# **Mohammod Ibrahim Hossain**

Machine Learning Engineer | Data Scientist | MLOps Specialist

## Portfolio +8801301927872 | Mark mohammod.ibrahim.data@gmail.com | https://www.linkedin.com/in/ibrahim-hossain

Detail-oriented expert in **Data Science** and **Machine Learning** and **MLOps**, with extensive experience in **end-to-end model development**, **deployment**, **and optimization**. Proven record of delivering high-accuracy solutions—such as real estate price predictions at **95% accuracy**—using **Python**, **NLP**, **Docker**, **and AWS**. Specialized in **data-driven insights** using **sentiment analysis**, **recommendation engines**, and **automated ML pipelines** for **scalable Al solutions**.



**Machine Learning** | Supervised & Unsupervised Learning, A/B Testing, Model Selection, Hyperparameter Tuning, Ensemble Methods, Natural Language Processing (NLP), Classification.

Deep Learning | Neural Networks, CNNs, RNNs, Transfer Learning, Model Optimization, Tensorflow.

Data Science Data Cleaning, data pipelines, Feature Engineering, Data Representation (SVG/JSON), EDA, Statistical Analysis, Data Preprocessing, Data Visualization, Advanced Statistics.

MLOps | CI/CD, Docker, Kubernetes, automated testing, Version Control, model monitoring, AWS (EC2, S3, SageMaker).

Tools & Libraries | Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn, Plotly, Git, DVC, MLflow

Programming Languages | Python (object-oriented programming), SQL, Flask.

**Soft Skills** Time Management, Teamwork, **Stakeholder Collaboration**, **Multitasking**, Problem-Solving.

# Projects \_\_\_\_\_

## Real Estate Model App (Python, Docker, AWS, CI/CD) | Code

Built an AI-powered real estate tool for price prediction, data analysis, and apartment recommendations.

Utilized Python, MLOps, Docker, Streamlit, AWS, Random Forest, CI/CD, DVC, and GitHub Actions for deployment.

Achieved 62 % to 95% accuracy, helping users make data-driven property investment decisions

#### **Sentiment Analysis** (TensorFlow, Scikit-Learn, NLP, MLOps)

Developed an NLP model to classify text sentiment (positive, negative, neutral, suicidal) using Pandas, Scikit-learn, Logistic Regression, MLOps, TF-IDF, Streamlit, and GitHub Actions.

Achieved more than 85% tracking accuracy with deep sort and achieved avg accuracy of 75%

#### **Personal AI Chatbot**

**Developed** and deployed a **chatbot** with dynamic, context-aware interactions and a user-friendly interface.

Focused on personalized responses and seamless engagement.

Technologies: Python, NLP, Streamlit, Deep Learning, ML

### **Movie Recommendation System** (Python, Collaborative Filtering, Docker)

**Built a recommendation system** using collaborative filtering to suggest films based on user preferences.

Technologies: Python, Pandas, NumPy, Scikit-learn, MLOps, Docker, Git Action, Streamlit.

Improved similarity score from 72% to 90%. Deployed via Streamlit for real-time recommendations.

### YouTube Comment Analyzer (NLp, AWS, MLOps, Scientific Visualization) Code

Developed an **NLP-based sentiment analysis tool** to analyze **YouTube comment trends**. Leveraged **AWS cloud services**, **ML models**, and **data visualization** techniques.

Leveraged Aws cloud services, ML moders, and data visualization technique

## CBC Report Checker (Medical Data Analysis, ML Deployment)

Developed a medical web app to analyze CBC reports and provide health insights.

Handled data preprocessing, feature engineering, and model deployment for accurate health analysis.

Certification
CampusX DSMP 2.0 Certificate- Demonstrated proficiency in Data Science, Machine Learning, and MLOps. View Certificate
WORK EXPERIENCE
Mashover(Clothing Brand) – Data Science & Machine Learning Specialist
<ul> <li>Analyzed customer behavior to identify trends and develop targeted marketing strategies, increasing local and online sales from 68 % to 71%</li> <li>Optimized sales strategies using data science and machine learning, boosting revenue for Mashover, a clothing brand in Dhaka.</li> <li>Built predictive models to forecast demand and optimize inventory, reducing overstock and improving product availability</li> </ul>
<ul> <li>Deployed ML models to enhance sales processes, making them more adaptive and data-driven.</li> <li>Real Estate Price Prediction – AI &amp; MLOps Deployment</li> </ul>
<ul> <li>Developed machine learning models with structured data representation to predict real estate prices, achieving 62 % to 95% accuracy.</li> <li>Optimized model interpretability by implementing intuitive visualizations for price trends and demand forecasting.</li> <li>Automated end-to-end ML pipelines using Docker, MLOps frameworks, and AWS, ensuring seamless deployment.</li> <li>Integrated real-time data analysis for dynamic model adaptability to market trends.</li> <li>Deployed APIs via Flask and FastAPI, enabling scalable and efficient access.</li> <li>Implemented monitoring and logging with MLflow and CloudWatch, ensuring stability and performance tracking.</li> <li>Delivered actionable insights, empowering stakeholders with data-driven investment decisions.</li> </ul>
EDUCATION
★ CampusX DSMP 2.0   Data Science, ML MLOps
Gained expertise in Python, Machine Learning, MLOps, Model Deployment, CI/CD, Docker, and AWS.
Real-world projects: model deployment, data pipeline automation, statistical analysis
Govt. Bangla College
(August 2023 - Present)  Relevant Coursework: Mathematics, Physics, Computer Science Fundamentals Self-Led Projects:
<ol> <li>Built a regression model to predict exam scores using Python.</li> <li>Designed a dashboard to visualize scientific data with Matplotlib.</li> </ol>
Languages
English: Fluent
Bangla: Native
Reference
Md Sahadad Hossain Parvez  Veterinary Officer Bangladesh Military Army  101769333726    10176933726    1017693726    10176