SIDHARTH KUMAR SHARMA

Kolkata, WB • 9836417005 • rs9768401@gmail.com • LinkedIn • GitHub

SUMMARY

Computer Science undergraduate with hands-on experience across AI/ML engineering, backend development, IoT systems, robotics, and web technologies. Delivered 5+ end-to-end projects spanning multi-agent AI frameworks, NLP applications, embedded hardware, and full-stack web platforms. Led AI backend development at Azmth (a startup company), building scalable infrastructure from the ground up. A versatile builder who can move across the stack. Seeking internships and roles where strong engineering fundamentals meet real-world impact.

EXPERIENCE

AI Backend Intern | Azmth — Jul 2024 – Oct 2025

- Architected and scaled a multi-agent framework over a year, enabling seamless inter-agent collaboration across complex AI workflows.
- Designed end-to-end data pipelines for AI systems, improving reliability and adaptability across diverse task environments.
- Led integration and orchestration of multiple AI agents, enabling coordinated decision-making with shared memory systems.
- Drove the full AI infrastructure stack — logic, memory, agent routing — delivering scalable, production-ready backend solutions.

Research – Holographic MIMO in Security | Adamas University (IDP) — Aug 2025

- Researched HMIMO applications for secure 6G wireless communication; reviewed 10+ papers on 4G/5G security evolution.
- Simulated and evaluated HMIMO beamforming models using MATLAB & CST Studio Suite, analyzing SNR and interception risk.

PROJECTS

Sign Language Interpreter Glove | *ESP32 · Python · TensorFlow · IoT · Neural Networks* (2025- Present)

- Built an IoT smart glove that captures finger-sensor data via ESP32, classifies gestures using a neural network, and converts them to audible speech — full hardware-to-software pipeline developed end-to-end.

Civic Issue Reporting App | *FastAPI · Flutter · Supabase · REST APIs* | *Smart India Hackathon 2025* (2025)

- Led a team as Team Lead; architected the FastAPI backend with full CRUD operations and a Supabase database, integrating with a Flutter frontend via Ngrok-exposed APIs for seamless end-to-end functionality.

AI-Powered Library Management System | *Flask · PHP · MySQL · LangChain · NLP* (2024)

- Developed a web platform with an LLM-powered chatbot and NLP-based book recommendation engine using borrowing history, reducing manual query load and personalizing the user experience.

File Compression & Decompression Tool | *Java · Java Swing · Huffman Coding* (2024)

- Built a desktop app implementing lossless Huffman Coding compression with a drag-and-drop GUI, demonstrating algorithmic design and UI development.

Robotic Hand Prototype | *Arduino UNO · C · Servo.h · Tinkercad* (2023)

- Designed and implemented motor control logic for a simulated robotic hand in Tinkercad, enabling precise gesture replication through algorithmic servo control.

TECHNICAL SKILLS

Languages: Python, Java, C++, C
AI / ML / NLP: Multi-Agent Systems, LangChain, LLMs, Prompt Engineering, TensorFlow, NLTK, OpenCV
Frameworks & Libraries: FastAPI, Flask, NumPy, Pandas
Databases: MySQL, ChromaDB, Supabase
Hardware / Robotics: ESP32, Arduino UNO, Tinkercad, IoT Prototyping

Tools & Platforms: GitHub, VS Code, XAMPP, Ngrok, HTML, PHP

EDUCATION

B.Tech – Computer Science & Engineering 2023 – 2027
Adamas University, Barasat | CGPA: 8.42/ 10 (6 semesters)

Class XII (ISC) 2022
Mahavir Institute of Education and Research, Kolkata | 73%

Class X (ICSE) 2020
Mahavir Institute of Education and Research, Kolkata | 80%

CERTIFICATIONS & ACHIEVEMENTS

- HackerRank: 4★ Java · 5★ C++ — top-tier competitive problem-solving ratings.
- The Java Language – Coursera | Introduction to Java as a Second Language – Coursera • C Programming – Great Learning