

Future Institute Of Engineering And Management, Kolkata, India

SUMMARY

Currently a first year postgrad at Future Institute Of Engineering And Management, highly interested in AI & ML, Data Science and Software Development.

INTERNSHIP

Data Science Intern at Oasis Infobyte

EDUCATION

Degree	Institute	Board / University	CGPA/Percentage	Year
MCA	Future Institute Of Engineering And Management, Kolkata	MAKAUT	-	2024-2026
BCA	Future Institute Of Engineering And Management, Kolkata	MAKAUT	8.4 CGPA	2021-2024
Senior Secondary	Falakata High School	WBCHSE	87.6%	2021
Matriculation	Falakata High School	WBBSE	88.14%	2019

PROJECTS

• Epiphany

Python, Google GenAI, Pypdf2, Langchain, FAISS, Flask

- Designed and developed an intelligent web application with interactive features, including a YouTube video summarizer and a PDF-based conversational assistant. Leveraged **Google Generative AI** for content generation and **FAISS** for advanced **vector-based search**, enabling context-driven question answering. Built robust PDF text extraction, segmentation, and storage processes to deliver seamless user interactions and efficient information retrieval.

• Prediction of Concrete Compressive Strength Using Machine Learning

Python, Flask, Jupyter

- Predicts the Concrete compressive strength(MPa, megapascals) considering cement blastFurnace flyAsh courseAggregate age using various ML algorithms like **Linear regression, Random forest, XGBRegressor** etc with best possible accuracy of approx **91 Percent**. Also did EDA and used **standard scalar** function for standardization.

• Advanced Forecasting of Energy Consumption Using Machine Learning and Time Series Feature Engineering

Python, Xgboost, ARIMA, Google Colab

- Developed a time series forecasting model for energy consumption using XGBoost. This project included data preparation, outlier detection, and splitting data with TimeSeriesSplit for cross-validation. Engineered time-based features and lag variables to capture patterns. The XGBoost model was trained and evaluated using RMSE, then retrained on the entire dataset to forecast future energy use, with predictions visualized for accuracy assessment.

TECHNICAL SKILLS

- **Data Science/ Machine Learning/ Deep Learning:** Data visualisation, Supervised Learning Algos, Unsupervised Learning Algos, ANN, CNN, EDA
- **Mathematics for ML & DL:** Algebra, Probability, Statistics, Matrices
- **Python Packages & Frameworks:** Scikit-Learn, Tensorflow, Flask, Numpy, Pandas, Scipy, Matplotlib, Seaborn
- **Programming Languages:** Python, SQL, Java, C, HTML/CSS
- **Databases:** MySQL
- **Developer Tools:** Git & Github, Docker, VS Code, Jupyter Notebook, Anaconda, Linux Environments, Dev-C++

Participation

- Data Analytics and Visualization Job Simulation from Accenture
- Internship and project letter from Ardent Computech Pvt. Ltd.
- Participated in HACKJMI 2025
- Conducted a Farewell cum Fresher's Program IMPULZ -2022 in FIEM
- Participated in Web Development Workshop organized by Xplorica in FIEM association with Coding Ninja.