Aria Diamond

https://github.com/ariadiamond New York, US

PROFILE

Recent college graduate looking to gain work experience in the industry. Interested and have academic experience in both front-end and back-end design and implementation. Able to work well both alone and in teams, including those using Agile development strategies. Organized and detail oriented.

EDUCATION

UC Santa Cruz — Computer Science BS, September 2018-June 2021
Graduated Magna Cum Laude and Highest Honors in the major
Relevant Coursework: Database Systems 1&2, Distributed Systems, Software Engineering, Functional Programming, Analysis of Algorithms, Data Structures

SKILLS

Programming Languages: C, C++, Go, Haskell, HTML, Java, JavaScript, Python, SQL
Operating Systems: Docker, FreeBSD, Ubuntu
Other frameworks: D3.js, ReactNative, HTTP, Git, LaTeX

EXPERIENCE

Grader, UCSC, Santa Cruz, California, US — April 2020-June 2021
Evaluated students assignments for correctness and gave detailed feedback on mistakes. Worked for three upper division classes on design and analysis of algorithms, including design and proof of correctness for greedy algorithms and dynamic programming, computational models, and database management on PostgreSQL and interaction from Python.

Group Tutor, UCSC — January-March 2020, April-June 2021
Explained assignments and concepts surrounding compilers in Haskell and distributed systems in Go, Python, and JavaScript. Troubleshot code written by students.

Buyer, Crossroads Trading, Santa Cruz, California, US — February 2018-March 2020
Appraised and priced clothes based on style, trend, and brand for the store to sell. Directed customers into fitting rooms, cashiered, and organized/cleaned the store.

PROJECTS

Cryptik, NYU — November 2021-Present (Go, JavaScript)
An end-to-end messaging platform using a client-server design. Uses a natural expansion of Diffie Hellman key agreement to an arbitrary number of parties to allow users to agree on keys with all users including randomness. User authentication and verification of messages use ed25519, allowing the user's password and any derivation to not be stored on the server.

Twizzler, UCSC — April 2021-Present (Doxygen)
Document user space primitives provided by the research OS. Explain primitives in contrast to those provided by previous OSes, including translations between the two and rationale for changes. Requires understanding of low level user space primitives written in C.

Nan HTTP — January 2021-Present (Go, Python3)
An HTTP server allowing for configuration files to construct dynamic web pages. Supports TLS 1.3 protocol for secure communication. Includes functional tests written in Python3 with the requests module.