



# MD MOCHADDEC HOSSAIN

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## Summary

Aspiring AI/ML Engineer and CSE student with hands-on experience in NLP, classical ML, and end-to-end model deployment. Built scikit-learn baselines and fine-tuned transformer models (BERT) for harmful-comment detection. Skilled in data cleaning, feature engineering, and reproducible research pipelines.

## Skills

Languages & Libraries	Python — Pandas, NumPy, Seaborn · SQL · C++ · JavaScript (basic)
ML & Deep Learning	NLP · CNN · Data Pre-processing · Feature engineering · Model Evaluation
Data Analysis	Power BI · Excel · Data Visualization
Others	Git · Linux · Docker · Jupyter Notebook · Huggingface · Supabase · Firebase
Soft Skills	Analytical thinking · Statistics · Problem solving · Adaptability · Team collaboration

## Experience

<b>Active Green Energy</b> <i>Data Analysis Project</i>	<b>07/2025</b>
<ul style="list-style-type: none"><li>Cleaned and formatted raw Excel data with guidance from senior accountant, ensuring accuracy</li><li>Built interactive Power BI dashboards to visualize sales and supplier data</li><li>Developed Python scripts and prediction models for business performance trends</li></ul>	

## Education

<b>American International University-Bangladesh (AIUB)</b> <b>B.Sc. in Computer Science &amp; Engineering</b> — CGPA 3.40	<b>Dhaka</b> 08/2021 — 12/2025( <i>expected</i> )
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## Projects

### Cyberbullying Detection for Sentiment Analysis

*Python · scikit-learn · NLP · Kraggle*

- Built an NLP pipeline for toxic comment and sentiment detection using TF-IDF baselines (SVM, LR) and fine-tuned BERT models.
- Handled preprocessing (normalization, noise removal, tokenization, class balancing) and evaluated.

### Bangla-English Code-switched Slang Detection

*Python · HuggingFace · Sentence-Transformers*

- Designed preprocessing for Bangla-English code-switched text (slang normalization, transliteration handling).
- Trained embedding-based classifiers to detect slang and abusive variants with data augmentation for low-resource slang.

### AI-Powered Data Cleaning & Prediction Tool

*Python · Pandas · Scikit-learn · Streamlit*

- Created an interactive tool to clean datasets, handle missing values, and generate quick predictions with classical ML models.
- Designed a Streamlit interface for CSV upload, preprocessing, and result visualization.

## References

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