

# AMIT BISWAS

- ✉ amit1994biswas@gmail.com
- ☎ +91 9748867349
- 📍 Kolkata, INDIA
- 🌐 LinkedIn
- 🐙 GitHub



## Profile Summary

AI enthusiast with an M.Tech in Artificial Intelligence from the University of Hyderabad and 1.5 years of experience as an Associate Software Engineer. Passionate about building AI-driven intelligent systems that make a difference. Eager to leverage technical expertise and academic foundation to contribute to innovative projects in the data science domain.

### PERSONAL PROJECTS

- **ThemeScanner: A Multi-Modal RAG-Based Theme Extraction System.**
  - Utilizes Chroma vector database for fast, context-aware retrieval and accurate theme synthesis from unstructured PDFs and images.
- **Parameter-Efficient Fine-Tuning(PEFT) of Llama-2 using LoRA and QLoRA.**
  - The model demonstrates improved conversational capabilities after being fine-tuned using a conversational dataset on limited hardware resources.
- **InfoDigest: An AI-Powered RAG-Based Knowledge Retrieval System**
  - Utilizes Pinecone's vector database for fast and relevant document retrieval, reducing query response time by significant amount.
- **Fine-Tuning BART for Text Summarization.**
  - After being fine-tuned with SAMSum dataset, the model demonstrates its capability to generate high-quality summaries for a given conversation.
- **An AI-Powered Car Selling Agent.**
  - It demonstrates the agent's capability of interacting with the database and answering the user query.
- **LLM Based Multi-Agent ChatBot Using LangChain.**
  - Demonstration of the Multi-Agent Architecture.
- **Self Driving Car Implimentation From NVIDIA Research Paper**
  - Front View, Steering Angle, CNN, Transfer Learning, VGG16.
- **Human Activity Recognition Using Smartphones**
  - UCI HAR dataset, LSTM, GRU, SVM, Logistic Regression, Decision Tree, Random Forest, t-SNE, Time Series Data.
- **Real Estate Price Prediction System**
  - Linear-Regression, DecisionTreeRegressor, flask.
- **Diabetes Prediction using different machine learning and deep learning technique**
  - SVM, Logistic Regression, Random Forest, GBDT, MLP.

### WORK HISTORY

- 📅 02-September-2022 - 09-January-2024  
📍 Appfoster Innovations Pvt Ltd, Greater Noida West, Uttar Pradesh  
**Associate Software Engineer**
- 📅 11-May-2022 - 29-July-2022  
📍 ContinuServe, Bangalore  
**Trainee Engineer**

### CERTIFICATION

- LLMops Masterclass 2024 - Generative AI - MLOps - AIOps
- LangChain- Develop LLM powered applications with LangChain

### EDUCATION

- M.Tech in Artificial Intelligence  
University of Hyderabad(2021)
- B.Tech in Computer Science And Engineering  
Gargi Memorial Institute Of Technology(2017)

### SKILLS

- |                                                |           |   |   |   |   |   |
|------------------------------------------------|-----------|---|---|---|---|---|
| Data Structure                                 | Algorithm | ● | ● | ● | ● | ● |
| Machine Learning/Probability and Statistics    |           | ● | ● | ● | ● | ● |
| Feature engineering/Exploratory Data Analysis  |           | ● | ● | ● | ● | ● |
| Natural Language Processing/Computer Vision    |           | ● | ● | ● | ● | ● |
| Deep Learning/Generative AI (Transformer, LLM) |           | ● | ● | ● | ● | ● |
| Data Mining (Clustering Technique)             |           | ● | ● | ● | ● | ● |
| Communication skill/Team Management            |           | ● | ● | ● | ● | ● |

### TECHNOLOGY

- |                                             |   |   |   |   |   |
|---------------------------------------------|---|---|---|---|---|
| Python/Flask/MySQL/Streamlit/SQL/SQLite     | ● | ● | ● | ● | ● |
| Git/GitHub/GitHub Action/Docker/Kubernetes  | ● | ● | ● | ● | ● |
| LangChain/Langsmith/MLOps/LLMOps/AWS        | ● | ● | ● | ● | ● |
| Matplotlib/Pandas/Numpy/scikit-learn/OpenAI | ● | ● | ● | ● | ● |
| Google Colab/Jupyter Notebook/Google Cloud  | ● | ● | ● | ● | ● |
| TensorFlow/Keras/PyTorch/Hugging Face       | ● | ● | ● | ● | ● |

### LANGUAGE

- |         |   |   |   |   |   |
|---------|---|---|---|---|---|
| English | ● | ● | ● | ● | ● |
| Hindi   | ● | ● | ● | ● | ● |
| Bengali | ● | ● | ● | ● | ● |