

Eli Slothower

Active Top Secret / SCI w. poly Clearance elislothower@gmail.com 717-668-3717 elislothower.com linkedin.com/in/eli-slothower

Education

Carnegie Mellon University, *Bachelor of Science in Computer Science, Minor in Software Engineering*

May 2025

Skills

Python, C, JavaScript, TypeScript, AWS, Go, React, Rest, Object-Oriented Programming, HTML, CSS, Functional Programming, Parallel & Concurrent Programming, LLMs, CI/CD, Agile/Scrum, Git, SML, Embedded Systems, OSI Model, Networking, Linux, Windows, Problem Solving, Teamwork, Written and Verbal Communication, Creativity, Time Management

Work Experience

Lockheed Martin Space

Full Stack Software Engineer, active Top Secret SCI w/ Polygraph clearance

Jun. 2025 – Present

- Specific details are withheld due to the highly classified nature of the program I work on. In general, this job requires:
 - Python, React, Rest, AWS, TypeScript, Bash Scripting, Networking, Docker, Kubernetes, Agile, and more
 - Speaking to government officials, writing documentation, holding meetings, ensuring code quality, and more
- Safeguarding the nation and its allies from highly dangerous threats

Embedded Software Engineer

May 2024 – Aug. 2024

- Solo-developed a classified testing suite in C for the United States Sentinel program, integrating over 10 different embedded systems. This streamlined the upgrade process of a 50+ year-old national security system designed to protect all 50 U.S. states and allied nations from potential global threats

MIDL Technology (startup company), *Full Stack Software Engineer*

Jun. 2023 – Aug. 2023

- Engineered a security alert system with ReactFlow and Next.js, enabling 100,000+ event chains that trigger security responses
- Built a secure check-in application for visitor-kiosks, enhancing 1,000+ kiosks used by universities, companies, and other users
- Created new features for the admin dashboard, like enhanced audit logs, object-filtration charts, and more for 100's of admins

Playspaces (startup company), *Full Stack Software Engineer*

Jun. 2022 – Jun. 2023

- Aided in reengineering codebase in C#/Unity and backend in Python, helping earn \$1,250,000 from the IES SBIR grant
 - Solo-engineered app prototype for funding using Vue.JS, helping to secure 12 executive board members
 - Created native iOS/Android wrapper of web application, increasing load times by ~200%
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Projects and Papers *(more on elislothower.com)*

- **Are You Smarter Than a Senior? (Python)**: A Carnegie Mellon professor once told me, "99% of graduating seniors in computer science can't even write QuickSort." This project features my implementations and cost analyses of common CS algorithms
 - **Incentives Map (TypeScript)**: Volunteered for Rewiring America, developed an interactive coverage map connected to their API
 - **Malloc (C)**: Implemented a custom memory allocator by implementing explicit free lists, segmented free lists, better-fit algorithms, mini-blocks, and more, resulting in a mean utilization of 83.4% and throughput of 7295
 - **EcoSim (Python)**: Developed a complex ecosystem simulator capable of randomized terrain generation, species, and mutation, along with metrics, graphs, and more to track the ecosystem's progress
 - **Power Method, QR Method, Deflation (Julia, LaTeX)**: A mathematical research paper on advanced Linear Algebra / Matrices
 - **Emotional Stimuli and Beyond (Python, LaTeX)**: A paper analyzing LLM performance due to emotional prompt engineering
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Awards, Honors, and Extracurriculars

- **Boeing STEM 2024 Scholarship**: Awardee. In recognition of impressive STEM accomplishments in college and high GPA
- **CMU Student Leadership Recognition Award**: Awardee. Recognized for my positive and lasting impact on all of campus
- **2025 Carnegie Mellon Graduation Event Speaker**: Spoke about my leadership on campus, and the communities I fostered
- **Students Using Data for Social Good**: Worked with non-profit/government organizations on data-driven, social justice projects
- **Habitat for Humanity**: Former Trip Coordinator and Board Member. Not just building houses, but homes, for those in need