Giovanni Assad

617-505-7621 / assad.g@northeastern.edu / linkedin.com/in/giovanni-assad / github.com/giovabattelli / giovabattelli.com

Education

Northeastern University Boston, MA
Bachelor's Degree in Computer Science *Expected May 2026*
GPA: 3.7

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

Experience

Philips July 2024 - December 2024
Software Engineering Co-op *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) January 2024 - July 2024
Software Engineering Intern *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

Projects

Sherpa (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

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

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

Technical Skills

Languages: Java, C#, Python, JavaScript, TypeScript, C++, C, SQL, HTML / CSS
Frameworks & Libraries: .NET, React, NextJS, Node, Flask, Numpy, Sklearn, LangChain, Qt
Other: Git, GitHub, Azure DevOps, MySQL, MongoDB, Supabase, PostgreSQL, Postman

Awards and Clubs:
Dean's List (all semesters), PEAK Awardee for Undergrad Research