Debabrata Dey

📞 9907862275 | ✉️ debabratadey9090@gmail.com | 🔗 [LinkedIn](#) | 💻 [GitHub](#) | 🌐 [Portfolio](#)

OBJECTIVE: -

Aspiring Data Scientist seeking an internship opportunity to apply skills in Python, data analysis, and machine learning. Passionate about solving real-world problems using data-driven insights and contributing to impactful projects.

EDUCATION: –

B. Tech in Computer Science and Engineering
Brainware University
2023 − 2027

SKILLS

Programming: Python, SQL
Libraries & Tools: NumPy, Pandas, Matplotlib, MongoDB, Jupyter Notebook, GitHub, DockerHub.
Soft Skills: Problem solving, Collaboration, Adaptability, Communication, Time Management.

EXPERIENCE

Virtual Internship | BCGx (Boston Consulting Group X) |Remote|2025
- Completed a virtual internship program focusing on analytical thinking and data-driven problem solving.
- Gained practical exposure to real-world business challenges and strategic decision-making.

PROJECTS

Product Price Prediction – Amazon ML Challenge 2025
Hackathon Project | Team Project (2 members) | ([GitHub Link](#))
- Built a machine learning model trained on **70,000+ product records** to predict product prices.
- Performed data cleaning, feature engineering, and exploratory data analysis on large-scale datasets.
- Trained and evaluated regression models to achieve accurate price predictions.
- Gained hands-on experience working with real-world e-commerce data under hackathon constraints.

Character Backstory Validation System – Kharagpur-data-science-hackathon-2026-IIT-kharagpur
Hackathon Project | Team Project (2 members)|([GitHub Link](#))
- Developed an NLP-based system to verify whether a given character backstory matches the content of provided novels.
- Implemented text analysis techniques to extract character-related context from novels.
- Compared user-provided backstories with novel context to determine correctness and consistency.
- Applied NLP concepts such as text preprocessing, semantic similarity, and contextual analysis.

Meeting Intelligence System (AI Meeting Assistant) — *([GitHub Link](#))*
- Architected a production-grade AI pipeline: Video → Audio → Transcription → Semantic Chunking → Embeddings → Vector Database → LLM inference.
- Implemented speech-to-text using Whisper and semantic search using SentenceTransformers + ChromaDB.
- Developed Retrieval-Augmented Generation (RAG) system enabling context-aware meeting Q&A.
- Built FastAPI backend supporting file upload, automated highlight extraction, and conversational chat.
- Designed meeting-isolated vector storage architecture for multi-session querying.
- Reduced manual note-taking time by ~70% through automated summarization and highlights.

AI Chatbot - *([GitHub Link](#))*
- Developed an AI chatbot capable of understanding user queries and generating intelligent responses using Python and NLP.
- Implemented contextual conversation handling and fallback responses.
- Worked with NLP libraries to enhance intent recognition and response accuracy.

Zomato Data Analysis - *([GitHub Link](#))*
- Conducted exploratory data analysis on Zomato restaurant data using Pandas, NumPy, and Matplotlib.
- Analyzed ratings, cuisines, locations, and pricing trends to extract insights.
- Created visualizations to identify patterns and outliers in food delivery data.

EXTRA-CURRICULAR ACTIVITIES

- Participated in **Amazon ML Challenge 2025**, gaining experience in building and deploying machine learning models on large datasets.
- Participated in **kharagpur data science hackathon 2026**, working on an NLP-based solution under strict deadlines.
- Collaborated with cross-functional teams during hackathons, improving teamwork and problem-solving skills.
- Actively participated in coding contests and technical quizzes at university level.
- Attended workshops and online courses on **Data Science, Machine Learning, and NLP**.

LEADERSHIP

- Volunteered as a coordinator for technical events at Brainware University, helping organize workshops and coding competitions.
- Mentored junior students in Python basics and data analysis techniques through informal peer sessions