

Rafan Ahmed

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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, Seaborn, 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
- *Extracurriculars & Leadership:*
 - **Investment Analyst — Summit Street Capital (Student Hedge Fund, \$70k+ AUM)** — Performed equity research, conducted macro/company analysis, and explored introductory quant modeling.
 - **AI Literacy Project Lead — Charlotte AI Club (CAIC)** — Led initiatives to broaden AI accessibility and literacy through workshops and outreach, engaging 50+ students campus-wide.

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

CO-FOUNDER & SOFTWARE DEVELOPER — STEALTH STARTUP

(Mar. 2025 - Present)

- Building an early-stage health-tech platform in rare disease research, applying AI/ML and data-driven methods to improve connections between patients, providers, and researchers.
- Leading MVP design and technical exploration, focusing on data integration workflows, backend architecture, and early use of scalable cloud tools.
- Collaborating across software, AI/ML, and biomedical research to validate the concept and support upcoming patent work.

REFERENCE

Available upon request