Eli Intriligator

San Francisco, California | intril.eli@gmail.com | linkedin.com/in/eintri | e.intril.net

EDUCATION

Tufts University, Medford, MA   **May 2023**
- *Bachelor of Science in Computer Science*
- *Bachelor of Science in Science, Technology, and Society*
- **Honors:** Phi Beta Kappa, *summa cum laude*, Dean's List (all semesters)

WORK EXPERIENCE

Full Stack Engineer for Tufts JumboCode, Medford, MA   September 2021 – May 2022
- Collaborated with an Agile student team to build a web app for event management, display, and registration, connecting 1000+ families with community programs at the Bergen Family Center (React).
- Implemented 10+ backend components for users to login, filter, and register for relevant events (Firebase).
- Built frontend interface for upcoming events, reducing page load time by 15% with image optimization (CSS).

Software Engineer for Computer Science Dept. at Tufts University, Medford, MA   March 2021 – January 2022
- Engineered VR prototype for visualizing high-volume datasets in Unity, a central feature of a $1M project sponsored by the Department of Defense (C#).
- Simulated real-time particle systems that dynamically respond to user input, with option to import CSV data.

Software Engineer for Human Factors Lab at Tufts University, Medford, MA   June 2020 – March 2021
- Developed VR environment in Unity to envision novel methods of searching airport baggage, deploying customized shaders to simulate realistic scans; research performed in partnership with the Department of Homeland Security (C#).
- Engineered simulation of an airport baggage screening console to record user performance metrics across 4 unique hardware devices.
- Utilized the simulation to conduct a usability test and optimize UX of airport screening, achieving 20% reduction in baggage search time at major airports.

Software Engineering Intern at Lexiwave Technology Ltd., Boston, MA   May 2019 – August 2019
- Developed object-detection algorithm for new radar modules, improving fire safety and climate control systems in several indoor shopping malls as part of a technology partnership with Infineon (C).
- Designed a calibrated state machine to process microwave signals from Doppler radar transceivers.

PROJECTS

Portfolio Website   October 2023
- Built polished, professional website with responsive layout, engaging animations, adjustable theme, and fully functional contact form (TypeScript, Tailwind CSS).
- Leveraged Server-Side Rendering and Server Functions in Next.js to optimize performance and improve UX.

Sleep Tracker API   June 2023
- Developed scalable RESTful API for a sleep tracker application, defining 5 endpoints to handle client requests to log sleep data, deliver reports, and analyze trends (Flask).
- Designed and implemented PostgreSQL database with CRUD operations.
- Leveraged Docker to containerize the database, ensuring consistent development and testing environments.

Network Incident Alarm   March 2022
- Developed real-time monitoring program to analyze network traffic and alert users about potentially malicious activity, detecting 4 distinct port scans and user credentials sent without encryption (Python).

Image Compressor and Decompressor   October 2021
- Engineered image compression program, achieving 70% reduction in file size by implementing algorithms for color space conversion, quantization, discrete cosine transform, and bit packing (C).
- Built decompressor to restore compressed images to their original format with minimal 2% information loss.

SKILLS

Programming Languages: JavaScript, TypeScript, CSS, HTML, Python, C++, C#, C, SQL, Bash
Frameworks and Technologies: React, Next.js, Tailwind CSS, Docker, Git, Flask, RESTful API, Agile Development
Databases: PostgreSQL, Firebase
Software Packages: Unity, Xcode, Visual Studio Code, GDB, Wireshark, Vim