

Obidur Rahman

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Education

University of Chittagong

BSc in Mathematics

Expected Dec 2026

Chittagong, Bangladesh

- **Relevant Coursework:** Complex Analysis, Numerical Analysis, Differential Equation, Vector & Tensor Analysis, Linear Programming, Linear Algebra, Calculus, Real Analysis, Geometry, Trigonometry, Mathematical Programming etc

Projects

Predicting Undergraduate Admission Outcomes in Bangladesh | Python, scikit-learn, XGBoost, SHAP

- Developed and deployed a machine learning model to predict undergraduate admission outcomes in Bangladesh
- Achieved 83.87% accuracy and 0.8633 ROC-AUC by optimizing feature selection and hyperparameter tuning
- Conducted SHAP analysis to identify key predictors (e.g., family support, GPA), providing actionable insights.

Environmental Determinants of Diarrheal Disease | Python, SARIMA, XGBoost, Linear Regression, Plotly

- Built and compared multiple regression models (Linear Regression, Random Forest, SVR, Decision Tree, Gradient Boost) for disease trend prediction.
- Incorporated lagged features 0-7 days to achieve best performance with Linear Regression RMSE: 7.40, MSE: 54.82
- Analyzed time-series data across four major divisions to identify key environmental correlations
- Designed an interactive dashboard with real-time visualizations for insights

Technical Skills

Programming Languages: Python, C++, JavaScript, HTML, CSS

Machine Learning & Data Science: scikit-learn, Pandas, NumPy

Tools & Technologies: Git, Streamlit, Matplotlib, Plotly, Firebase, LaTeX

Achievements

First Place – Digital Innovation Fair 2018: Won 1st place for developing a Drug Addiction Recovery System, featured in a national newspaper.

Social Engagements

Founder & Community Lead, The Code Forum: Built a tech community with 100+ members and established 5 learning paths.

Research and Development Secretary, Chittagong University Math Club: Led research initiatives and organized knowledge-sharing events.

Educator, All Students in One Platform: Mentored admission candidates in an educational initiative by University of Chittagong students.

Content Creator: Produced 10+ educational videos on ML, Mathematics and Programming on YouTube

Technical Writer: Published 13 articles, gaining 1000+ reads on Python and ML topics on Hashnode

Training & Certifications

Software Engineering Fellowship – Headstarter (Aug 2024)

Developed five full-stack web applications using Firebase, Git, and JavaScript. Worked collaboratively in a team of four developers, following agile methodologies to deliver projects on time.

Introduction to Programming with MATLAB – Vanderbilt University (Jun 2024)

Credential ID: Z6HMC9DS5LSM — View Credential

Developing AI Applications with Python and Flask – IBM (Jan 2024)

Credential ID: HV6QNTGU2KHY — View Credential

Programming in C++: A Hands-on Introduction Specialization – Codio (Dec 2023)

Credential ID: MNYQFWD4JX4P — View Credential

Python for Data Science, AI & Development – IBM (Nov 2023)

Credential ID: 4LK9Y375MAQ7 — View Credential