

Yusuf Elsharawy

✉ yse2561@rit.edu

☎ (929)-258-9238

🌐 yelsharawy.github.io

🌐 linkedin.com/in/yelsharawy

OBJECTIVE

Experienced and detail-oriented programmer seeking software development co-op position to invent solutions using extensive skills in software design, collaboration, and communication. Particularly interested in opportunities in low-level, backend, or full-stack development. Available Spring/Summer 2025.

EXPERIENCE

Data Analyst Intern

Equality Labs

June 2024 – Current

- Gather functional requirements and learned about each department's duties through self-scheduled meetings with staff.
- Produce internal resources to aggregate and analyze information on over 1,000 contacts, fostering a data-informed culture.

Online Computer Science Tutor

Tutor.com

August 2023 – Current

- Schedule 7 hours a week, during which students can request sessions, to uphold a quota in a remote position.
- Receive consistently positive feedback from college and adult students across 5 colleges and 4 programming languages.

Supplemental Instruction Leader

Rochester Institute of Technology

January 2023 – May 2024

- Planned and lead weekly collaborative study sessions, promoting active participation and group cohesion among students.
- Communicated low-level computer science concepts and the inner workings of C using visual aids and interactive demos.

PROJECTS

Videogame Database Application Backend

Java Spring Boot, JDBC, Git, MVVM, PostgreSQL, Database Design

January 2024 – Current

- Conducted domain analysis to create a robust Entity Relationship model, yielding a relational database of 15 normalized tables.
- Implemented secure REST API endpoints via prepared SQL queries and mapping results to Java objects serialized to JSON.
- Simplified codebase by abstracting controllers and DAOs, reducing over 3,000 lines of code while enhancing functionality.

PC Builder Website

Java Spring Boot, Node.js, AngularJS, RxJS, TypeScript, Git, MVVM

January 2023 – May 2023

- Implemented token-based authentication and role-based access control, resulting in an easily extensible and secure REST API.
- Maintained proper usage of SOLID object-oriented principles, unit testing, and version control across over 350 commits.
- Coordinated a group of 5 students to follow agile development using Scrum over the course of 4 months.

Club Penguin 3D

Unity, C#, Visual Studio

March 2017 – November 2020

- Collaborated remotely with a small team to recreate the childhood MMO game Club Penguin using Unity and C#.
- Refactored project to enhance runtime performance and developer usability, while creating tools to streamline development.
- Prioritized user experience and maintainability when engaging in team discussions over key design decisions.
- Delivered seasonal game updates and regular bugfixes to an audience of over 45,000 users over the course of 3 years.

SKILLS

Languages

C/C++, Python, Java, SQL, C#, .NET, Bash, HTML, CSS, JavaScript / TypeScript, Haskell, Nim, Zig

Tools

Git, Node.js, Amazon Web Services, Microsoft Azure, Google Cloud, Docker Containers, Valgrind + GDB, MongoDB, Visual Studio

Technical Skills

Linux System Administration, Cloud Architecture, Distributed Systems, Automation, Data Structures, Algorithms

EDUCATION

Rochester Institute of Technology

Bachelor of Science, Computer Science

GPA: 3.84/4.00

August 2022 – December 2026 (Expected)

AWARDS & CERTIFICATIONS

- | | | |
|--------------------------|------------------------------|---------------|
| • Amazon Web Services | Certified Cloud Practitioner | July 2023 |
| • Microsoft | Azure Fundamentals | July 2023 |
| • Putnam Competition | Score: 20 | December 2023 |
| • BrickHack 9 | Best Use of AI to Elevate | February 2023 |
| • RIT | Dean's List | 2022 – 2024 |
| • Stuyvesant High School | Highest Honors in CS | June 2022 |