

# SAHEER RAHMAN

## EDUCATION

**BACHELOR OF SCIENCE IN COMPUTER SCIENCE, MINOR: ECONOMICS**  
*University at Buffalo (SUNY Buffalo)*

**Aug 2022 - Present**  
*Buffalo, NY*

Expected Graduation: 2026

## TECHNICAL AND SOFT SKILLS

- ♦ **Programming Languages:** Java, Python, JavaScript, C, MIPS Assembly, VHDL.
- ♦ **Data Technologies:** SQL (PostgreSQL, MySQL), Power BI, Data Normalization (BCNF, 3NF), Query Optimization, Indexing, Triggers, Transactions, ER Diagrams
- ♦ **Web Development:** HTML, CSS, Django, Node.js, React.js, Express.js, WebSockets.
- ♦ **Databases:** MySQL, MongoDB, PostgreSQL.
- ♦ **Tools & Platforms:** Docker, GitHub, VS Code, IntelliJ, Jupyter Notebook, Power BI.
- ♦ **Office & Productivity Tools:** Microsoft Excel, Word, PowerPoint.
- ♦ **Soft Skills:** Problem Solving, Decision Making, Communication, Leadership, Adaptability, Time Management, Teamwork.

## EMPLOYMENT HISTORY

### INTERN

*Ontik Technology*

**Dec 2024 - Apr 2025**  
*Dhaka, Bangladesh*

- ♦ Gaining practical experience and training in Web Development, AI/ML, and Data Science from senior developers
- ♦ Conducted in-depth research on SaaS platforms, focusing on LazyChat's omnichannel solution for streamlined customer service, which contributed to an 80% reduction in support costs while enhancing industry knowledge
- ♦ Actively contributed to LazyChat's dashboard design, working closely with a team of 7 senior developers to integrate user-friendly features and improve functionality.
- ♦ Learning professional workflows and industry-standard work practices
- ♦ Gaining hands-on exposure to organizational tools and technologies

### INTERN

*Center for Natural Resource Studies*

**Oct 2021 - Jan 2022**  
*Dhaka, Bangladesh*

- ♦ Analyzed national projects to identify trends and solutions
- ♦ Actively engaged with senior staff, absorbing industry knowledge and best practices
- ♦ Contributed to team discussions, offering fresh perspectives on environmental issues

## PROJECTS

### LOCATION REVIEW PLATFORM

A web application enabling users to leave reviews for various locations via a dynamic map interface built with Leaflet.js.

- ♦ **Technologies Used:** Python, JavaScript, HTML, CSS, Django, PostgreSQL, Redis, WebSocket, Docker, OpenStreetMap API, Nginx, Vscod.
- ♦ Built an intuitive review system with likes and media uploads to enhance user engagement.
- ♦ Built an interactive map showcasing locations and user reviews.
- ♦ Implemented secure user access through robust authentication protocols.
- ♦ Created a puzzle map game featuring a real-time leaderboard powered by WebSocket increasing user-experience by 50%

### REAL-TIME CHAT APPLICATION (ACADEMIC PROJECT)

A robust chat platform that enables users to send and receive messages instantly with minimal latency.

- ♦ **Technologies Used:** Python, JavaScript, HTML, CSS, MongoDB, WebSocket, Nginx, Docker, Vscod.
- ♦ Built from scratch using Python, JavaScript, and WebSocket, featuring user authentication and media sharing. Implemented without frameworks to understand core internet protocols.

### MUSIC STREAMING ANALYTICS SYSTEM

Built a normalized PostgreSQL database for a music platform with advanced SQL queries, transaction handling, and Power BI visualizations for analytical reporting.

- ♦ **Technologies:** PostgreSQL, Power BI, SQL, ER Modeling.
- ♦ Designed and implemented a relational database in PostgreSQL with 10+ entities, ensuring BCNF compliance to eliminate redundancy and maintain data integrity.
- ♦ Wrote 30+ advanced SQL queries - including joins, subqueries, grouping, and aggregation - to analyze user behavior and performance across 300+ streaming records.
- ♦ Built an interactive Power BI dashboard to visualize streaming trends, artist engagement, playlist activity, and user reviews, enabling actionable insights.
- ♦ Developed and tested 5+ stored procedures and triggers to automate playlist updates and simulate real-world transaction failures.
- ♦ Optimized slow queries using B-Tree indexing strategies, improving execution time by approximately 60%.
- ♦ Simulated transaction failures using triggers and stored procedures to ensure data integrity under failure conditions.