

# Xavier Rao

(201) 936-9204 | [xavierrao23+resume@gmail.com](mailto:xavierrao23+resume@gmail.com) | <https://github.com/XavierRao> | <https://www.xavierrao.com>

## Objective

Seeking a Spring/Spring and Summer Software Engineering co-op using strong programming skills in Python, Java and JavaScript. Available January to August 2026.

## Education

### Rochester Institute of Technology (RIT)

Bachelor of Science, Software Engineering

Expected May 2028

*Related Courses:* Intro to Software Engineering, Web Engineering, Process and Project Management, Engineering of Software Subsystems, Intro to Cybersecurity

## Skills

**Programming Languages:** Java, Python, JavaScript, HTML/CSS, TypeScript, SQL, C

**Software:** Visual Studio Code, IntelliJ IDEA CE, STM32CubeIDE, Fusion 360, Git, GDB, Maven, Jacoco, Angular

## Projects

### Most Likely To Game, *Personal Project*

May 2025 – Present

- Developed a real-time, multiplayer web-based party game using React, JavaScript, HTML, CSS, Node.js, and Socket.IO, enabling players to join games, vote on fun questions, and reveal results interactively
- Implemented WebSocket communication for seamless game state synchronization and integrated a JSON-based question bank for dynamic content delivery

### NutriApp, *Class Project*

Spring 2025

- Collaborated in a team to design and develop a nutritional planning web application using Java, Angular, TypeScript, HTML, and CSS, enabling users to track dietary goals and generate meal plans
- Implemented backend logic for nutritional data processing and frontend components for user interaction, integrating RESTful APIs for seamless data exchange

### TypeSpeedrun, *Personal Project*

October 2025 – March 2025

- Developed a web-based typing speed assessment tool inspired by Monkeytype.com using HTML, CSS, and JavaScript
- Designed a dynamic mode selection interface for customizable tests (time, word count, quote length) with Fetch API integration for real-time JSON data retrieval

### Cat Rescue, *Class Project*

Fall 2024

- Collaborated in a team of three to develop a web application for cat rescue in Rochester using Angular CLI, Java, HTML, CSS, and TypeScript
- Designed and integrated key pages (Login, Basket, Checkout, Admin) with Angular's HTTPClient for seamless frontend-backend communication

## Work Experience

### MLC STEM Center | Bloomfield, NJ

Summer 2022/2024/2025

#### STEM Mentor/Counselor

- Developed and delivered lesson plans on coding, physics, chemistry, and 3D design for classes of 20 students
- Designed and led a week-long curriculum introducing artificial intelligence concepts through hands-on coding projects
- Fostered collaborative learning through hands-on instruction, emphasizing foundational programming concepts

### TAG Online Inc. | Clifton, NJ

Spring 2023

#### Intern

- Designed and developed custom websites using WordPress, HTML, CSS, and PHP, meeting client specifications for usability and aesthetics
- Contributed to projects including [pinkhammerhome.com](http://pinkhammerhome.com) and [corbocollection.com/hotels](http://corbocollection.com/hotels)

### NanoGraf | Chicago, IL

June 2021 – July 2021

#### Intern

- Engineered high-performance battery cells by formulating specialized slurries and applying precision compression in a controlled glove box environment
- Conducted patent research and competitive analysis, documenting findings in detailed spreadsheets to support materials innovation