

Giovanni Assad

617-505-7621 / assad.g@northeastern.edu / [linkedin.com/in/giovanni-assad](https://www.linkedin.com/in/giovanni-assad) / github.com/giovabattelli

EDUCATION

Northeastern University

Bachelor's Degree in Computer Science

GPA: 3.7

Boston, MA

Expected May 2026

Related Coursework: Data Structures & Algorithms, Object-Oriented Programming & Design, Programming in C++, Computer Systems, Databases, Discrete Structures, Mathematical Reasoning, Mathematics of Data Models, Machine Learning and Data Mining

Technical Skills:

- **Programming Languages:** Java, C#, Python, C++, C, JavaScript, TypeScript, SQL
- **Frameworks and Libraries:** .NET, React, Node, Flask, LangChain, Qt
- **Developer Tools:** Git, GitHub, Azure DevOps, MySQL, MongoDB, PostgreSQL, Postman

PROFESSIONAL EXPERIENCE

Philips

Software Engineering Co-op

July 2024 - December 2024

Cambridge, MA

- Delivered **15+** full-stack enhancements, bug fixes, and features in **.NET/C#** for Philips PIC iX, a hospital monitoring system supporting data from **600+** million patients annually, directly enhancing patient care
- Leveraged **Visual Studio** test tools to develop comprehensive unit tests, achieving **100%** code coverage on new and edited components to validate functionality and enhance code quality
- Contributed to transforming PIC iX's backend components from the monolith to a **microservices** architecture

Northeastern University ([Gruepr.com](https://gruepr.com))

Software Engineering Intern

January 2024 - July 2024

Boston, MA

- Architected a **RESTful API** using **Flask** and **Python**, facilitating integration between clients and learning management systems; boosted engagement and collaborative learning for **80+** educational institutions
- Developed grouping algorithm software in **C++** using **Qt Framework** to optimize student group formations
- Overhauled desktop app integration with Google and Canvas APIs by writing and optimizing C++ code
- Utilized the **Doxygen** tool to generate comprehensive codebase documentation to support future contributors

OTHER EXPERIENCES

Sherpa ([Trysherpa.bot](https://trysherpa.bot)) *Typescript, OpenAI API, LangChain, GitHub API*

September 2024 - Present

- Built a GitHub bot in **Node.js** that uses custom search algorithms and LLMs through **OpenAI API** to suggest context-based solutions to repository issues; deployed across **50+** open-source and private repositories
- Coded a script that uses embeddings to convert codebase data into searchable vectors stored in **MongoDB Atlas**
- Used **LangChain** to implement a search algorithm with ranking and vector similarity to provide context to LLM
- Deployed the bot on an **AWS EC2** instance through Heroku providing reliable and scalable access to users

IntelliScope *Python, Javascript, Selenium, BeautifulSoup, Google Cloud Vision*

September 2023

- Programmed a Chrome extension during HackMIT that leverages **Google Cloud Vision AI** to make written homework submissions quicker on Gradescope; resulted in **60+** users
- Deployed a **Flask** backend to handle **100+** HTTP requests a second to enable real-time data processing
- Crafted a makeshift API by reverse-engineering Gradescope frontend using **Selenium** and **BeautifulSoup**

Peer-2-Peer Battleship *Java, Gradle, JUnit*

June 2023

- Constructed battleship game in **Java** that can be played through the terminal between a server and clients; followed the model-view-controller OOP design pattern to maintain a scalable and reusable codebase
- Composed unit and functional tests in **JUnit**, maintaining **90%+** code coverage through glass-box testing

Awards and Clubs:

Dean's List (all semesters), [PEAK Awardee for Undergrad Research](#), [NU Quantitative Finance Club](#)