Sourish Chatterjee

Sourish.xyz | In sourish-chatterjee | Sourize | Sourize | Contact.sourishchatterjee@gmail.com | Mobile: +91 9330319122

CAREER OBJECTIVE

Aspiring Data Scientist with expertise in data preprocessing, feature engineering, and predictive modeling. Passionate about utilizing data-driven insights and machine learning techniques to solve complex problems and drive innovation.

TECHNICAL SKILLS

Languages : Python, Java, C

Tools & Libraries: Pandas, Numpy, Matplotlib, Scikit-learn, Streamlit

Data Analysis: Data Preprocessing, Data Cleaning, Data Visualization

Platforms : Google Cloud, GitHub

Tools : Visual Studio Code, Google Colab, Jupyter Notebook, Git (basic)

PROJECTS

Nifty 50 Stock Prediction Model

Python, Numpy, Pandas, Scikit-Learn, VS Code, Streamlit

Source Code

Location: Kolkata, WB, India

Live Model

- Working on transitioning from Random Forest to LSTM models to improve prediction accuracy and handle sequential data effectively
- Aiming to achieve over 90% accuracy by leveraging the temporal capabilities of LSTM networks
- Focusing on enhancing model performance through advanced feature engineering and optimization to reduce prediction errors by 15%.

Real Estate Price Prediction Model

Google Colab, Python, Numpy, Pandas, Matplotlib, Scikit-Learn

Source Code

- Preprocessed data using One-Hot Encoding, improving model accuracy by 15%.
- Trained a Random Forest Regressor achieving an R² score of 85% and Mean Squared Error (MSE) of 150,000.
- Optimized hyperparameters and enhanced feature selection, reducing prediction error by 10%.

Oil Spill Detection Using AIS Data and SAR Images (Hackathon Project)

Working On...

Source Code

- Focused on building an AIS-based anomaly detection model for maritime oil spills.
- Developed and tested ATS models, specifically Autoencoders and currently working on LSTM architectures, to identify anomalous ship movements.
- Contributed to the internal round qualification for the Smart India Hackathon 2024

GPT from Scratch Working on.. Source Code

- Built a custom GPT model inspired by the "Attention Is All You Need" research paper.
- Trained the model on the **tinyshakespeare dataset**, generating text character by character.
- Designed and implemented encoding/decoding, dataset preparation, and tokenization using PyTorch.
- Explored foundational Bigram models and self-attention mechanisms, incorporating learnings from Andrej Karpathy's "Zero to Hero" series.

CERTIFICATIONS

Google Cloud Platform || Generative AI || MOOCs

EDUCATION

Meghnad Saha Institute of Technology

Bachelor of Technology in Computer Science Engineering with specialization in AIML

2022 - 2026

Delhi Public School Ruby Park

Higher Education in Computer Science

Kolkata, WB, India

Kolkata, WB, India

2020 - 2022