TANU MANNA

Hooghly, West Bengal

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PROFILE SUMMARY

I am an AI & ML Engineer with over a year of practical experience in developing and deploying effective AI solutions in real-world scenarios.

EDUCATION

The Neotia University, Diamond Harbour

2021 - 2025

B. Tech - Computer Science and Engineering - CGPA - 9.02

Diamond Harbour, West Bengal

TECHNICAL SKILLS

Languages: Python, SQL, C, Java

Technologies/Frameworks: Pandas, NumPy, Scikit-learn, TensorFlow, Keras, Matplotlib, Seaborn,

HuggingFace, Streamlit, Flask, LangChain

Developer & Deployment Tools: Git, GitHub, Docker, MLOps

AI & ML Tools: Data Cleaning, EDA, Machine Learning, Deep Learning, Generative AI

Databases: MySQL

EXPERIENCE

Intern at DCG Data Core System 🔀

Jan 2025 - Jun 2025

Kolkata, West Bengal

- Role AI-Integrated Backend Developer • Developed a full-stack ASP.NET Core MVC application for hospital patient registration, ensuring secure data entry and a modular design that significantly reduced manual workload
 - Built a Retrieval-Augmented Generation (RAG) chatbot using LLMs, enabling intelligent and context-aware responses

Intern at WEBEL

June 2024 - August 2024

Role - Data Science Intern

Kolkata, West Bengal

- Conducted EDA and clustering (K-Means) on 5 years of global socio-economic data to identify drivers of national happiness, providing insights for policymaking.
- Designed an interactive Streamlit dashboard that optimized workflow for policymakers by transforming raw datasets into actionable visual insights.

Intern at AILABS

June 2023 - August 2023

Role - Machine Learning Intern

Kolkata, West Bengal

- Developed an end-to-end Loan Approval Prediction System achieving 89% accuracy, using Logistic Regression, Random Forest, and XGBoost.
- Implemented model tracking with MLflow, containerized workflow using Docker, and deployed on Render for real-world usage.

PROJECTS

2025

- Engineered an AI-powered Career Assistant that fetches job postings, parses resumes, and recommends jobs using semantic similarity and embeddings.
- Integrated a RAG-based chatbot to handle user queries and automated PDF generation for resumes and cover letters, which significantly reduced manual effort in job applications

Medical Insurance Cost Prediction Python, Streamlit, Pandas, Matplotlib, Seaborn

2025

- Built a modular ML pipeline for medical insurance cost prediction using regression models (Linear Regression, Random Forest, XGBoost, CatBoost), achieving R² 0.86
- Performed EDA, feature engineering, and hyperparameter tuning (RandomizedSearchCV), then deployed via Streamlit on Render, enabling interactive usage.

How Educated India Is Z | K-Means, Python, matplotlib, Seaborn

2025

- Executed the **How Educated India Is** project by analyzing census data (1991–2011) to study literacy trends across states, education levels, gender, and age groups, and clustered states with similar literacy patterns
- Forecasted literacy rates for 2021 and 2031, and built an interactive Streamlit dashboard deployed on Render.

CERTIFICATIONS

- Oracle Cloud Infrastructure 2025 Certified Generative AI Professional Oracle, Sep 2025
- Introduction to Data Science Cisco Networking Academy, Sep 2025