

ALTON BANUSHI

Available August Through December 2024

(608) 921-5467 | altonbanushi@icloud.com | [linkedin.com/in/alton-banushi](https://www.linkedin.com/in/alton-banushi) | github.com/banushi-a | altonbanushi.com

EDUCATION

Northeastern University

Boston, MA

Candidate for B.Sc. in Computer Science and Mathematics **GPA: 3.98/4.00**

Sep 2021 – May 2025

Coursework: Object Oriented Design, Algorithms & Data, Foundations of Data Science, Logic & Computation, Database Design, Linear Algebra, Probability & Statistics, Calculus 3, Statistic & Stochastic Processes, Group Theory

Awards & Honors: Dean's Scholarship, Dean's List

TECHNICAL SKILLS

Languages: Java, TypeScript / JavaScript, Python, C++, C#, Swift, MATLAB, R

Technologies: React, Next.js, MySQL, Node.js, Express, tRPC, Prisma, Tailwind, SwiftUI, numpy, pandas

WORK EXPERIENCE

UBS

Chicago, IL

Quantitative Developer Co-op

December 2022 – August 2023

- Collaborated with portfolio managers to engineer a custom fixed-income web tool, enabling visualization of 300+ months of data using React and TypeScript
- Designed and implemented a portfolio optimization tool utilizing mixed integer programming, resulting in a positive excess return on average
- Developed and maintained a back-end system to collect and process large-scale fixed-income market data using Python and SQL, reducing manual portfolio analysis by 200%
- Researched 15 different benchmarks to analyze the performance of bond signaling functions over a period of 339 months

Khoury College of Computer Sciences

Boston, MA

Teaching Assistant

August 2022 – Present

- Instruct 40+ students in a weekly lab, explore lecture topics on algorithms and data structures more intensively, address student questions one-on-one
- Provide personalized feedback to students on over 30 assignments weekly, analyze and evaluate more than 15,000 lines of code to identify areas for improvement
- Conduct virtual and in-person office hours, guide 8+ students an hour on homework, debug 10,000+ lines of code

EXTRACURRICULAR

SandboxNU

Boston, MA

Head of Developer Experience

Aug 2022 – Present

- Spearhead the developer onboarding program by collaborating with project leads to implement project-specific 'New Joiner Wikis' and leading workshops, reducing new developer ramp-up time by 40%
- Coordinate with team members to design and develop a Python back end, React front end, and SQL database for a web application, resulting in a seamless integration of front-end and back-end systems
- Maintain and improve existing code-base, contribute 10+ hours weekly to enhance the application including critical bug fixes, resulting in improved application performance

PROJECTS

Student Government Member Tracker

- Digitized the member attendance, voting, and messaging of Northeastern's Student Government with a custom web application, simplifying procedures for over 150 senators
- Automated data collection and processing using a React front end and a Python and MySQL back end, shortening common procedure times by over 500%

Gym Social Media App

- Developed an iOS app that allows users to share their latest workout with friends using SwiftUI and Firebase
- Employed object-oriented principles to enable extensibility and code cleanliness, facilitating the addition of new operations without modifying code interfaces