Peter C. Morganelli

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EDUCATION

Tufts University Medford, MA

Bachelor of Science in Computer Science (BS in CS) GPA: 3.7/4.0

Fall 2023 - Spring 2027

• Relevant Coursework: Machine Structure and Assembly, Data Structures + Intro Computer Science (C++), Generative AI, Calculus I

Milford High School Milford, MA

• Top 10% in class; Hank Schroeder Computer Science Scholarship

June 2023

EXPERIENCE

Tufts University Medford, MA

Data Structures Course Assistant | C++

August 2024 - Present

- Evaluated and graded 60+ student submissions, assessing code functionality, style, and organization
- Held regular office hours to support 200+ students with homework assignments and course concepts
- Provided constructive feedback to students, facilitating their understanding and application of data structures principles
- Actively responded and endorsed hundreds of student questions and answers on the course Piazza forum page

Tufts JumboCode | React, TypeScript, TailwindCSS, Next, DrizzleORM, Clerk

Medford, MA

Software Developer

October 2023 - Present

- Developed a full-stack inventory website for a local Somerville theater with a group of 10+ developers
- Implemented data retrieval and submission functionalities by working on GET and POST API handlers using TypeScript, enhancing several React components and styling them with TailwindCSS
- Facilitated user content management by designing a page that enables the user to upload images into a custom carousel, detailing item information such as name, description, and filter tags while using Figma for design prototyping

Massachusetts Institute of Technology's Leadership Training Institute (MIT LTI)

Cambridge, MA

Project Mentor

February 2024 - May 2024

- First-ever non-MIT student to become a mentor at LTI in 11 years of the program, presented in front of 70+ LTI students in 2022 and 2023
- Mentored 15+ students on their community service projects, including one student who was 1 of 3 chosen to present out of 50+ peers
- · Advised students on leadership building strategies through leading weekly two-hour in-person development sessions on the MIT campus

PROJECTS

College Break Matcher | React, Next, TypeScript, Node, Python, Flask, BeautifulSoup

May - Aug 2024

- Engineered a full-stack application to scrape and aggregate academic calendars from various colleges, displaying overlapping breaks on a dynamic React calendar interface
- Designed and integrated a user-friendly interface with React calendar components to visually represent and compare overlapping academic breaks, improving accessibility and usability for students planning shared activities.

Advanced Portfolio Website | https://petermorganelli.vercel.app | React, JavaScript, Tailwind, ThreeJS, EmailJS, Framer Motion July 2024

- Designed and developed a highly responsive portfolio website through the use of React and Tailwind, showcasing advanced front-end development skills and adherence to modern web design principles
- Engineered interactive components including a dynamic navigation menu, detailed project showcase, and experience sections by leveraging React and JavaScript for a seamless user experience
- Integrated complex three-dimensional objects with ThreeJS and implemented a fully-functional contact form utilizing EmailJS, enhancing user interaction and engagement on the platform

gerp | C++ May 2024

- Replicated the Unix "grep" program in C++ using Hash Tables, Vectors, and Maps achieving <1GB of RAM and 2.3s query time
- Achieved efficient indexing and search functionality for strings capable of handling a minimum 5GB of text files (~900 million words)

LEADERSHIP & ACTIVITIES

Tufts Leadership Training Institute (LTI)

Medford, MA

Founder and Head Project Mentor (PM)

June 2024 - Present

- Successfully recruited 15+ mentors for an intensive 8-week program, ensuring a high-quality mentorship experience and involvement
- Spearheaded all meetings, planning, funding, room reservation, recruitment, and admission to the program
- Worked alongside MIT LTI directors to effectively establish a new student organization and abide to all guidelines of the program

SKILLS

Languages: C++, C, Python, JavaScript, TypeScript, CSS, HTML, Makefile

Technologies & Frameworks: React, Next.js, Node.js, TailwindCSS, Git, BeautifulSoup, Framer Motion, ThreeJS, Linux, Figma