Elias Thomas

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EDUCATION

California State University, Fullerton   Fullerton, CA
B.S. in Computer Science — GPA: 3.87 / 4.0   *August 2023 – Present*
Expected Graduation: May 2027
Relevant Courses: Software Engineering, Data Structures & Algorithms, Files & Databases, Front End Engineering

EXPERIENCE

Controls and Data Engineer   Aug. 2025 – Present
Formula SAE   *Fullerton, CA*
- Collect and process telemetry from the Engine Control Unit (ECU) to evaluate engine and vehicle performance.
- Design and implement the core firmware for the vehicle's Electric Throttle Control (ETC) system using C++ on an Arduino microcontroller, resulting in a **6%** increase in engine efficiency.
- Collaborate in a multidisciplinary team with **20+** mechanical and electrical engineers to integrate the ETC module and other components with physical sensors and vehicle hardware.

Algorithm Officer   June 2025 – Present
Association for Computing Machinery (ACM)   *Fullerton, CA*
- Lead weekly workshops on fundamental data structures and algorithms for 40+ students, delivering over **10** sessions on topics including arrays, trees, and graphs.
- Develop and present a curriculum of **30+** LeetCode-style problems to strengthen members' problem-solving abilities and prepare them for technical interviews.
- Provide targeted one-on-one mentorship during workshops, providing guidance on effective debugging, professional coding practices, and advanced algorithmic thinking.

Barista   Oct. 2023 – Present
Starbucks Coffee Company   *Ladera Ranch, CA*
- Provide exceptional customer service in a fast-paced environment, building meaningful connections with regular customers and serving **500+** per day.
- Effectively communicate with coworkers to streamline operations and maintain a positive work environment, helping the store **consistently exceed** targets for order accuracy and speed.
- Accurately process hundreds of daily transactions, maintaining speed, precision, and trust in handling payments.

PROJECTS

Group Chat Web Application [Github] | *Python, FastAPI, PostgreSQL, React, Websockets*   Sept. 2025
- Built a full-stack messaging platform with JWT-secured authentication, group chats, invitations, and user management.
- Designed a PostgreSQL schema (accounts, chats, messages, invites) with SQLAlchemy ORM to ensure persistence, relational integrity, and data validation.
- Integrated a React frontend and implemented WebSockets for real-time chat messaging, enabling live updates across multiple clients.

Formula SAE Club Website [Github] | *HTML, CSS, JavaScript*   Oct. 2025
- Developed and deployed a 6-page, public-facing static site (csuftitanracing.com) to showcase engineering projects, attract sponsors, and recruit new members.
- Engineered a responsive, mobile-first UI, resolving complex cross-browser rendering bugs to ensure a consistent experience on all devices.
- Achieved an average Google Lighthouse score of **92+** by optimizing site performance (preloading, lazy-loading) and implementing on-page SEO (meta tags, sitemap).

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, C++, SQL, HTML/CSS, Assembly
Frameworks & Libraries: FastAPI, React.js, SQLAlchemy, PyTorch
Databases & Platforms: MySQL, PostgreSQL, Supabase
Developer Tools: Git, GitHub, Linux, Vite, VS Code, REST APIs, JWT