# Harry Lynch

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### PROFESSIONAL SUMMARY

Intellectually curious Computer Science, Finance, and Math student passionate about technology and economics. Proficient in both front-end and back-end industry-standard technologies with a strong mathematical background. Equipped with strong analytical, communication, and problem-solving abilities.

#### **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

Secondary Education

Lawrenceville, NJ

Graduated June 2023

**TECHNICAL SKILLS & PROJECTS** 

Programming Languages: C++, JavaScript, Python, SQL, HTML, CSS, Java, C

Software Programs and Tools: Amazon Web Services (EC2, S3), React, PostgreSQL, NodeJS, ExpressJS, Git, Docker

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 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

### Airtight Storage Systems Inc.

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 invoice generation, facilitated transport documents, and developed an 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

- Working 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 nationwide.

# **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.