ADITYA SAHU

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SUMMARY

New York City based Software Engineer with 4+ years of experience in developing, optimizing and scaling products, working with SQL and NoSQL databases such as MongoDB and PostgreSQL. Proficient in JavaScript and C++ with a focus on designing large scale distributed customer-facing systems. Experienced in test-driven development within Agile environments to deliver high-quality, secure software. Exposure to software development with Agentic AI.

EXPERIENCE

Amazon Web Services (AWS)   **Jul 2025 – PRESENT**

Software Engineer, Artificial Intelligence Systems, New York, NY

- Delivered customer-facing Quick Suite powered by Retrieval Augmented Generation (RAG) to over 100k customers, accelerating launch readiness by leading the Operational Readiness Review and streamlining service deployment workflows
- Increased system reliability by ~40% and reduced CI/CD pipeline failures by 60% through the implementation of alarms, integration tests, and observability infrastructure and dashboards
- Improved customer experience and service stability by standardizing exception handling across distributed microservices, cutting runtime faults by 35% and enabling faster incident triage and recovery
- Agentic AI Systems: building scalable 1P Agents and handling Agent-to-Agent communication using MCP Servers

University of Massachusetts Dartmouth   **Jan 2024 – May 2025**

Teaching Assistant, Operating Systems, Dartmouth, MA

- Designed 10+ OS lab materials and led labs for over 200 students, graded papers, proctored tests, provided programming mentorship
- Conducted 12 labs on C programming, covering advanced topics like system calls, message queues, and inter-process communication

Signzy Technologies   **July 2020 – June 2023**

Software Engineer, Bengaluru, India

- Built 3 scalable, fault-tolerant, low cost distributed storage, index, and query products that increased efficiency by 30%
- Developed and maintained 55 REST APIs written in Node.js and Python with MongoDB, Elasticsearch for data storage, serving 120+ clients
- Led the API Dev Team, building six of the most consumed APIs which generated around 30% revenue in the year 2021
- Achieved a 76% cost-reduction and 15% performance increase using code optimization and scaling across the top 20 APIs by usage annually

Spade Infotech   **June 2019 – August 2019**

Software Development Engineer Intern, Gurugram, India

- Developed a full-stack insurance management web application based on Ethereum blockchain by using Express.js and Bootstrap
- Implemented offline access feature in an AngularJS ionic mobile application project using SQLite for cache management

EDUCATION

- **University of Massachusetts Dartmouth, MA**   **May 2025**
  Master of Science, Computer Science, 4.0/4.0 GPA
- **GGSIP University, New Delhi, India**   **May 2020**
  Bachelor of Technology, Computer Science & Engineering, 8.01/10 CGPA

SKILLS

Frameworks/Tools: Express.js, React, Git, MySQL, MongoDB, FastAPI, Fastify, Redis, Docker, AWS, Kubernetes, Bash, OpenCV, Web3.js, Beautiful Soup, ELK Stack, Nginx, MQTT, Elasticsearch, Jenkins, Flask, HTML5, CSS3, Figma
Languages: C, C++, Python, TypeScript, JavaScript, Swift, Solidity, SQL

PROJECTS

Lemme Learn More (LLM)   **October 2024**

Developed a web app that transforms information into engaging formats like podcasts, shorts/reels and flashcards using React and Python

- [Project link] - Awarded as one of the winners at YHack'24, Yale University

Mobile Applications   **August 2019 – PRESENT**

Built and launched four mobile applications from scratch, generating 200+ downloads and a 60% user engagement rate within the first month

- Dowd Solar Pump: an iOS app using Swift, MQTT to automate home gardening systems powered by solar energy. Deployed on AWS EC2.
- PURE: a crowdsourced golf course conditions reviewing app on iOS using Swift, Node.js, MongoDB; deployed on Heroku Cloud
- Remindoze: a utility Android App for users who share subscription with their friends. Utilized Java, Node.js, MongoDB
- Smart Classroom: Applied head pose estimation, face recognition and hand gesture analysis to identify real-time audience feedback during lectures leveraging Flutter, Python, NoSQL

Project OpAlert   **August 2019**

Deployed a full stack web application on Google App Engine to notify students about the job opportunities at campus using web scraping

- Received more than 50 subscribers and sent over 2000 notification alerts in the first three months of its launch

OPEN-SOURCE CONTRIBUTIONS

Google Summer of Code Participant with LibreOffice   **May 2020 – August 2020**

- Completed the project "Move Gallery Code to Use ZIP Files" for the open-source office suite LibreOffice; received a completion certificate
- Standardized ZIP and XML to store theme files and metadata to make the gallery storage system consistent

Code Contributor at LibreOffice   **2018 – PRESENT**

- Fixed, filed and contributed to over 50 stories using C++, Python (for writing unit tests) and GTK for LibreOffice (Link to Pull Requests)