Snowflake, ensuring data integrity and reliability across environments.
- Designed profiling scripts to detect anomalies, validate schema conformance, and improve data quality by 25%.
- Documented data cleansing methodologies and lineage, aligning with governance policies and compliance.
- Partnered with product owners and QA teams to establish Agile processes, code reviews, and CI/CD best practices.

Quality Engineering Analyst | Binare IT Solutions | 07/2022 – 12/2023

- Developed Python automation scripts for efficient API log extraction using regular expressions (re) and text parsing techniques.
- Automated the extraction of API details from Excel files using pandas and OpenPyXL, improving data processing accuracy and reducing manual effort.
- Diagnosed and resolved Python script issues, implementing logging, exception handling, and debugging techniques to optimize code performance.
- Created automated test scripts with Pytest and Unittest to ensure robust performance and usability testing.
- Processed streamed data with Kafka Streams to analyze execution time, failure rates, and system performance.
- Improved real-time data querying using Redis for structured data storage and efficient retrieval.

Software Developer | Vispro Soft Tech Solutions | 03/2021 - 04/2022

- Implemented data processing pipelines using NumPy and Pandas, improving analysis efficiency and accuracy.
- Automated web scraping with Scrapy and BeautifulSoup to extract, clean, and structure large datasets.
- Built testing frameworks using Pytest and Unittest, reducing defect resolution time by 30%.
- Developed real-time monitoring dashboards in Tableau to track test execution and performance metrics.
- Suggested and implemented Kafka for real-time data processing, optimizing large-scale data pipelines.

Software Engineer | Portfoliss Solutions | 09/2019 - 02/2021

- Designed NLP-based algorithms using NLTK and Spacy to automate document parsing and keyword extraction.
- Extracted structured data from Wikipedia and multiple sources, organizing content into Excel reports via OpenPyXL.
- Developed analytics dashboards in Insis Suite to improve operational efficiency in manufacturing industries.

Python Developer | Value SoftTech Solutions | 06/2016 - 08/2019

- Built and deployed Flask-based applications, including a to-do list and expense tracker with CRUD operations.

- Designed a MySQL-based marketing lead database, integrating data from multiple digital sources.
- Wrote and maintained unit tests using Test-Driven Development (TDD) principles to ensure software quality.

EDUCATION

- Master's in Information Science University of New Haven | Spring 2024 – Summer 2025
- Bachelor of Technology in Information Technology Gandhi Institute of Technology and Management | 2012 – 2016

CERTIFICATIONS

- AWS Certified Solutions Architect (In Progress)
- Tableau Desktop Specialist
- Python for Data Science (Coursera)

PROJECTS & ACHIEVEMENTS

- Developed a Corporate Employee Performance Management System with real-time analytics, using Flask, PostgreSQL, and Tableau.
- Automated API data extraction workflows, reducing processing time by 40%.
- Designed interactive Power BI dashboards for performance monitoring and business insights.