

ASHIQUR RAHMAN SAYEM

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EDUCATION

Bachelor of Science in Computer Science | Expected Graduation: 2027

Daffodil International University | GPA: 3.77/4.0

TECHNICAL SKILLS

Languages: Python, SQL, C++, C, JavaScript

Data & ML: Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, TensorFlow, PyTorch, SQL (PostgreSQL, MySQL), Data Visualization, Statistical Analysis

Tools & Technologies: Git, Linux, Docker, Jupyter, VS Code, Tableau, Excel, Bash, REST APIs

Core CS: Data Structures & Algorithms (300+ LeetCode problems), OOP, Database Design, System Design, Software Engineering Principles

PROJECTS

End-to-End ML Pipeline: Customer Churn Prediction | *Python, Scikit-learn, Pandas, SQL*

- Built complete ML pipeline from data extraction to model deployment, processing 100K+ customer records from PostgreSQL database
- Implemented feature engineering, handling missing data (15% null values), categorical encoding, and class imbalance (SMOTE), improving model performance by 23%
- Achieved 87% accuracy using Random Forest with hyperparameter tuning via GridSearchCV, documented in comprehensive Jupyter notebook

Exploratory Data Analysis: E-commerce Sales Trends | *Python, Pandas, Matplotlib, Seaborn*

- Analyzed 500K+ transaction records to identify seasonal patterns, customer segments, and revenue drivers across 18-month period
- Created 12+ visualizations revealing 35% revenue concentration in Q4, 60% repeat customer rate, and top-performing product categories
- Presented actionable insights through interactive dashboard, recommending targeted marketing strategies for high-value customer segments

Database Design & Analytics: Library Management System | *PostgreSQL, SQL, Database Design*

- Designed normalized relational database schema (3NF) with 8 tables, managing books, members, loans, and reservations with referential integrity
- Wrote 25+ complex SQL queries including multi-table JOINS, subqueries, window functions, and CTEs for analytics and reporting
- Implemented stored procedures and triggers for automated overdue notifications and fine calculations, reducing manual processing by 80%

Advanced Content Tracker | *Python, Linux, ML (CLIP, NudeNet), OCR (Tesseract)*

- Built Linux daemon integrating ML models (CLIP for image classification, NudeNet for content filtering, Tesseract for OCR) to analyze screen activity
- Implemented privacy-first architecture with local processing, multi-threaded Python with queues for concurrent operations, and systemd integration
- Demonstrated practical ML deployment and systems programming skills, processing real-time data with minimal resource overhead

ETL Pipeline: Automated Data Aggregation System | *Python, SQL, REST APIs, Airflow*

- Designed automated ETL pipeline extracting data from multiple REST APIs, transforming 50K+ daily records, and loading into PostgreSQL warehouse
- Implemented error handling, logging, and data validation checks ensuring 99.5% data accuracy and automated retry mechanisms for failed requests
- Scheduled daily execution using Airflow DAGs, reducing manual data collection time from 4 hours to 15 minutes

ADDITIONAL EXPERIENCE

FAANG Preparation Journey | Completed 11-month structured program

- Solved 300+ LeetCode problems (80 Easy, 180 Medium, 40 Hard) covering Arrays, Strings, Trees, Graphs, Dynamic Programming, System Design
- Built 11 mini-projects applying DSA concepts to practical problems, demonstrating systematic learning and consistent execution
- Mastered core algorithms and data structures through daily practice (4-5 hours/day) with focus on time/space complexity optimization

CERTIFICATIONS & ACHIEVEMENTS

- LeetCode: 300+ problems solved, Top 15% global ranking in Algorithms
- Completed Stanford Machine Learning Specialization (Coursera) - Andrew Ng
- Published 5+ technical blogs on Medium explaining data structures and ML concepts with 10K+ combined views