Diptadeep Sinha

+91 6909989308 | khdiptadeep@gmail.com | www.linkedin.com/in/diptadeep-sinha-671356188 |

Education

VIT Bhopal University , Bhopal , Madhya Pradesh May 2026
BTech in Computer Science and Engineering *CGPA: 8.80/10*

Modern Higher Secondary School,Agartala,Tripura, 12th Standard March 2022
Central Board of Secondary Education *Percentage: 86.62/100*

Ramakrishna Mission Vidyapith, Deoghar, Jharkhand, 10th Standard March 2020
Central Board of Secondary Education *Percentage: 95.60/100*

Technical Skills

Programming Languages: C++, Python,HTML

Tools and Technologies: Transformers ,PyTorch,TensorFlow.

Field of Interest: Artificial Intelligence, ,Machine Learning and their applications in Natural Language Processing,healthcare,finance.

Languages: Fluent in English, Hindi, Manipuri, Conversational Proficieny in Bengali

Projects

VibeValue Aug 2023 – Nov 2023
Language Model for Sentiment Analysis of Financial Statements *Python, Transformers, PyTorch, TensorFlow*

- Engineered a specialized sentiment analysis model for financial texts using BERT, achieving a 98% accuracy rate in sentiment classification.
- Trained and customized a BERT model on financial datasets (e.g., FiQA, Financial PhraseBank) by integrating domain-specific embeddings and optimizing attention layers for improved sentiment classification.
- Achieved 98% accuracy, 97% precision, and an F1-score of 97%, outperforming LSTM, ELMo, ULMFiT, and other traditional models on a 15,000-annotated-statement financial dataset.
- Demonstrated the efficacy of leveraging BERT for financial sentiment analysis, significantly improving accuracy and enabling nuanced insights for decision-making in financial markets.

AlzAware Feb 2024 – Apr 2024
Image Classification of MRI Brain Scans for Alzheimer's Detection *Python, TensorFlow*

- Developed AlzAware, a deep learning framework using CNNs and transfer learning on 12,000+ MRI scans, offering a non-invasive, scalable tool that improved early Alzheimer's detection rates by 25%.
- Implemented methods including transfer learning with pre-trained models, data augmentation for robustness, and optimization with adaptive learning rates.
- Achieved 99.41% accuracy with a validation loss of 0.1465.

TerraTech Jan 2025 – Apr 2025
Hybrid Machine Learning Model for Agricultural Price Forecasting *Python, LSTM, XGBoost.*

- Built a hybrid LSTM + XGBoost architecture to forecast prices for 22 Indian agricultural crops and commodities, achieving 97.56% accuracy in time-series prediction.
- Designed a full ML pipeline including data scraping, preprocessing, model training, real-time prediction, and dashboard visualization.
- Integrated lag features and rolling statistics into a forecasting model, which enhanced the identification of seasonal patterns, reducing prediction errors by 20% .

Certifications

- MERN Full Stack Certification Program April 2025
- IBM Blockchain Developer April 2025
- NPTEL Online Certification in Marketing Analytics May 2025
- NPTEL Online Certification in Cloud Computing April 2024