

Aditya Abhay Sidham

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Applied Data Science M.S. student at USC. One year of professional software engineering at LTIMindtree building C#.NET and Java/Spring Boot backends against SQL Server and MySQL. Now building an iOS app running a four agent Claude orchestration layer.

Education

University of Southern California (USC)

Jan 2025 – Dec 2026 (Expected)

Master's in Applied Data Science

CGPA: 3.52/4

Relevant Coursework: Natural Language Processing, Machine Learning for Data Science, Foundations of Data Mining

DY Patil Ramrao Adik Institute of Tech

June 2020 – June 2024

Bachelor's in Computer Engineering, Specialization in Data Science

GPA: 3.68/4

Skills

Applied AI & LLMs: Claude API, Google Gemini API, Multi-agent orchestration, Agentic workflows, Retrieval-augmented generation (RAG), Model Context Protocol (MCP), Claude Code

Languages: Python, Java, C#, C++, Swift, JavaScript, TypeScript, SQL, Bash

Backend & Frontend: FastAPI, ASP.NET, Spring Boot, REST APIs, Microservices, Celery, React, SwiftUI, Streamlit

Data & ML: PostgreSQL, MySQL, SQL Server, MongoDB, Redis, Apache Spark, Pandas, NumPy, PyTorch, TensorFlow, Scikit-learn, OpenCV, MediaPipe

Cloud, DevOps & Hardware: AWS (EC2, S3), Docker, Git/GitHub, Linux, CI/CD, Postman, Arduino, Raspberry Pi, MQTT/IoT

Project Work

FitandFine: AI-Powered iOS Nutrition Tracking App

Apr 2026 – Present

Swift/SwiftUI, FastAPI, PostgreSQL, Redis, Celery, Claude API

- Shipped a solo-built iOS nutrition platform end to end, hitting sub-500 ms barcode-to-food-card lookup against a 50,000+ item USDA database with an offline cache for no-network use.
- Built a four-agent Claude orchestration layer running label OCR to structured macros at >85% field accuracy, weekly diet analysis and meal recommendation, with Celery workers keeping LLM calls off the request path.
- Designed a closed-loop calorie target that re-fits against observed weight trend and Apple HealthKit activity rather than a static formula.

Chat-DB: Natural Language to Database Query Engine

May 2025

Python, Streamlit, Google Gemini API, MySQL, MongoDB

- Built a Gemini API backed web app turning natural language into executable MySQL and MongoDB queries, cutting query construction time by roughly 60% for non-SQL users.
- Led a four-person team and drove schema-aware context injection so generated queries stayed valid against live databases.

Work Experience

LTIMindtree, Mumbai

September 2024 – December 2024

Software Engineer

- Built backend integration workflows for the Otis enterprise application (ODC) in C#, ASP.NET, SQL Server and REST APIs, moving data reliably across service management, dispatch, inventory and reporting platforms.
- Rebuilt SQL procedures behind IoT fault-event ingestion, optimizing joins across telemetry, elevator asset and maintenance-history tables and reworking status-update queries feeding downstream work order creation. Cut backend issue-resolution turnaround by 20%.

Tata Consultancy Services, Navi Mumbai

January 2024 – May 2024

Software Development Intern

- Developed a full-stack web module for the CPMS (Central Plan Scheme Monitoring) project that cut manual data entry time by 35% through Spring Boot and SQL-based automation.
- Built backend features for the CPMS module in Java, JSP, Servlets and SQL, covering business logic, request handling, form validation and database operations, shipping inside a two-week Agile sprint cycle.

Aces Invensys Technologies, Navi Mumbai

May 2023 – June 2023

IoT Intern

- Built a Python MQTT beacon positioning system accurate to within ± 10 cm in real time, writing the sensor communication protocols and the positioning analytics and collected real time IoT sensor data and developed a beacon positioning program to track location data.

Patent, Awards and Certificates

- Patent Published** "FitForm: AI Powered Exercise Tracking and Form Correction System" (MediaPipe + OpenCV) Real-time pose-landmark system auditing exercise form. App. No: 202421099595 | 17 January 2025
- Google Data Analytics Professional Certificate** | Jun 2024
- Harvard Business School** | Certificate in Business Analytics and Sustainable Business Strategy | Jun 2023