INDRANIL BAIN

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EDUCATION

B.Tech, Computer Science and Technology
Indian Institute of Engineering Science & Technology, Shibpur

📅 December 2020 – June 2024 ⦿ Howrah , West Bengal

CGPA : 7.8/10.0 (73%)

PROJECTS

pdfSAGE - An Intelligent Document Companion
📅 June 2024 - July 2024 Access Link ↗

Technology Used: Next.js, Tailwind CSS, OpenAI **Personal Project**

- Engineered a Next.js application integrating OpenAI API for advanced document processing
- Implemented real-time PDF analysis with 95% accuracy in content summarization

HMER Model - Decoding Math Expressions
📅 January 2024 - May 2024 Access Link ↗

Technology Used: Python, VIT, GPT-2 **Group Project**

- Developed an encoder-decoder model achieving 88% accuracy in expression recognition
- Leveraged Vision Transformer for feature extraction and fine-tuned GPT-2 for sequence generation

Capital Asset Pricing Model
📅 June 2023 - July 2023 Access Link ↗

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

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

EXPERIENCE

Summer Project Intern
IIEST Shibpur || Prof. Abhik Mukherjee

📅 May - July 2023 ⦿ Onsite Credential ↗

- Led the development of GRE platform, resulting in a 40% increase in user engagement and retention
- Designed intuitive interfaces, reducing user onboarding time by 50%
- Implemented personalized learning algorithms using collaborative filtering, boosting student performance by 25%

Research Project Intern
IIT Kharagpur || Prof. Debdoot Sheet

📅 July - Oct 2022 ⦿ Remote Credential ↗

- Spearheaded front-end development for a medical imaging Android application
- Conducted research on Federated Learning, improving model accuracy by 15% while maintaining data privacy
- Optimized the "Skin Curate" disease detection algorithm, reducing false positives by 30%

TECHNICAL SKILLS

- **Programming Languages:** Python, C++
- **Web Development:** HTML5, CSS3, React.js, Next.js, Node.js, JavaScript
- **Data Analysis:** Pandas, NumPy, Matplotlib, Jupyter Notebooks
- **DevOps & Cloud:** Git, Docker, AWS, CI/CD
- **Databases:** MySQL, PostgreSQL
- **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 6% 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 inter-college badminton
- **Football:** Served as center-forward on the University Football Team, contributing to multiple tournament victories

LANGUAGES

English
Bengali
Hindi