HALEY LENANDER

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Skills

Java, Python, C, Go, AI validation, RISC-V, JavaScript, HTML/CSS, Bash, Linux, Unity, Assembly, Kubernetes, Docker, XML, YAML.

Education

***Bachelor of Science: Computer Science* | University of San Francisco**

Aug 2020 - May 2023. Summa Cum Laude, 4.0 Major GPA.

Relevant Classes: Software Engineering (Java), Operating Systems (C), Data Structures & Algorithms (Java), Programming Languages & Paradigms (Racket, Haskell), Senior Team Project (Golang, Docker, Kubernetes)

Experience

***Software Engineer* | DataAnnotation | Jan 2024-Current**

- Troubleshoots three to five different AI models on their ability to generate correct code.
- Validated over 100 prompt response evaluations through intensive testing.
- Improved the accuracy of models working on Python data visualization from 10% to 50% through accuracy evaluations.

***Teaching Assistant* | University of San Francisco | Jan 2023 – May 2023**

- Directly ensured the success of 50 students in creating and optimizing high-level custom search engines.
- Greatly improved student understanding of programming concepts such as multithreading and complex data structures.
- Advised students on optimizing their code as well as contributing to student skill in code-writing.

***Instructor/Tutor* | Wallenberg HS, Breakthrough (volunteer) | Jan 2023 – May 2023**

- Designed and implemented lessons to teach Python and general coding concepts to middle and high school students.
- Fostered girls' confidence in programming, improving female participation (asking/answering questions in class) by 70%.
- Customized lessons to student experience and level of engagement required, anticipating student level of understanding.

Projects

Custom Search Engine (available upon request) — *Java, Html*

Utilized advanced Java programming to create an optimized, multithreaded, full-stack search engine with the capacity for exact and partial (prefix) search. Assembled using Log4j, Bulma, SQL, HTML requests, and many open-source libraries. Created web-crawler functionality and search algorithm and worked with data structures and multithreading to improve runtime by 3x. Project available by request due to plagiarism concerns.

Admissions Webhook (Intel Mentorship) — *Golang, Shell*

Implemented custom event creation and dashboard initiation and manipulation using Kubernetes, as well as utility methods for an admissions webhook that works with Kubernetes, Docker, Redis and a variety of other open-source tools. Utilized open-source tools such as Syft and Grype to scan and vet pods for CVE's and to analyze their components (SBOM).

Custom Shell (available upon request) — *C, Linux*

Created a custom Linux shell that performs similar or improved functionality to a regular Linux shell, notably to execute commands such as ls, cd, exit, and history. Also worked on functionality for scripting, signal handling, history storage, I/O redirection (pipes), background jobs, and autocomplete. Works in a Linux virtual machine.

Portfolio Website — *JavaScript, React*

Created a portfolio website using React framework to showcase personal projects and expertise as a programmer. Personalized using custom assets and CSS specifications.

Climate Change Casa — *Python (Pygame)*

Utilized Pygame to develop an active user input-based trash sorting minigame and optimize overall functionality of an eco-education-based computer game.

Awards and Acknowledgements

- ***Community Engaged Computer Science: Scholar (University of San Francisco)***
  Part of a selective program of students requiring and pursuing academic excellence in Computer Science.
- ***Academic Excellence Award for Computer Science (University of San Francisco)***
- ***Dean's List all semesters (University of San Francisco, St. Andrews Scotland)***
- ***Yale Science and Engineering Award (Hawaii State Science Fair '19)***