Sourish Chatterjee

Sourish.xyz | In sourishchatterjeeml | Sourize | Sourize | Sourishchatterjee@gmail.com | Mobile: +91 9330319122

CAREER OBJECTIVE

I am a final-year **Computer Science Engineering** student specializing in **AI/ML**, with hands-on experience in **time-series forecasting** (**93.5**% holdout accuracy) and **anomaly detection** (**96.2**% recall), and published **transformer-LoRA adapters** (**70+** downloads). I am eager to apply **these skills** to **impactful projects** that drive innovation and foster **continuous learning**.

TECHNICAL SKILLS

Languages : Python (Advanced), Java (Intermediate), C, SQL

Frameworks : TensorFlow/Keras, PyTorch, Scikit-learn, Pandas, NumPy

Tools & Platforms: Google Cloud Platform, Git & GitHub, Google Colab, Jupyter Notebook, VS Code, Excel

Data Analysis: Data Mining, Preprocessing, Feature Engineering, Predictive Modeling, Visualization (Matplotlib)

PROJECTS

 DeepTalks
 Hugging Face ⋅ PEFT ⋅ Transformers
 HuggingFace

 Developed and fine-tuned a LoRA adapter for Microsoft Phi-2, injecting short-term memory with only 0.2% of base parameters.

Achieved a validation loss of 1.10 on a 35 K-token corpus and attracted 70+ downloads on Hugging Face.

Price PulseTensorFlow/Keras · LSTMGitHub

 Engineered a 3-layer LSTM on 5 years of Nifty 50 data, delivering 93.5% forecasting accuracy on a 6,500-sample holdout set (17.2% above ridge regression).

• Deployed as a **Hugging Face Space**, securing **100+ user interactions** in the first month.

<u>NavAl-Guard</u> Scikit-learn · AutoencoderTensorFlow/Keras · LSTM <u>GitHub</u>

• Trained an unsupervisedautoencoder on 1.4 M AIS records (speed, heading, position) with noise reduction, achieving 96.2% recall, 4.8% false-positive rate, and 28% faster convergence.

 Deployed on Hugging Face Space, able to process 3,000 vessel updates/min at 150 ms latency and reducing manual oversight by 30%.

Decodex PyTorch · Transformer GitHub

- Built GPT-style decoder from scratch with multi-head attention & positional embeddings.
- Optimized training with AdamW and layer normalization for 20% faster convergence on a classic-literature corpus.

POSITIONS OF RESPONSIBILITY

Peer Tutor - Python & ML

2024-Present

Location: Kolkata, WB, India

Meghnad Saha Institute of Technology

- Taught fundamentals of Python and introductory ML concepts to 20+ first-year students, developing lesson plans and quizzes.
- Collected feedback after each session and iterated materials to improve clarity, achieving an average rating of 4.8/5.

CERTIFICATIONS

Google Cloud Platform Fundamentals | Generative AI Specialization by Google | MOOCs - ML & CS

EDUCATION

Meghnad Saha Institute of Technology