

Ryan Howe

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[LinkedIn](#) | [GitHub](#) | Available May 2025

EDUCATION

Northeastern University

Boston, MA

Bachelor of Science in Computer Science.

Sep 2021- May 2025

- Relevant Coursework: Object Oriented Design, Algorithms & Data Structures, Mathematics of Data Models, Machine Learning and Data Mining I, Artificial Intelligence, Programming in C++

EXPERIENCE

Software Engineer Co-op

Boston, MA

INTEGRITY Security Services

July 2024 – Present

- Converting API framework from Meteor to Express, creating/implementing endpoints for various PKI data types
- Develop client scripts to perform key and certificate cryptography operations on data received from DLM systems
- Integrate new cryptography features and resolve bugs on multiple major releases

Embedded Software Engineer Co-op

Burlington, MA

Keurig Dr Pepper

July 2023 – Dec 2023

- Redesigned file upload alert handling, preventing Azure from receiving over 100k false alerts weekly
- Created CLI commands in C++ for remote control over brewer to improve automated testing
- Designed a memory analysis tool to enhance memory utilization visibility for Smart Brewers
- Worked on features/bugs/defects in scrum environment on multiple Smart Brewer major releases

Software Tech Lead

Boston, MA

Northeastern Electric Racing (NER)

September 2022 – May 2024

- Responsible for maintaining the full stack of FinishLineByNER, a product dashboard with over 200 student users
- Manage and advise a team of 10 developers by overseeing code assignment and providing code reviews.
- Break out epics and tickets while taking ownership of more complicated coding assignments

Teaching Assistant

Boston, MA

Northeastern University (Algorithms and Data Structures)

May 2023 – May 2024

- Hosted weekly office hours to guide 120+ students through course material and assignments.

PROJECTS

Smart Brewer Memory Analysis Tool

Burlington, MA

Keurig Dr Pepper

October 2023-December 2023

- Created mapping tool in C++ that shows all Flash Memory addresses with values in given range
- Implemented functionality in File System to calculate total memory used/available

FinishLineByNER ([Link](#))

Boston, MA

Northeastern Electric Racing

Sept 2022-May 2024

- Improved application by implementing interactive features in the UI with corresponding backend support, introducing new endpoints, and conducting both unit and integration tests
- Software: React, TypeScript, Prisma, PostgreSQL, Express, Docker

All-NBA Team Prediction Project

Boston, MA

Intro to Machine Learning I

April 2024

- Developed a machine learning pipeline to predict All-NBA teams given data extracted from the NBA public API
- Trained 4 distinct predictive models on cleaned data, each surpassing an accuracy of 90%
- Performed feature importance analysis to identify key factors driving model accuracy and interpretability
- Software: Python, NumPy, Pandas

SKILLS/INTERESTS

- **Languages:** Python, TypeScript, JavaScript, Java, C++, HTML, CSS
- **Frameworks/Tools:** React, Prisma, PostgreSQL, Express, Git, Docker, Node.js, MongoDB, Jest, Jira
- **Interests:** Skiing, soccer, golf, travel, fantasy football