

# RAYYAN A SIDDIQUI

rayyan.siddiqui23@spit.ac.in | [Github Profile](#) | [Linkedin Profile](#)

## SUMMARY

Second-year Computer Science student with strong foundations in Java, web development (MERN stack), and backend development using REST APIs. Experienced in building full-stack applications with secure authentication and cloud integration. Currently building foundational machine learning skills, with plans to develop deep learning models using PyTorch for real-world applications. Actively exploring AI model deployment, MLOps, and interdisciplinary research opportunities in health and climate domains.

## EDUCATION

### Sardar Patel Institute of Technology

BTech, Computer Science and Engineering

CGPA as of 3<sup>rd</sup> Semester : 8.66

**Mithibai College - HSC 12th Science - 2023 : 86.8%**

**Hansraj Morarji Public School - SSC 10th - 2021 : 89.8%**

## TECHNICAL SKILLS

- Programming: C, Python, Java
- Data Analysis : Pandas, NumPy
- Web Development: React.Js, Node.Js, Flask
- Data Visualization: Matplotlib, Seaborn
- Database Management: MySQL, MongoDB
- Machine Learning: Regression models, Data Preprocessing, Feature Engineering, Model Evaluation, Scikit-learn, PyTorch

## SCOPE CERTIFICATION

### JP Morgan Chase College to Corporate Program - (Ongoing, Started in March 2025)

- Selected for an industry training program by JPMorgan Chase & Co., focusing on cloud computing and agile methodology

## PROJECTS

### LEGO Price Prediction (Machine Learning Project)

- Applied and evaluated multiple regression models to predict LEGO set prices using features like number of pieces, release year, and theme.
- Performed data cleaning, feature scaling, and log transformation for preprocessing.
- Used scikit-learn for model training and visualized performance metrics to compare results.

### Micrograd: Custom Autograd Engine

- Implemented a minimal automatic differentiation engine in Python from scratch.
- Built core components such as scalar Value objects and backward pass logic to understand gradient computation.
- Gained foundational understanding of backpropagation and neural network internals.

### 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 preference