Rafan Ahmed

Charlotte, NC • ahmedrafan235@gmail.com •
GitHub: github.com/rafanahmed • Portfolio: https://rafan-ahmed.vercel.app/ •
LinkedIn: linkedin.com/in/rafan-ahmed

OBJECTIVE

Computer-science student specializing in AI and data analytics, with hands-on experience in machine-learning-driven trading and full-stack development. Passionate about applying predictive modeling and scalable cloud solutions to enhance financial decision-making and customer experience. Seeking to engage in spaces where analytical rigor and collaborative execution drive innovation in global financial services.

TECHNICAL SKILLS

LANGUAGES: Python, Java, C, JavaScript, HTML/CSS
ML & DATA: TensorFlow, Scikit-learn, Pandas, NumPy, Time-Series Forecasting, Generative-AI API Usage
FRAMEWORKS & CLOUD: Django REST, Google Gemini API, Next.js, Git/Github, Discord.py, Heroku
VISUALIZATION: Matplotlib, Adobe Creative Suite

EDUCATION

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE *(Expected Graduation Fall 2026)*

- B.S. Computer Science with concentration in AI & Robotics (GPA 3.38)
- *Relevant Coursework*: Computer Systems, Data Structures & Algorithms, Software Engineering, Matrices & Linear Algebra

KEY PROJECTS

ML TRADING STRATEGY - QUANTCONNECT RNN CASE STUDY *(Mar. 2025 - May. 2025)*

- Engineered a SimpleRNN model with walk-forward validation to forecast SPY price moves; dissected overfitting and look-ahead bias.
- Open-sourced full project and presented findings at UNC Charlotte's College of Computing and Informatics to an audience of 30+ peers as a learning case study in ML pitfalls.
- Demonstrates quantitative modeling, risk diagnostics, and transparency for global markets & risk culture.
- Tools: Python, Scikit-learn, TensorFlow, Pandas, NumPy, QuantConnect

AI STUDY ASSISTANT - DJANGO WEB APP, GOOGLE GEMINI INTEGRATION *(Jan. 2025 - Apr. 2025)*

- Co-developed a Django-based app that integrates Google Gemini API for real-time AI-powered learning assistance.
- Focused on backend integration, secure API handling, and collaborative software engineering practices.
- Integrated LLM endpoint for real-time query assistance.
- Tools: Django, REST APIs, Google Gemini API, Git

DISCORD BOT - SCALABLE REAL-TIME COMMUNICATION PLATFORM *(Jan. 2025 - Present)*

- Co-Engineered a microservices-based application with 15+ modular components including user authentication, real-time data processing, and automated workflow management serving 300+ active users across 3 production environments.
- Designed PostgreSQL data architecture with normalized schemas for user analytics, audit logging, and permission management ensuring data integrity and compliance.
- Built event-driven processing pipeline with asynchronous message handling and real-time user activity tracking, demonstrating scalable system design principles.
- Tools: Python, PostgreSQL, SQLite, RESTful APIs, Cloud deployment (Heroku), Real-time analytics

EAGLE SCOUT, COMMUNITY CEMETARY CONSTRUCTION (MINI-SUPPLY-CHAIN SIMULATION) *(Sep. 2022 - Oct. 2022)*

- Coordinated sourcing, logistics, and 20-person volunteer schedule over a 7-week period to deliver cemetery construction under budget & on time.
- Oversaw all aspects of project management, including site planning, task coordination, and scheduling.
- Demonstrated leadership, cross-community collaboration, and logistical execution in delivering a meaningful, community-centered infrastructure project.

WORK EXPERIENCE

SALES ASSOCIATE — STAPLES *(Jul. 2024 - Oct. 2024)*

- Managed Amazon returns, order-fulfillment routing, and in-store inventory audits, processing 100+ SKUs daily.
- Analyzed sales-conversion data to upsell rewards program, increasing membership sign-ups 18%.
- Managed Amazon returns, order fulfillment, and customer support for retail and e-commerce operations.

HOST – CO WAVERLY *(Feb. 2023 - Dec. 2023)*

- Led front-of-house operations and maintained inventory for high-volume restaurant. Optimized seating turnover via data-driven waitlist adjustments; maintained inventory of dining supplies.
- Reinforced team efficiency and inventory replenishment practices—core concepts in supply chain management.

REFERENCE

Available upon request