Adithya Sudhindra

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Education

University of Southern California   **Jan 2025 – Dec 2026**
Master of Science in Computer Science, GPA: 3.67/4.0   *Los Angeles, CA*
- Coursework: Analysis of Algorithms, Operating Systems, Information Retrieval and Web Search Engines, Machine Learning for Data Science, Foundations of AI

JSS Academy of Technical Education   **Aug 2019 – Jun 2023**
Bachelor of Engineering in Computer Science, CGPA: 9.24/10.0   *Bengaluru, India*
- Relevant Coursework: Data Structures, Web Technology, Mobile Application Development, Database Management Systems, Big Data Analytics, NOSQL Database

Technical Skills

Programming Skills: Python, Java, C, C++, SQL, JavaScript, Kotlin, HTML, CSS, R
Frameworks/Tools: Django, Flask, Streamlit, Primefaces, Java EE, Maven, JDBC, Android, Git, Jira, Postman, Docker, GCP
Databases: MySQL, PostgreSQL, MongoDB, Firebase, Hadoop
Testing and Methodologies: JUnit, Unit Testing, Integration Testing, Agile Scrum, TDD, CI/CD
Machine Learning Libraries: NumPy, Pandas, Matplotlib, Scikit-learn, OpenCV, TensorFlow, Seaborn, Statsmodels, Langchain
Areas of Expertise: Full-Stack Development, Large Language Models (Gen AI), Machine Learning, Deep Learning, Microservices

Experience

Mercedes-Benz Research and Development India   **Jul 2023 – Dec 2024**
Consultant (Software Developer)   *Bengaluru, India*
- Designed, implemented, and deployed **15+** full-stack features for a large-scale in-house Java enterprise application, utilizing technologies including **JDBC** for efficient data access, **EJB** for scalable business logic, and **Primefaces** for UI;delivering seamless backend and front-end integration for thousands of daily users
- Delivered development tasks 20–30% before **JIRA** sprint deadlines by prioritizing critical requirements, revamping sprint planning, and driving **Agile** ceremonies; accelerated release cycles, boosting team throughput by **25%**
- Adapted to and enhanced a 17-year legacy codebase, rapidly mastering complex application logic and launching new features while safeguarding all existing functionalities; preserved **100%** application integrity and enabled seamless feature rollouts
- Employed rigorous unit testing with **JUnit**, resulting in a notable reduction of post-release defects and facilitating smooth transitions for feature enhancements during QA cycles
- Engineered and launched an automated help file generation system for a large-scale enterprise application using **GPT-4o, Ada API, and Streamlit**; increased PDF help file engagement by **30%** and optimized support workflows with context-aware documentation features

Saigeware Technologies Pvt Ltd   **Feb 2023 – Apr 2023**
AI and Data Science Intern   *Bengaluru, India*
- Designed and implemented an end-to-end **ML pipeline**; developed a custom ensemble of Random Forest and deep learning models for image and sound data from 800+ clinical patients, elevating multiclass classification accuracy from **55% to 75%**
- Built data extraction pipelines for large-scale healthcare datasets, including advanced feature extraction from image data using **Variational Autoencoders** (VAEs) to learn meaningful latent representations
- Led dataset engineering, model architecture design, and system optimization for a comprehensive healthcare AI platform
- Performed visualization, data extraction, and trend analysis on a US healthcare dataset of **1.2 billion** patient records; automated data workflows to reduce manual intervention by 30%
- Drove advanced data mining and extraction initiatives on large-scale clinical datasets; created and validated supervised learning models to predict stroke risk, enabling intervention and data-driven patient care

Projects

Operating System Development | *C, Linux, x86 Assembly*
- Devising and assembling core operating system features, incorporating advanced process scheduling strategies, efficient memory management, and custom system call interfaces in **C** and x86 assembly; ensured system robustness via exhaustive testing and low-level debugging within **Linux**

AI-Based Image Generation | *Stable Diffusion, CLIP*
- Reproduced Stable Diffusion using **80,000 images**, achieving coherence and accuracy competitive with original models (baseline CLIP score: 34.9-36.2; artist imitation **accuracy: 81%**). Fine-tuned pipeline to enhance text-to-image quality by 25%

Restaurant Reservation System | *Django, HTML, CSS, PostgreSQL*
- Modeled and developed a full-stack restaurant reservation web application using Django, integrating user authentication, booking management, and responsive interface; integrated robust CRUD operations and database models to provide real-time availability and reporting for multiple restaurants