Mangesh Raut

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Portfolio

Summary

Software Engineer skilled in full-stack development (Java, Python, AngularJS) and cloud solutions (AWS, Docker), currently enhancing energy analytics tools at Customized Energy Solutions (40% efficiency gain). Previously honed expertise in network engineering (35% latency reduction at Harshwardhan Enterprises) and Java development (20% code optimization at IoasiZ), alongside part-time roles managing databases at Aramark and Drexel University. Eager to leverage hands-on experience with scalable systems, CI/CD pipelines, and machine learning to drive innovation in fast-paced teams. Actively pursuing roles focused on emerging technologies to accelerate career growth.

Technical Skills

Languages: Java, Python, SQL, JavaScript

Frameworks: Spring Boot, AngularJS, TensorFlow, scikit-learn

Cloud/DevOps: AWS, Docker, Jenkins, Terraform

Databases: PostgreSQL, MongoDB, MySQL

Tools: **Git**, Jira, **Tableau**, Wireshark **Networking**: **Cisco**, OSPF/BGP

Experience

Customized Energy Solutions

Philadelphia, PA

Software Engineer

Aug 2024-Present

Full-Stack Development: Built energy analytics dashboards using **Java Spring Boot** (backend) and **AngularJS** (frontend), reducing data rendering latency by 40% via **RESTful API** optimization

Cloud DevOps: Orchestrated AWS Lambda/EC2 workflows with Terraform IaC, accelerating deployment by 35% through Dockerized Jenkins CI/CD pipelines

Machine Learning: Enhanced demand forecasting accuracy by 25% using **Python**-based LSTM models (**TensorFlow**) with feature engineering

IoasiZPiscataway, NJSoftware EngineerJul 2023–Jul 2024

System Modernization: Refactored legacy Java monoliths into modular services using Spring Framework,

cutting code redundancy by 20% (SOLID principles) **Distributed Systems:** Resolved 50+ bugs in microservices architecture, boosting sprint efficiency by 15% via

JUnit/Mockito test suites

Performance Optimization: Integrated Redis caching for inventory APIs, achieving 30% faster response times

through query tuning

Aramark Philadelphia, PA

Database Administrator (Part-Time & Internship)

Jun 2022-Jun 2023

AWS Automation: Developed **Python** scripts to manage event inventory systems on **AWS**, reducing manual errors by 25% for 200+ events

Data Migration: Transitioned 3+ legacy databases to **AWS RDS**, improving scalability for high-traffic event analytics

Drexel University Philadelphia, PA

Database Administrator (Part-Time)

Sep 2021-May 2022

SQL & Compliance: Maintained **HIPAA-compliant MySQL** databases for 5K+ student records, ensuring 99.9% accuracy with constraint-driven validation

Reporting Tools: Streamlined data workflows using **Tableau** and **Excel**, cutting report generation time by 20% for administrative teams

Harshwardhan Enterprises

Pune, India

Network Engineer

Jun 2020-Jun 2021

Network Optimization: Deployed **Cisco ASR 9000** routers with **OSPF/BGP** protocols, slashing latency by 35% in enterprise WANs

Troubleshooting: Resolved 500+ connectivity issues via **Wireshark** analysis, achieving 90% SLA compliance for client networks

Scripting: Created Python-based monitoring tools, reducing manual diagnostics by 50%

Education

Drexel University Philadelphia, PA

Master of Science in Computer Science, GPA: 3.3 Sep 2021—Jun 2023

Pune University Pune, India

Bachelor of Engineering in Computer Engineering, GPA: 3.6 Jun 2017–Jun 2020

Projects

Angular, Flask, SQLite

Starlight Blogging Website

Jan 2023-Apr 2023

Built a blogging website with user authentication and post-management features Attracted 100+ users within three months and enabled interactive community features

Python, OpenCV, Machine Learning

Real-Time Face Emotion Recognition System

Jun 2019-Jun 2020

Planned a real-time emotion recognition model with 95% accuracy Arranged in retail stores and institutions, reducing incidents by 50%

Java, Database Integration, Automation

PC Crime Detector

Jun 2016–Jun 2017

Implemented security automation, reducing breaches by 80% Deployed in institutions, decreasing security incidents by 50%

Publications

International Journal of Future Generation Communication and Networking

Real-Time Face Emotion Recognition System

May 2020-Jun 2020

Published research on facial recognition algorithms and image processing Explored elastic bunch map graphing, PCA, and cascading techniques

Certifications

Google - Prompt Design in Vertex Al Skill Badge, Digital Marketing, Online Marketing Fundamentals **IBM** - Cybersecurity Fundamentals, Data Fundamentals (SQL/NoSQL), Explore Emerging Tech (AI), Fundamentals of Sustainability and Technology

Cisco - Networking Basics (OSPF/BGP), CCNP (Routing & Switching)

Microsoft - JavaScript Programming