

Alison Ryan

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[Website](#) | Availability: Jan. - Sep. 2024 | [LinkedIn](#)

EDUCATION

Northeastern University | Khoury College of Computer Sciences | Boston, MA Sep. 2022-Present
Candidate for Bachelor of Science in Computer Science and Mathematics *Expected May 2026*
Honors: **GPA:** 3.97/4.0, Dean's List, Honors Program, National Merit Finalist
Coursework: Object-Oriented Design, Algorithms & Data Structures, Linear Algebra, Discrete Math, Probability and Statistics, Theory of Computation, Fundamentals of Computer Science I and II, Calculus I, II, and III
Activities: Club Running, Club Tennis, Generate Product Development, NUWIT

TECHNICAL SKILLS

Languages: Java, Racket, JavaScript, TypeScript, Swift, HTML, CSS
Frameworks/Tools: React.js, SwiftUI, Next.js, Express.js, Docker
Development: Git, Visual Studio Code, IntelliJ, XCode, Eclipse

EXPERIENCE

Generate Product Development Jan. 2023-Present
Software Engineer *Boston, MA*

- Collaborate with agile software engineering teams to develop websites for Northeastern startups, Boxy and Voxeti
- Contribute to weekly stand up meetings and give/receive constructive feedback from peers on pull requests
- Implement and maintain testing procedures including both unit tests and end-to-end tests to ensure product quality
- Mentor new members to integrate them into the Generate community and familiarize them with the codebase

Northeastern University Sep. 2023-Present
Teaching Assistant for Fundamentals of Computer Science I *Boston, MA*

- Lead a lab section of 40 students, facilitating an in-depth understanding of course material
- Prepare and deliver comprehensive lesson plans each week to reinforce lecture content
- Conduct five hours of weekly office hours to provide students with valuable one-on-one guidance
- Offer technical feedback on assignments and exams to help students improve code readability and functionality

PROJECTS

Run Jam | SwiftUI, Swift | [Github](#)

- Developed an iOS app that plays users' songs aligned with their running cadence, boosting running speed by 8.5%
- Utilized the Core Motion framework to record the user's running cadence within the last 5 seconds
- Integrated the Spotify iOS SDK, allowing users to change their preferences mid-run and adjust playback
- Designed an intuitive user interface for easy navigation and real-time cadence feedback

Boxy | TypeScript, Tailwind CSS, Docker, PostgreSQL, Next.js, Prisma, React.js

- Collaborated on a team of six software engineers to develop a website for renting out storage space to college students
- Built infrastructure to manage reservations by developing REST API endpoints to connect to the backend database
- Created an interactive and scalable web page to display and create user listings in collaboration with designers

Cadence Matcher | Javascript, React.js, HTML, CSS | [Github](#)

- Leveraged the Spotify API to develop a web application that generates personalized running playlists
- Seamlessly handled the selection and sorting of over 1000 songs based on user preferences in tempo and energy
- Integrated an interactive and convenient user interface using React.js to streamline the user experience
- Optimized performance through techniques such as lazy loading and asynchronous data retrieval

Voxeti | Go (golang), TypeScript, MongoDB, Tailwind CSS, React.js, Vitest | In Progress

- Developing a website that allows connecting users with idle 3D printers with those seeking 3D print designs
- Responsible for handling the creation, storage, and display of user profiles

INTERESTS

Running, Classic Rock, Tennis, Guitar, Football, Track and Field