

# Harry Lynch

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## EDUCATION

### Tufts University

Medford, MA

Bachelor of Science in Computer Science, Minor in Finance, Minor in Mathematics

Expected Graduation: May 2027

- **Cumulative GPA:** 3.8/4.0 | **Major GPA:** 3.9/4.0

- **Relevant Coursework:** Data Structures, Artificial Intelligence, Linear Algebra, Multivariable Calculus, Discrete Math

### The Lawrenceville School

Lawrenceville, NJ

Secondary Education

Graduated June 2023

## TECHNICAL SKILLS & PROJECTS

**Programming Languages:** C++, C, JavaScript, TypeScript, Python, SQL, Java, C#, HTML, CSS, Assembly Language

**Software Programs and Tools:** Amazon Web Services, React, PostgreSQL, NodeJS, ExpressJS, Git, Docker, UNIX

**Languages:** English, Spanish

### Container Depot Internal Inventory Software (JavaScript & SQL: React, ExpressJS, AWS, NodeJS)

- Developed a web-based inventory system capable of managing shipping containers from reception to sale.
- Implemented user authentication and account system, automated client emails, and industry-focused logistic tools.
- Currently hosted and maintained live from AWS (EC2 & S3) for day-to-day internal corporate use.

### Grep Recreation (C++)

- Created a template-class hash table from scratch and applied it to the indexing of words within a file tree (like unix's 'grep').
- Supported near-constant time access to an index of tens of thousands of text files through an Object-Oriented approach.

### Huffman Encoder and Decoder (C++)

- Implemented text compression by applying the Huffman Algorithm to a binary tree to generate bit codes for ASCII text.
- Significantly reduced file sizes by encoding into binary while supporting lossless decompression back to readable text.

## PROFESSIONAL EXPERIENCE

**Launch** (Python: TensorFlow, Django, MongoDB; JavaScript: React, NodeJS; AWS: EC2, S3)

Medford, MA

Full Stack Software Development Intern

January 2025 – May 2025

- Contributed to the front and back ends of an artificial intelligence-based startup focused on custom website generation.
- Developed and trained a custom AI agent to generate a website based on scraped data from existing social media profiles.
- Created an interface for end-users to customize generated websites (dragging and dropping website components, etc).

**Airtight Storage Systems Inc.** (Technologies Listed Above)

Manalapan, NJ

Software Development Intern

May 2024 – October 2024

- Single-handedly developed and maintained a full-stack web application for internal inventory and sale management.
- Implemented industry-specific invoice generation, transport documents, and bespoke internal communication software.

**Ray Catena Mercedes Benz of Freehold**

Freehold, NJ

Product Specialist

May 2023 – August 2023

- Provided support in navigating automotive software documentation and facilitated user experience.
- Performed exceptional customer service and product education in a sales environment.

**The Lawrenceville School**

Lawrenceville, NJ

House Prefect / Resident Assistant

September 2022 – May 2023

- Mentored and oversaw 40 underclassmen aged 14-17 in a residential house (similar to a dormitory) for 14 hours daily.
- Responsible for liaising student concerns with residential staff.

## LEADERSHIP & ACTIVITIES

**Engineers Without Borders**

Medford, MA

Software Developer

September 2024 – Present

- Worked with a team of developers on a web-based project-management system to organize large humanitarian efforts.
- Plans to scale to the hundreds of EWB chapters at other universities supporting operations in Third World countries.

**Tufts Varsity Football**

Medford, MA

Player – Defensive Line

August 2023 – May 2024

- Practiced and Competed as an NCAA varsity athlete.

**Tufts Torn Ticket II**

Medford, MA

Stage Manager, Pit Guitar Player, Actor

August 2023 – Present

- Facilitated production of a mainstage musical, managing 40 cast and crew members. Scheduled and ran rehearsals.

**General Interests:** Guitar, Welding, Football, Theatre, Tennis, Chess.