Aakruti Ghatole
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EXPERIENCE

Associate Software Developer
Siemens Digital Industries Software | July 2022 – August 2024 | Pune, India

- Improved the Function Configuration Framework (FCF) by developing new UI features, resulting in a 20% increase in responsiveness and usability.
- Reduced QA and customer issues by 15% through effective bug diagnosis and resolution in an Agile environment.
- Refactored core components in C++ using OOP principles and Component Object Model (COM), decreasing application load time by 10%.
- Designed and executed automated test cases, reducing manual QA time by 25% and accelerating release cycles.

Data Science Intern
Technocolabs Software | June 2021 – July 2021 | Remote

- Developed a sentiment-driven stock prediction model using NLP techniques, achieving 85% classification accuracy and improving trend forecasting.
- Designed and automated ETL pipelines to ingest and process financial news data, enabling real-time analysis for market insights.
- Built and deployed a Flask-based web application on Heroku with an interactive UI, handling a 300% increase in simulated user traffic.
- Created dynamic dashboards for stock movement trends, enhancing decision-making for non-technical stakeholders.
- Collaborated with data engineers to optimize API response times by 30%, ensuring data delivery to frontend.

PROJECTS

Cross Border Organ Donation System – Remote (Dec 2024)
Java, NetBeans, OOP, Relational Database, Java Mail API

- Developed a Java-based approval dashboard to track and manage pending organ donation requests, increasing approval workflow efficiency by 40%.
- Implemented real-time data updates using Java Swing and DefaultTableModel, enhancing stakeholder visibility through intuitive interfaces.
- Built automated email alert systems using Java Mail API, reducing manual follow-ups and keeping medical teams informed of approval statuses.
- Integrated with a relational database (dbo4) to optimize backend query performance and ensure data integrity, reducing response times by 25%.

Decentralized Token Analytics Dashboard – Boston, MA (April 2025)
Python, AWS Lambda, API Gateway, DynamoDB, FastAPI, Terraform, GitHub Actions, Blockchain APIs

- Developed a scalable, serverless analytics platform to track and visualize real-time blockchain token prices using CoinGecko and Etherscan APIs.
- Developed backend APIs with FastAPI, deployed via AWS Lambda and API Gateway, achieving 99.9% uptime.
- Provisioned AWS infrastructure (DynamoDB, Lambda, API Gateway) using Terraform, reducing manual deployment errors by 100%.
- Implemented CI/CD pipelines using GitHub Actions, automating backend builds and infrastructure deployment.
- Enforced security using IAM-based RBAC and AWS Well-Architected Framework, ensuring compliance.
- Designed an optional React frontend hosted on AWS S3, delivering seamless REST API integration and improving user engagement.

EDUCATION

Master of Science in Information Systems
Northeastern University | Boston, MA | Sept 2024 – Dec 2026
Involvement : Senator, Graduate Student Government (GSG) | Feb 2025 – Present

Bachelor of Technology in Mechanical Engineering
Cummins College of Engineering for Women | Pune, India | Aug 2018 – June 2022

SKILLS

Languages & Frameworks: Python, Java, C++, SQL, FastAPI, Flask, Spring Boot
Cloud & DevOps: AWS (Lambda, API Gateway, S3), Terraform, GitHub Actions, IAM, CI/CD
Tools & Technologies: Git, Heroku, Jira, Polarion, REST APIs, Blockchain APIs
Databases: DynamoDB, MySQL, PostgreSQL, MongoDB, BigQuery