

Ayon Rahman

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Education

- **University of Maryland, Baltimore County | Exp Graduation: May 2027**
- Bachelor of Science in Computer Science
- Data Structures, Database Management Systems, Linear Algebra, Statistics, Design and Algorithms

Projects

UMBC Parking Management System | Feb 2026- May 2026

<https://github.com/Ayon0922/CMSC461-DBMS-.git>

- Engineered a full-lifecycle relational database system to automate campus parking logistics, simulating real-time data ingestion. From lot sensors to track space availability
- Eliminated 100% of concurrent booking conflicts by implementing pessimistic transaction locking mechanisms to guarantee data isolation and integrity

Workout Analytics & Recommendation Engine | March 2026 – Present

GitHub: github.com/Ayon0922/workout-analytics-engine | Live: web-production-4fe39.up.railway.app

- Built an end-to-end ETL pipeline processing 4,500+ rows of personal strength-training data into a relational SQLite database, surfacing progression trends, stall detection, and volume insights across 161 sessions through 7 interactive Plotly dashboards
- Deployed a full-stack Flask web application on Railway with a REST API and a real-time recommendation engine, implementing Epley's e1RM formula and double progression logic to prescribe personalised weight and rep targets after every logged set

Technical Skills

Python, SQL, PostgreSQL, C++, Pandas, Numpy, Streamlit, Microsoft Excel, Git/Github, Tableau. Power BI

Professional Experience

Boomerang BD | Co-Founder | April 2021 – January 2024 | Dhaka Bangladesh

- Expanded e-commerce revenue by \$3000+ within the first 90 days by analyzing historical sales data and inventory turnover metrics to optimize pricing strategies
- Scaled digital community to 20K+ followers by building an analytical tracking system of social media engagement metrics to refine core demographic targeting
- Reduced order fulfilment cycles by 15% by streamlining logistics pipelines and automating order-tracking data entries.

Summer Conference Assistant | Events and Conferences UMBC | May 2026 – Aug 2026 | Baltimore, Maryland

- Secured campus building integrity by auditing administrative database logs for high-volume guest processing and electronic room access programming
- Sustained a 99% hospitality satisfaction score by conducting standardized, data-logged room inspections and auditing guest service compliance
- Resolved 100% of operational logistics issues and guest emergency responses for 500+ summer conference guests by managing real-time facilities data