#### SARVESH SHAH

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#### **SUMMARY**

Full-stack Cloud and AI Developer with 2+ years of experience across AWS, React, Node.js. Built and deployed scalable web and cloud applications, reducing latency by up to 95% and automating CI/CD pipelines across multiple environments. Integrated LLMs like OpenAI GPT with LangChain to accelerate internal tool performance and search accuracy.

#### **EDUCATION**

# Pace University, Seidenberg School of Computer Science and Information Systems

New York, NY

Master of Science (MS) in Computer Science | GPA: 4.00 / 4.00

May 2026

Relevant Coursework: Operating Systems, Computer System and Concepts, Java DS, Database Management Systems, Artificial Intelligence, Parallel Computing, Algorithms & Computing Theory, ML, Mobile Application Development

### Mumbai University, KJ Somaiya Institute of Technology

Mumbai, India

BTech in Electronics and Telecommunication | GPA: 8.2 / 10.0

May 2022

Relevant Coursework: Cloud Computing & Security, Natural Language Processing, Web Design, Management Information Systems, Image Processing & Machine Vision, Digital Circuit Logic Design

#### **PROFESSIONAL EXPERIENCE**

## **Tata Consultancy Services**

Mumbai, India

Systems Engineer – AWS DevOps Cloud Developer

July 2022 - August 2024

- Re-architected a high-traffic e-commerce platform, reducing latency from 15-20 seconds to under 500 milliseconds by leveraging NOSQL Database **DynamoDB's efficient pagination** and reusable data-fetching functions.
- Led a team of 5 to optimize AWS architecture with Auto Scaling and Load Balancing, increasing system availability by 35% and reducing infrastructure costs by 20%.
- Enforced IAM best practices across 100+ user roles, implementing MFA and least-privilege access, reducing security incidents by 60%.
- Built 5+ serverless applications using Lambda, API Gateway, and DynamoDB; migrated 50K+ records to RDS and DynamoDB, improving data retrieval speeds by 40% and cutting maintenance costs by 25%
- Implemented **AWS GenAI-powered chatbot**, improving customer engagement and support efficiency by 40% using vector databases for Jira and GitHub Docs integration.

## **PROJECTS**

## Early Detection of Heart Disease Using Decision Tree and Naïve Bayes

February 2025 – April 2025

 Developed supervised classification models using Scikit-learn to predict cardiovascular disease risk based on 300K+ health records. Applied data cleaning, label encoding, normalization, SMOTE, and K-Fold Cross Validation.

# Find Your Flight - Github

January 2025 - March 2025

 Developed a full-stack flight search platform with AWS-hosted frontend. Integrated filterable results with PostgreSQL, used React Router for page transitions, and deployed using CI/CD via GitHub Actions.

# AWS Databases: DynamoDB Query vs Scan Optimization (RESEARCH)

September 2024 – December 2024

Benchmarked and analyzed performance between Scan and Query operations. Implemented Global Secondary Indexes and parallel scans to boost cost-efficiency and speed.

### Web Application for Sentimental Analysis with NLP - (PUBLISHED) Paper - Github

January 2022 - April 2022

• Built a Flask-based web app to classify sentiment from product reviews. Achieved 90% accuracy using NLP models and visualized data insights using Python libraries.

# **Stock Price Manipulation Detection (CASE STUDY)**

November 2021 – January 2022

• Conducted a case study using GANs and LSTMs to detect stock anomalies from time-series data, focusing on fraudulent activity simulation and anomaly prediction.

# **TECHNICAL SKILLS**

**Programming & Frameworks:** Python, Java, C++, SQL, Bash, HTML, CSS, JavaScript, Flask, Django, React, Bootstrap, Tailwind CSS **Cloud Platforms:** AWS (Lambda, EC2, RDS, S3, DynamoDB, IAM, CloudFormation), Azure, Google Cloud

**AI/ML:** PyTorch, TensorFlow (basic), Scikit-learn, Spacy, TextBlob, GANs, LSTM, Jupyter, Pandas, NumPy, Matplotlib, Seaborn, NLP, Sentiment Analysis, Data Preprocessing

DevOps & Tools: Git, GitHub Actions, CI/CD, Agile Methodology, Unit Testing, JIRA

Databases: MySQL, PostgreSQL, MongoDB, DynamoDB

Awards: National Cyber Olympiad International 45th Rank (February 2018)

#### **CERTIFICATIONS**