Joseph Siracusa

551-237-0240 | siracusa.j@northeastern.edu | linkedin.com/in/joseph-siracusa | github.com/Joeweh | joeyqsa.dev

Education

Northeastern University Expected May 2027
Bachelor of Science in Computer Science *Boston, MA*
Coursework: Algorithms & Data Structures, Computer Systems, Computer Architecture, Object Oriented Design, Foundations of Cybersecurity, Fundamentals of CS 1 & 2, Discrete Structures

Experience

NExT Consulting Sep. 2025 – Dec. 2025
Software Engineer Intern *Boston, MA*
- Built **12 AI-native prototypes** using multi-agent workflows and prompt engineering to guide Northeastern's AI strategy
- Evaluated **50 developer tools** such as Arize Phoenix, LangChain and CrewAI to find the best-fit solution for the university
- Automated CI/CD with GitHub Actions, Docker and Render, eliminating integration bugs before production

Wyzant Jun. 2023 – Sep. 2025
Software Engineer Tutor *Remote*
- Delivered SWE tutoring to students from high school to graduate level, tailoring sessions to academic and career goals
- Tutored 40+ students in DSA, test-driven development and DB design achieving **100% satisfaction** over **300+ hours**
- Designed interactive exercises using Replit & GitHub for students to apply programming concepts with hands-on practice

Northeastern University Jan. 2025 – Apr. 2025
Computer Science Teaching Assistant *Boston, MA*
- Provided instruction to **170+ students** on data structures, algorithms, and object-oriented programming in Java
- Mentored students on data structure selection and redundant computation over **10+ assignments** to optimize time/space
- Reinforced inheritance, polymorphism and encapsulation with **15+ code reviews**, improving student code structure

Projects

Breathe Easy | *Dart, Flutter, Google Map & Air Quality APIs, Docker, Git* 1st Overall – CS Base Climate Hack
- Built a mobile app to compute optimal travel routes from real-time air quality data to help users avoid pollution hotspots
- Developed reactive Flutter/Dart UI for intuitive route visualization, helping users better prioritize their respiratory health
- Integrated Google Maps & Air Quality APIs, mapping route segments using the UAQI to compare exposure between routes

Portal Card | *Dart, Flutter, Google Wallet API, Git* 3rd Overall – FinHacks 2025
- Created a demo mobile app for a hybrid credit–transit card concept to promote public transit adoption and sustainability
- Implemented the app in Flutter and Dart, managing state, UI and business logic to deliver a functional end-to-end demo
- Leveraged digital wallet integration via the Google Wallet API, enabling users to add Portal Cards to their wallets

Math Monsters | *HTML/CSS, JavaScript, Git* 1st in Track – PawHacks 2024
- Constructed an interactive educational game to teach children foundational mathematics through customizable gameplay
- Utilized HTML, CSS, and JavaScript to implement game mechanics and provide an inviting UI for children

City Story | *JavaScript, React, Google Maps API, Java, Spring, Git*
- Produced a web app for tourists to discover, rate and travel to **30+ landmarks** with crowd-sourced recommendations
- Embedded Google Maps API with React to compute optimal multi-stop routes, streamlining trip planning for tourists
- Engineered a RESTful rating system with Spring Java & MySQL, allowing users to rate landmarks and guide future visitors

Tutor Me | *JavaScript, React, WebRTC, Go, Git* Work in Progress
- Developing a real-time tutoring platform enabling tutors & students to video call, screen share and send messages
- Implemented WebRTC video calling and screen sharing with a Go signaling server, enabling low-latency P2P sessions
- Deployed TURN/STUN server for NAT traversal, ensuring reliable P2P connections over restrictive network environments

Technical Skills

Languages: Java, Kotlin, Dart, Python, C, C#, HTML, CSS, JavaScript, Typescript, Go, SQL, Ocaml, x86-64 ASM, WASM
Frameworks: React, Node.js, JUnit, Spring, Ktor, Flask, FastAPI, LangChain, Flutter, .NET, GRPC
Developer Tools: Git, GitHub Actions, Docker, AWS, Linux, Redis, Notion, Linear
Concepts: Data Engineering, System Design, Cloud Computing, Data Structures, Algorithms, OOP, SOLID principles, Unit Testing, APIs, Operating Systems, Web Services, Prompt Engineering, Multi-Agent Systems