DEBMALYA SUR

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EDUCATIONAL QUALIFICATIONS

Indian Institute of Technology, Dhanbad (IIT Dhanbad)
Master of Technology in Computer Science and Engineering | CGPA : 9.26 — 2022 – 2024

Government College of Engineering & Ceramic Technology, Kolkata
Bachelor of Technology in Computer Science and Engineering | CGPA : 9.87 — 2018 – 2022

Bhatpara Amar Krishna Pathsala, Bhatpara
Class XII (WBCHSE) (2017 - 2018) | Percentage: 92.4% — Class X (WBBSE) (2015 - 2016) | Percentage: 93%

SKILLS

Technical Expertise	Python, Machine Learning, Deep Learning, Natural Language Processing (NLP), Large Language Models (LLMs), Generative Adversarial Networks (GANs), Computer Vision, C++, C, GUI Development, Data Analysis, Data Extraction, Data Visualization
Quant Finance Skill	Statistical Modeling, Probability, Derivatives Pricing, Time Series Analysis, Financial Data Analysis, Valuation, Monte Carlo Simulations.
Proficient Tools	Flask, SQL, SQLite3, Firebase, MongoDB, AWS, HTML, Bootstrap, Tailwind CSS, Redis, Pandas, NumPy, SciPy, Matplotlib, Seaborn, TensorFlow, PyTorch.

PROFESSIONAL EXPERIENCE

Senior Engineer @ Samsung Research Institute Bangalore (SRIB) — **July 2024 - Present**

- Enhanced Samsung's user interface through computer vision-based innovations for improved user experience.
- Analyzed large-scale datasets, performing advanced data extraction and visualization to derive actionable insights.
- Optimized deep learning models for on-device applications, ensuring efficiency and scalability.

Research Intern @ Samsung Research Institute Bangalore (SRIB) — **June 2023 - Aug 2023**

- Collaborated with the OnDevice AI team to optimize render thread performance, focusing on reducing latency and improving device responsiveness.
- Designed and implemented a Huffman Encoding-based texture optimization algorithm, achieving a compression ratio of 93%.
- Conducted data extraction and visualization to support the development and testing of optimization algorithms.

TECHNICAL PROJECTS

Smart Attendance System with Proxy Detection: Designed an IoT-powered attendance system incorporating machine learning algorithms to automate attendance tracking and detect proxy attendance. Utilized Python, computer vision, and Google Drive API for backend integration.

Baud News: Developed a web-based application offering personalized news content tailored to user preferences. Implemented real-time updates using Cron jobs and employed Flask, Redis, Firebase, and Bootstrap for development.

CERTIFICATIONS

Python for Data Science and Machine Learning Bootcamp - Udemy

Quantitative Analysis Using Python - Udemy

Time Series Analysis and Forecasting with Python - Udemy