# RAYYAN SIDDIQUI

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#### **EDUCATION**

# Sardar Patel Institute of Technology, Mumbai

2023 - Till Date

B.Tech in Computer Science and Engineering Minor in Financial and Strategic Management

#### WORK EXPERIENCE

# Machine Learning Intern

July 2025 - Present

Aim 4U

Working on convolutional neural network (CNN) architectures for disease identification from skin images. Collaborated with the ML team to integrate models into production-ready pipelines.

# Summer Intern (Incoming)

June 2026 - August 2026

**Barclays** 

Selected for the Summer Internship program, Onsite

#### **SKILLS**

**Programming** C, Python, Java

Web Development Node.js,Next.js,FastAPI

Database ManagementMySQL, MongoDB, ChromaDBAPIsRESTful APIs, JWT Authentication

DeploymentRender, VercelData AnalysisNumpy, PandasData AnalysisMatplotlib, Seaborn

Machine Learning
Regression Models, Data Preprocessing, Feature Engineering, Scikit-learn
LLMs
Gemini API, Retrieval-Augmented Generation (RAG), Sentence-Transformers

## **PROJECTS**

**DiploMate** -Next.js, Node.js, MongoDB, Python, FastAPI, Sentence-Transformers, ChromaDB July 2025 Developed a full-stack AI-powered Model United Nations assistant with user authentication, event creation, and chatbot integration.

Engineered hybrid RAG pipelines combining vector database search and Gemini APIs for context-aware responses. Built chatbots scoped to events with toggles for general knowledge or event-specific memory using vector embeddings. Enabled speech generation and persistent saving to both user profiles and context memory for reuse during sessions. Deployed frontend on Vercel and backend microservices on Render with JWT-secured REST APIs for user and event flows.

## LEGO Price Prediction - Python, scikit-learn, pandas, matplotlib

April 2025

Applied multiple regression models to predict LEGO set prices.

Performed preprocessing via data cleaning, feature scaling, and log transformation.

Trained and evaluated models using scikit-learn and visualized results.

## Micrograd: Custom Autograd Engine - Python

June 2025

Implemented a minimal autograd engine from scratch.

Built scalar value objects and backward pass logic.

#### PESTEL Analysis Chatbot - Node.js,React.js,Gemini API

March 2025

Developed a MERN stack chatbot for PESTEL analysis using Gemini API.

Stored analyzed reports in MongoDB and built an interactive React frontend

#### HACKATHON EXPERIENCE

#### **SPIT Frontend Odyssey**

**SportsHub** – Designed and developed a responsive web platform using React and NewsAPI featuring secure user profiles, live match schedules, curated YouTube tutorials, and integrated news updates.

#### SPIT SE Hackathon

MangaLo-Manga Reader App Developed backend for manga reader app using Node.js and MongoDB for efficient data management. Implemented JWT authentication and bcrypt for secure user login and registration. Designed RESTful APIs for manga data retrieval, user progress tracking, and preferences

#### CodeIn Clash Hackathon

**NurtureWell**: Developed a maternal healthcare web application featuring secure authentication, profile management, immunization schedule tracking, and admin-driven educational content delivery. Designed REST APIs for seamless mobile and web integration.

## **Odoo Community Days Hackathon**

**SkillSwap** – Built a React-based web app enabling peer-to-peer skill exchange, with service request/offer workflows, real-time swap matching, and integrated 1:1 video calls using 100ms.live.