Dipon De

Kolkata, India

Bachelor of Technology

B.P. Poddar Institute of Management & Technology, Kolkata

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GitHub Profile

In LinkedIn Profile

EDUCATION

•Bachelor of Technology in Computer Science and Engineering

B.P. Poddar Institute of Management & Technology, Kolkata

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•Higher Secondary (Science – PCMB), WBCHSE

Anandapur Higher Secondary School, West Medinipur

Percentage: 94.8%

•Secondary, WBSE

2020

2022-2026

CGPA: 8.53

 $Teghari\ High\ School\ (H.S.)\ ,\ West\ Medinipur$

Percentage: 90.85%

PERSONAL PROJECTS

•Real-Time Anomaly Detection and Alert System

A real-time anomaly detection system using deep learning that sends instant image alerts via Telegram.

- Engineered a real-time violence detection solution for CCTV leveraging MobileNetV2, automating incident alerts with Telegram for rapid security response.
- It is a lightweight, easily implementable solution requiring minimal hardware constraints.
- Technology Used: TensorFlow, Keras, OpenCV, Flask, MobileNetV2, Telegram API.

•Real-Time Twitter Sentiment Analysis Web App

A web application providing real-time sentiment analysis of Twitter data for any keyword.

- Developed scalable backend workflows for real-time tweet sentiment analysis using Python and machine learning, with integrated data visualization using dynamic charts.
- Technology Used: Flask, scikit-learn, TextBlob, NLTK, Matplotlib, Requests (scraper API)

•Bitcoin Price Forecasting & Trading Strategy Backtesting

Developed a time series forecasting model using a stacked LSTM network to predict 30-minute Bitcoin closing prices.

- Engineered an LSTM model to forecast Bitcoin prices, resulting in a backtested trading strategy with a 139.92% simulated ROI.
- Technology Used: LSTM, Keras, TensorFlow, Scikit-learn, Pandas, NumPy, Matplotlib...

EXPERIENCE

Large Language Models Internship

June - July 2025

National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata

On Site

- Developed biomedical QA system by fine-tuning BioGPT with LoRA, optimizing performance and efficiency.
- Accelerated model performance by 40% and reduced VRAM usage by 75% through strategic fine-tuning of BioGPT with LoRA, enabling deployment on consumer-grade GPUs for wider accessibility.
- Modified model configurations to enable CPU compatibility by setting float32 precision in config.json for efficient deployment and broader hardware support.

•Training & Internship part-time

 $January - June\ 2025$

Sabudh Foundation & STPI

Online

- Completed a comprehensive Machine Learning module, applying supervised and unsupervised techniques for model development and evaluation; consistently achieved high performance.
- Gained hands-on experience in data science workflows using Dataiku, developing proficiency in data analysis, visualization, and platform integration.

TECHNICAL SKILLS AND INTERESTS

Languages: Java, Python, HTML, CSS

Libraries: Keras, OpenCV, Scikit-learn, Matplotlib, PyTorch Tools: VScode, Version control (Git), Github, Jupyter notebook

Frameworks: TensorFlow, Flask, Streamlit

Cloud/Databases : Oracle DB

Relevent Coursework: Data Structures & Algorithms, Operating Systems, Object Oriented Programming, Database Management System, Software Engineering.

Areas of Interest: Machine Learning, Deep Learning, Large Language Models, Artificial Intelligence, Data Science.

Soft Skills: Patience, Attention to detail, Active listening, Goal orientation, Rapid learning

CERTIFICATIONS

• Oracle Cloud Infrastructure 2025 Certified Generative AI Professional, Verification link

August, 2025

• Oracle Cloud Infrastructure 2025 Certified Developer Professional, Verification link

 $August,\ 2025$

• Oracle Cloud Infrastructure 2025 Certified Data Science Professional, Verification link

September, 2025

• Oracle Cloud Infrastructure 2025 Certified Networking Professional, Verification link

September, 2025

• Oracle AI Vector Search Certified Professional, Verification link

 $September,\ 2025$