

AIDAN LYNCH

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Seeking a software engineering position for Q1 2025.

EDUCATION

Rochester Institute of Technology | Rochester, NY
B.S. in Computer Science GPA: **3.86**

August 2019 - December 2022

CS Courses: Computer Vision • Machine Learning • Algorithms • Networking • Distributed Systems

Math Courses: Graph Theory • Game Theory • Multivariable Calculus • Differential Equations

EXPERIENCE

C Speed: Software Engineer

February 2023 - Present

- Translated project requirements into high-quality, maintainable software across multiple domains.
- Led multiple software development efforts while delegating responsibilities to interns and managing their deliverables.
- Improved and maintained build systems to create bootloader, kernel, and root file system images for various embedded devices.
- Leveraged knowledge in PowerShell and WSL to mount LUKS encrypted partitions on a Windows machine.
- **Utilized:** C++, Bash, PowerShell, Linux/WSL, OpenEmbedded, OpenWRT, Azure DevOps, SVN

Bryx: Software Engineering Intern

May 2022 - August 2022

- Improved form extensibility through the use of a nested data structure for storing user-created forms.
- Built a dynamic rendering system for the form structure by using a set of recursive functions.
- Incorporated regulatory form requirements by extending the nested structure for validation criteria.
- **Utilized:** TypeScript, React, JSON, Material UI

C Speed: Software Engineering Intern

January 2021 - August 2021

- Improved a radar data parser's performance by 25% through the identification of inefficient operations.
- Implemented an interactive website for the visualization of live and historical radar data.
- Implemented a distributed algorithm for determining the temporal ranges of data points to improve search and playback.
- **Utilized:** C++, C#, JavaScript, AWS

PROJECTS

AutoPot:

June 2023 - Present

- Designed a distributed system that separated sensor and control processes to improve flexibility and fault handling.
- Leveraged Unix domain sockets to handle inter-process communication to coordinate system behavior.
- Translated knowledge in build systems and shell scripting to improve the build, deployment, and testing cycle.
- **Utilized:** Rust, Cross Compilation, SPI, SQLite

Artificial Life:

January 2022 - February 2022

- Designed creatures with a genome to dictate traits and a neural network brain to govern behavior.
- Implemented the NeuroEvolution of Augmenting Topologies algorithm to simulate evolution in a digital population.
- Leveraged Perlin noise to guide the generation of random world terrain and obstacles.
- **Utilized:** C++, SFML, NEAT

Drone:

September 2018 - May 2019

- Leveraged the tiny footprint and compute power of a Raspberry Pi to control the flight of a custom built drone.
- Implemented user controls by converting radio receiver signals to thrust and translation vectors.
- Integrated a PID control loop to change propeller speed based on sensor readings and user input.
- **Utilized:** C++, PID, GPIO, Raspberry Pi

SKILLS

Programming: Rust • C • C++ • Bash • Python • C# • Java • JavaScript • HTML • CSS • SQL

Tools: Git • Azure DevOps • SVN • Linux • Make • OpenEmbedded • BuildRoot • Neovim