Aakruti Ghatole

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SUMMARY

Results-driven Blockchain Engineer with hands-on expertise in smart contract development, decentralized finance (DeFi) protocols, and Web3 integrations. Skilled in Solidity, Rust, and AWS Cloud services to deliver scalable and secure blockchain applications. Experienced in DAO governance design, token analytics, and CI/CD automation for cloud-native deployments.

EDUCATION

Northeastern University M.S. in Information Systems | Boston, MA | Sept 2024 – Dec 2026 Senator, Graduate Student Government (GSG) | Feb 2026 – Present

Cummins College of Engineering for Women B. Tech in Mechanical Engineering | Pune, India | Aug 2018 – June 2022

SKILLS

Tools & Technologies: AWS Lambda, API Gateway, DynamoDB, IAM, CloudWatch, Terraform, GitHub Actions, Agile, Flask, Git, WordPress, Android Studio, Heroku, MATLAB

Data Analysis: Token Analytics, CoinGecko API, Etherscan API, Sentiment Analysis, Data Cleaning, Visualization Blockchain: Solidity, Rust, Web3 Integration, Smart Contracts, Blockchain Data Ingestion, Quantitative Modeling

EXPERIENCE

Siemens Digital Industries Software

Associate Software Developer | Pune, India | July 2022 - August 2024

- Improved UI responsiveness by 20% by developing new features in the Function Configuration Framework using Agile methodologies.
- Collaborated with cross-functional Scrum teams to resolve customer-reported issues and QA defects, resulting in a 15% drop in support tickets.
- Reduced load times by 10% by refactoring legacy code and enhancing software maintainability.
- Decreased manual testing cycles by 25% by creating automated test cases, accelerating release timelines.
- Utilized Polarion dashboards for tracking QA metrics and task completion, contributing to development pipelines.

Technocolabs Software

Data Science Intern | Remote | June 2021 – July 2021

- Built a sentiment analysis model using NLP to forecast stock movements, achieving an 85% prediction accuracy.
- Developed and deployed a web-based dashboard using Flask and Heroku, handling a 300% surge in user traffic.
- Designed dynamic visualizations using Python and Matplotlib to present sentiment trends, enabling better user decision-making.

PROJECTS

Decentralized Token Analytics Dashboard - Boston, MA (April 2025)

Python, AWS Lambda, API Gateway, DynamoDB, FastAPI, Terraform, GitHub Actions, Blockchain APIs

- Developed a serverless analytics platform using AWS Lambda and API Gateway, reducing infrastructure management overhead by 30%.
- Integrated CoinGecko and Etherscan APIs to automate token data ingestion, enabling real-time price tracking.
- Provisioned AWS infrastructure using Terraform and automated deployments with GitHub Actions, cutting deployment time by 40%.
- Implemented IAM-based RBAC to enhance platform security, ensuring compliance with AWS Well-Architected Framework.
- Delivered an optional React frontend on AWS S3, improving user engagement through interactive RESTful API visualizations.

Crypto Portfolio Optimizer (DeFiQuant) – Boston, MA (March 2025)

Python, Rust, Solidity, Foundry, DAO Governance, ML Strategies

- Built a smart portfolio optimizer using Python for strategy modeling, Rust for backend data processing, and Solidity for on-chain asset rebalancing on Ethereum.
- Designed an on-chain governance layer for future DAO implementation with price oracle integration to enhance decentralized decision-making.
- Achieved 20% gas cost efficiency improvement through optimized smart contract logic and simulation with Foundry tools.
- Currently extending the system with DAO governance features, price oracles, and ML-driven asset selection strategies for improved portfolio management.