

# SAYANDIP SAHA

Siliguri, West Bengal

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LinkedIn

Github

Codeforces

Leetcode

Kaggle



## EDUCATION

**Jalpaiguri Government Engineering College**

2023 – 2027

Bachelor of Technology in Information Technology - **CGPA - 9.14** till 4th Semester Jalpaiguri, West Bengal

## EXPERIENCE

**Summer Research Intern at Indian Statistical Institute, Kolkata**

June 2025 - July 2025

**Deepfake video Detection** | PyTorch, OpenCV, MTCNN, Torchvision, Transformer, Scikit-Learn

- Developed a hybrid Deep Fake Detection model using Vision Transformer and auto encoder to detect temporal level inconsistencies from sequence of video frames achieving 65% test accuracy on **dataset**

## PROJECTS

**MedGPT** | Python, React, Langchain, FastAPI, Pinecone, React, Postgresql, SQLAlchemy, Docker, Neon 2025

- Architected an end to end Retrieval-Augmented Generation (RAG) based medical assistant leveraging GPT-OSS-120B, and Sentence Transformers for context-aware response generation.
- Designed a scalable backend using FastAPI with JWT-based authentication and integrated NeonDB serverless PostgreSQL with SQLAlchemy ORM for efficient data modeling and persistence. **Link**

**GPT2 model From Scratch** | PyTorch, tiktoken, hugging faces, matplotlib

2025

- Implemented BPE Tokenizer to split raw text into sub word units, with total of 5145 tokens in dataset
- Implement 165 Million parameter GPT2 architecture of 12 layers decoder block each with 12 attention heads

**AgriTech Web Solutions** | Python, TensorFlow, Scikit-Learn, Flask, Docker, GitHub, HTML, CSS 2025

- Built and deployed a Flask web application integrating weather forecasting, integrating ML models for crop and fertilizer recommendation from environmental factors, along with a CNN-based crop disease detection system.

## TECHNICAL SKILLS

**Languages:** Python, C, C++, Javascript

**Technologies/Frameworks:** Numpy, Pandas, Matplotlib, Seaborn, Pytorch, Optuna, Tensorflow, Scikitlearn, LangChain, LangGraph, Hugging Faces, Vector Databases, Flask, FastAPI, Linux, GitHub, Git, HTML, CSS, JS, React.js, Node.js, MongoDB, Express.js, SQL, Docker, AWS

**Core Concepts:** Data Structure and Algorithms, Database Management Systems, Computer Networks, System Design Principles, Object Oriented Programming

## EXTRACURRICULAR

**SPOC, Training and Placement Cell, JGEC**

Dec 2023 – Present

Coordinating for Onampus placement drives

**AI/ML Lead, GDSC, JGEC**

November 2024 – Present

Organized Seminars and mentoring Sessions

## ACHIEVEMENTS

Participated in Google Solution Challenge 2024 and 2025.

Participated in Smart India Hackathon

Achieved a rank of under 4000 among more than 82k teams in Amazon ML Challenge 2025

## CODING PLATFORMS

**Leetcode**, Max rating **1699+**

Solved **200+** Problems across **Codeforces**

Newbie on Codeforces Max Rating **885+**

## CERTIFICATIONS

- Machine Learning Specialization