SAYANDIP SAHA

Siliguri, West Bengal

📞 +91-9679042278 ✉ sahasayandip480@gmail.com 🔗 Linkedin 🐙 Github 📊 Codeforces ⚔ Leetcode k Kaggle ⬤

EDUCATION

Jalpaiguri Government Engineering College   **2023 – 2027**
*Bachelor of Technology in Information Technology - **CGPA** - **9.12** 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 for spatial feature extraction and Transformer encoder to detect temporal level inconsistencies from sequence of video frames
- · Applied learning rate scheduler, weighted sampling, and data augmentation to handle class imbalance, trained on a balanced subset of the FaceForensics dataset, achieving 65% test accuracy.
- · Published a paper on 12th International Conference on Microelectronics, Circuits and Systems, Micro2025

PROJECTS

MedGPT ☐ | Python, hugging faces, Langchain, Flask, Pinecone, React, PyMongo   **2025**

- ∗ Built a medical QA system (MedGPT) using a RAG pipeline, integrating PyPDFLoader, Semantic Chunker, and Sentence-Transformer embeddings to convert medical literature into high-quality vectorized knowledge.
- ∗ Implemented Pinecone as a vector database with ContextualCompressionRetriever to deliver highly relevant, compressed context to OpenAI's gpt-oss-120B LLM, improving retrieval precision and reducing hallucinations.
- ∗ developed an end-to-end medical assistant capable of generating accurate causes, symptoms, remedies, and treatment suggestions for user queries while maintaining domain-specific safety and reliability.

AgriTech Web Solutions ☐ | Python, TensorFlow/Keras, Scikit-Learn, Flask, Docker, GitHub, Render **2025**

- ∗ Built Deployed a Flask Web App integrating ML models for crop disease detection, crop recommendation, and fertilizer suggestion on Render. deployed here.
- ∗ Developed a CNN-based disease detection model optimized with TFLite for real-time predictions.
- ∗ Implemented ML models for crop and fertilizer recommendations using Random Forest and NPK-based analysis to enhance yield and sustainability.

TECHNICAL SKILLS

Languages: Python, C, C++, Javascript

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

EXTRACURRICULAR

Training and Placement Cell   **Dec 2023 – Present**
SPOC   *Jalpaiguri*
- · Coordinated for Oncampus placement drives

GDSC JGEC   **November 2024 – Present**
AI/ML Lead   *Jalpaiguri*

Organized Seminars and mentoring Sessions

Achievements

Participated in Google Solution Challenge 2024 and 2025. ☐
Participated in Smart India Hackathon
Participated in Amazon ML Challenge 2025

CODING PLATFORMS

Solved **250+** Problems on **Leetcode.** ☐
Solved **200+** Problems across **Codeforces**
Newbie on Codeforces Max Rating **885+**. ☐

CERTIFICATIONS

- • Machine Learning Specialization ☐