Shreya Mahajan

Santa Clara, CA| samahajan@scu.edu | +1 (669)-230-9554 | LinkedIn: shreyamahajan2105 | Github

Education

Santa Clara University (Santa Clara, CA) *Sept 2024 – Present*
Master of Science in Computer Science and Engineering

University of Mumbai *June 2020 – May 2024*
BE in Information Technology with Honors in Artificial Intelligence and Machine Learning.

Skills

Languages: JavaScript (TypeScript), Python, Java, SQL
Cloud & Infrastructure: AWS (Lambda, API Gateway, DynamoDB, S3, EC2, IAM, CloudWatch), Docker, Kubernetes, REST APIs
AI & Machine Learning: Large Language Models (LLMs), NLP, LangChain, LLM Integration Evaluation, AWS Rekognition
Frameworks & Tools: React, Spring Boot, Flask, Git, GitHub Actions, Linux, PostgreSQL, MySQL

Achievements

Winner – AWS × INRIX × HighView Hackathon (Santa Clara University, ACM) *Oct 2025*

- **Studentlytics** — *AWS × INRIX Hackathon 2025 (1st Place, HighView Prize)*
- Architected and deployed a **real-time, cloud-native serverless platform** integrating AWS Lambda, API Gateway, DynamoDB, S3, Step Functions, and Bedrock to automate attendance and engagement tracking, reducing instructor effort by **80%**.
- Designed, tested, and **debugged RESTful APIs and event-driven workflows**, resolving authentication (IAM), payload validation, and cross-service integration issues to ensure low-latency, fault-tolerant execution.
- Integrated **AWS Rekognition** for AI-driven visual attendance detection and built a **React + TypeScript dashboard** to stream real-time insights, implementing monitoring via CloudWatch for reliability.
- Documented API flows and architecture decisions to streamline onboarding for collaborators, presenting technical trade-offs and scalability considerations to judges among **254 participants**.

Experience

Graduate Teaching Assistant, Leavey School of Business (Santa Clara University) *Jan 2026 – Present*

- Led review sessions and office hours, translating complex technical concepts into clear explanations for diverse student groups.
- Managed grading workflows and processed structured data efficiently, ensuring timely and transparent feedback.

Graduate Research Assistant, Leavey School of Business (Santa Clara University) *Oct 2025 – Present*

- Built and maintained reproducible data pipelines for large-scale financial datasets, performing structured data collection, dataset matching, and automated validation to ensure accuracy and integrity.
- Automated data cleaning, transformation, and regression workflows using Python, STATA, and Excel, reducing manual processing time and improving reporting efficiency.
- Diagnosed inconsistencies across multi-source datasets, debugging data mismatches and implementing validation checks to prevent downstream errors in econometric analysis.

Projects

FitGeek: Modelling ML-Based Recommendation System for Fitness and Wellness *Jan 2024 - Apr 2024*

- Secured the **Best Project Award** at the Major Project Exhibition, outperforming **30+ project teams** through strong collaboration and technical execution.
- Created a **machine learning–driven recommendation system** using **content-based filtering and K-Nearest Neighbors (KNN)**, delivering personalized workout and diet plans; implemented in **Java (OOP)** with user data stored in a **MySQL database**, enabling **10+ new application features**.
- Built a **diabetes prediction model** using **Support Vector Machines (SVM)**, trained on the **Kaggle PIMA dataset**, achieving **88% accuracy**, and developed a **Stress Level Detector** to support improved healthcare insights.

Certification

AWS Certified Solutions Architect – Associate (SAA-C03) — Score: 835/1000 *Nov 2025*

- Demonstrated expertise in architecting **scalable, event-driven, API-centric cloud systems** using AWS services including Lambda, API Gateway, DynamoDB, S3, IAM, and CloudWatch.
- Validated knowledge of **authentication, distributed system design, high availability, monitoring, and cost optimization** for production-ready applications.

Publications

FitGeek: Modelling ML-Based Recommendation System for Fitness and Wellness *March 15–16, 2024*
International Conference on Advanced Communication, Energy and Big Data (ICACEBD-24) **Research Paper**

Genetic Disorder Prediction using the K-Nearest Neighbors Algorithm *2023*
International Journal For Multidisciplinary Research (IJFMR) **Research Paper**