

# SURIYA CHELLAPPAN

+1(408)455-4739 ♦ suriya.chellappan@sjsu.edu ♦ LinkedIn ♦ GitHub ♦ Portfolio ♦ San Jose, CA

## EDUCATION

- **San Jose State University, California** Aug 2024 - May 2026  
Master of Science in Engineering  
CGPA: 3.4/4  
**Specialization:** AI/ML & Cloud Technologies
- **Anna University, Chennai, India** Nov 2020 - April 2024  
Bachelor of Technology in Information Technology  
CGPA: 9.32/10

## EXPERIENCE

- **Student Assistant, 3D Unity Development, San Jose State University, CA** Jan 2025 – Present
  - Engineered interactive 3D simulation models in Unity, enhancing realism and user engagement for educational VR demos.
  - Optimized rendering and physics performance, boosting frame rates by **20%** and reducing glitch artifacts.
- **Member, Machine Learning SJSU Club, San Jose State University, CA** Aug 2024 – Present
  - Developed a multimodal ML pipeline using ensemble models to enhance smart home voice recognition accuracy by **25%**.
  - Streamlined reinforcement learning training by compressing state spaces with unsupervised clustering, improving policy generalization across 3 environments.
- **Data Analyst Intern, E-Parisaraa Pvt. Ltd., Bangalore, India** May 2023 – Nov 2023
  - Analyzed real-time dismantling and recovery data using **Python** and **SQL**, improving material classification precision by **20%**, and built predictive models that increased batch revenue by **12%** and profit margins by **9%**.
  - Designed interactive **Tableau dashboards**, cutting executive reporting turnaround by **40%**.

## PROJECTS

- **CollabSphere – AI-Powered Community Chat Platform** Jan 2025 – Mar 2025
  - Built a full-stack real-time chat app using **Next.js**, **FastAPI**, **PostgreSQL**, and **WebSockets**, with smart replies and moderation via **GPT-4** and **Whisper**.
  - Deployed on **AWS EKS** using **Docker**, **Kubernetes**, **Terraform**, and **GitHub Actions**, boosting moderation efficiency by **25%**.
- **VisionMeet – AI-Supported Video Conferencing Platform** Feb 2025 – Apr 2025
  - Built a video conferencing system with **React.js**, **Node.js**, and **MongoDB** supporting chat, screen sharing, and participant analytics.
  - Integrated **GPT-4**, **AWS Transcribe**, and **Azure Emotion API** for meeting insights, and deployed to **AWS ECS & EKS** using **Docker**, **Terraform**, and CI/CD workflows.
- **PolyChat – Multilingual & Emotion-Aware Chat App** Mar 2025 – May 2025
  - Developed a multilingual chat app using **Next.js**, **Node.js**, and **Socket.IO**, featuring real-time translation and emotion detection.
  - Integrated **AWS Translate**, **Comprehend**, and **GPT-4**, and deployed via **Docker**, **Kubernetes**, and CI/CD on **AWS EKS**.
- **BrandSnap – Instant Brand Identity Generator** Apr 2025 – May 2025
  - Built a SaaS tool to instantly generate brand kits including logos, color palettes, and pitch decks using **GPT-4** and **Stability AI**.
  - Implemented async asset delivery via **Celery** + **Redis** and hosted the app on **Azure AKS** with infrastructure-as-code via **Terraform**.
- **Agentic AI RAG Enterprise Assistant** May 2025 – Present
  - Built an enterprise assistant with **GPT-4**, **LangChain**, and **Pinecone** to automate tasks across **Google Workspace**, **Outlook**, and **Jira**.
  - Deployed via **Docker**, **Kubernetes**, and **Terraform** on **AWS EKS**, with CI/CD improving task scheduling efficiency by **35%**.

## SKILLS

- **Programming Languages:** C, C++, Python, Java, JavaScript, SQL, R
- **AI/ML:** Scikit-Learn, TensorFlow, PyTorch, OpenCV, NLP, MLOps, LLMs, Transformers, RAG
- **Frameworks:** Flask, ReactJS, NextJS, Flutter, Git, Streamlit
- **Developer Tools:** Docker, Kubernetes, CI/CD Pipelines (Jenkins, GitHub Actions), Jira, Ffmpeg
- **Technologies:** AWS, GCP, Azure, MySQL, APIs, MongoDB, PostgreSQL, Unity, Blender

## CERTIFICATIONS

- **Google Data Analytics** Aug 2023
- **Java Full Stack - Wipro** May 2023
- **Google IT Automation in Python** Sep 2022

## ACHIEVEMENTS

- **AWS Cloudathon @ SJSU – 2nd Place Winner** Apr 2025
  - Designed and deployed a scalable cloud architecture using React.js, FastAPI, ECS Fargate, and Aurora PostgreSQL. Showcased strong DevOps, cloud security, and teamwork skills through Terraform-driven AWS infrastructure.