

Adithya Sudhindra

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Education

University of Southern California

Master of Science in Computer Science, GPA: 3.74/4.0

Jan 2025 – Dec 2026

Los Angeles, CA

- Coursework: Analysis of Algorithms, Operating Systems, Distributed Systems, Information Retrieval and Web Search Engines, Machine Learning for Data Science, Applied NLP, Foundations of AI

JSS Academy of Technical Education

Bachelor of Engineering in Computer Science, CGPA: 9.24/10.0

Aug 2019 – Jun 2023

Bengaluru, India

- Coursework: Data Structures, Web Technology, Mobile Application Development, Database Management Systems, Big Data Analytics, NoSQL Database, Digital Image Processing, Data Mining and Data Warehousing

Technical Skills

Languages: Python, Java, C, C++, SQL, JavaScript, Kotlin, R

Frameworks & Tools: Django, Flask, Streamlit, Docker, AWS, GCP, Java EE, Maven, Git, Jira, Postman, React, Node.js

ML & AI Libraries: TensorFlow, PyTorch, Scikit-learn, LangChain, OpenCV, NumPy, Pandas, Matplotlib, Seaborn, Statsmodels

Databases: MySQL, PostgreSQL, MongoDB, Firebase, Hadoop, VectorDB

Testing & Methodologies: JUnit, CI/CD, Agile Scrum, TDD

Areas of Expertise: Full-Stack Development, Applied Machine Learning, Computer Vision, Generative AI, Retrieval-Augmented Generation (RAG), Cloud-Native Microservices, Scalable and Distributed Architectures

Experience

Mercedes-Benz Research and Development India

Jul 2023 – Dec 2024

Bengaluru, India

Consultant (Software Developer)

- Designed, implemented, and deployed **15+ scalable full-stack features** for a distributed Java enterprise system using **JDBC, EJB, and Primefaces**, enhancing performance for **thousands of daily users**.
- Delivered sprint goals **25% ahead of schedule** by optimizing Agile workflows and enhancing team coordination, improving overall development velocity.
- Engineered an **LLM-powered documentation system** using GPT-4o, Ada API, and Streamlit; increased user help-file engagement by **30%**.
- Modernized a **17-year legacy codebase** by introducing modular architecture, integrating **CI/CD pipelines and JUnit-based automated testing**, ensuring 100% production integrity and zero-downtime releases.

Saigeware Technologies Pvt Ltd

Feb 2023 – Apr 2023

Bengaluru, India

AI and Data Science Intern

- Performed **VAE-based feature extraction** on clinical image data (800+ patients) to learn robust latent representations for downstream modeling.
- Built an **end-to-end ML pipeline** on multimodal healthcare data (image + audio) using a Random Forest + CNN ensemble, boosting multiclass classification accuracy from **55% → 75%** and enabling scalable predictive analytics.
- Engineered **data extraction and visualization pipelines** on a large-scale **US healthcare dataset (1.2B+ records)**, automating workflows and surfacing key clinical trends to improve reporting efficiency by 30%.
- Designed and validated **stroke-risk prediction models**, enabling scalable analytics and supporting early-intervention insights.

Projects

Operating System Development | C, Linux, x86 Assembly

- Implemented **core OS features** including process scheduling, memory management, and system calls; achieved **fault-tolerant performance** through low-level debugging in Linux.

AI-Based Image Generation | Stable Diffusion, CLIP

- Reproduced Stable Diffusion using **80K+ images**; optimized CLIP-guided text-to-image generation pipeline, improving coherence by 25% and achieving **81% artist imitation accuracy**.

Restaurant Reservation System | Django, PostgreSQL

- Designed and developed a **scalable full-stack web app** with **authentication, CRUD APIs, and real-time table availability**; engineered a **modular backend architecture** to optimize **data operations** and performance.

Achievements

- Placed **5th** in company-wide **AWS DeepRacer** competition, applying reinforcement learning for autonomous driving optimization.
- Developed an **LLM-based multimodal Streamlit chatbot** at Mercedes-Benz R&D to improve car manual accessibility using GPT-4o and Ada API (**text, audio, image prompts**); **secured 2nd place** in an internal hackathon.
- Recognized for **cross-functional collaboration and innovation**, consistently exceeding sprint goals and delivering high-quality releases ahead of schedule.