# **INDRANIL BAIN**

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in indranil-bain

not-indro

not-indro.github.io

V Kolkata, West Bengal, India

#### **EDUCATION**

#### B.Tech, Computer Science and Technology

Indian Institute of Engineering Science & Technology, Shibpur

**December 2020 - June 2024** 

• Howrah , West Bengal

CGPA: 7.83/10.00 (73%)

# **PROJECTS**

### pdfSAGE - An Intelligent Document Companion

**J**une 2024 - July 2024

Access Link

Technology Used: Next.js, Tailwind CSS, OpenAl Personal Project

 Engineered a Next.js application integrating the OpenAl API for realtime PDF analysis, achieving 95% accuracy in content summarization.

#### **HMER Model - Decoding Math Expressions**

**a** January 2024 - May 2024

Access Link

Technology Used: Python, VIT, GPT-2

**Group Project** 

• Developed an encoder-decoder model (ViT-GPT-2), achieving 88% accuracy in expression recognition and sequence generation.

#### **CAPM - Capital Asset Pricing Model**

**J**une 2023 - July 2023

Access Link

**Technology Used:** Python, Streamlit, Pandas

**Personal Project** 

 Designed a tool for portfolio analysis and risk assessment, Implemented CAPM algorithms, reducing manual calculation time by 75%.

#### **EXPERIENCE**

#### **Data Engineer Trainee**

#### i3 Digital Health

Sept - Present

Remote

Credential 🔼

- Automated extraction of drug, cancer, and gene data from ClinicalTrials API using Hugging Face and SciSpacy, reducing human intervention by 85% and significantly saving time.
- Developed an automated system to scrape FDA website, including layered pages, to download 170+ cancer drug label PDFs, saving 3 hours of manual effort daily.

#### Summer Project Intern

#### IIEST Shibpur || Prof. Abhik Mukherjee

**May** - July 2023

Onsite

Credential 🔼

- Spearheaded GRE platform development, boosting user engagement by 40% and reducing onboarding time by 50% through UI enhancements.
- Designed and deployed personalized learning algorithms using collaborative filtering, enhancing student performance by 25%.

## Research Project Intern

#### IIT Kharagpur | Prof. Debdoot Sheet

**July - Oct 2022** 

Remote

Credential 🗹

- Led front-end development for a medical imaging web app, optimizing "Skin Curate" disease detection to reduce false positives by 30%.
- Researched and applied Federated Learning, increasing model accuracy by 85% while ensuring data privacy.

## **TECHNICAL SKILLS**

- Programming Languages: Python, C++
- Web Development: HTML, CSS, Tailwind CSS, React.js, Next.js
- Data Science & ML: Pandas, NumPy, Matplotlib, TensorFlow, PyTorch
- Al & APIs: OpenAl API, Hugging Face
- DevOps & Cloud: Git, Docker, AWS, Jenkins
- Databases: MySQL, PostgreSQL, MongoDB
- Operating Systems: Unix, Linux, Windows

#### PERSONAL SKILLS

#### Strengths

- Strong motivational and leadership skills.
- Effective individual and team collaborator.
- Positive attitude and adaptable mindset.

#### Areas for Growth

- Detail-oriented approach.
- Continuously improving assertiveness and prioritization.

#### **ACHIEVEMENTS**

- JEE (Main): Secured top 7% rank nationwide
- CodeChef: Achieved 3-star coder status with a rating of 1603

#### **ADDITIONAL PURSUITS**

- ASCE: Assistant Treasurer (2023), Event Secretary (2024)
- REBECA: Publication Co-Lead (2023), Cultural Secretary (2024)
- Badminton: Represented university in intercollege badminton
- Football: Served as center-forward on the University Football Team, contributing to multiple tournament victories

#### **LANGUAGES**

English Bengali Hindi

