

ZOE RIZZO

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EDUCATION

Rochester Institute of Technology

Rochester, NY

Bachelor of Science in Software Engineering

May 2027

Relevant Courses: Web Engineering, Software Process and Project Management, Engineering of Software Subsystems, Human Centered Requirements and Design

EXPERIENCE

Software Engineering Intern | New Jersey Innovative Institute COMET

June 2024 – Dec 2024

Software Lead | Project W.A.R.D.E.N.

Landing, NJ

- Led the software team to create controls and communication code for an aerial drone and ground rover
- Implemented LAN network communications, using the aerial drone as a network extender to enhance the communication range of the ground rover
- Used NVIDIA Jetson Nano to implement live object detection using PlantNet-300K with OpenCV

Innerstill Flutter Mobile App

- Worked closely with a client to improve existing Flutter app by creating a robust design document
- Developed a script to automate administrative tasks and generate app activation codes specific to each user using RSA encryption
- Resolved critical issues by updating deprecated libraries and refactoring legacy code to ensure full functionality and seamless user interactions

Executive Board Member | RIT VEX U Robotics

Aug 2022 – Current

- Lead competition debriefs and planning meetings, implementing a Gantt chart to track tasks and deadlines and facilitate open communication among sub-teams
- Established comprehensive documentation standards to preserve both technical and administrative knowledge, ensuring long-term team sustainability

FIRST Robotics Mentor

Sep 2022 – Current

- Teach high school students good programming practices, design process, and proper documentation

PROJECTS

Wikipedia Race

Personal Project, Aug 2024 – Oct 2024

- Created a program to find the quickest path from one Wikipedia article to another through hyperlinks
- Visualized search graphs with over 300 nodes using NetworkX and Matplotlib
- Decreased search time by an average of 60% by using A* Search with optional multi-threading to reduce runtime based on search complexity

U-Fund Non-Profit Donations Board

Intro to Software Engineering, Aug 2023 – Dec 2023

- Led a team to design and build a non-profit donation website using Java Spring and Angular
- Conducted asynchronous code reviews to improve the quality of features
- Achieved 96% backend code coverage through robust and independent unit tests

SKILLS

Language and Frameworks: Java, Python, HTML, CSS, C, JavaScript, Angular, Spring Boot, Bootstrap

Tools: PostgreSQL, Raspberry Pi, Arduino, Linux, Windows, Git, OpenCV, SonarQube

Methodologies: Agile, Scrum, OpenUP, Rapid Development