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https://github.com/onionhoney

Education

The University of California, Los Angeles

B.S. Computer Science, Class of 2019

Los Angeles, CA Sept 2015 - present

- GPA: 3.90 (Dean's Honors List)
- Coursework: Compiler, AI, OS, Network, Algorithm, Automata Theory, Programming Languages, Computer Architecture, Linux Software, Graphics;

Experience

• Software Developer Intern at Microsoft OS Security

Redmond, WA | Summer 2018

- Prototyped a smart whitelisting policy recommendation cloud app for enterprises in C#.
- Analyzed telemetry data from 100k+ users and came up with metrics for measuring policy effectiveness.

• Software Developer Intern at Symantec

Los Angeles | Summer 2017

- Ported legacy virus scanner engine to the new safe execution environment in C++.
- Designed an automatic code converter using tokenizer to help the porting effort in Python.

Research & Projects

• LoopInvGen - PL Research under Prof. Todd Millstein | OCaml

Fall 2017 - Present

- Worked on LoopInvGen, the world's fastest Loop Invariant Generation Tool for Program Verification.
- Write 500+ lines of OCaml to add powerful type and quantifier semantics to the synthesis engine.
- 15-puzzle.com A Sliding Puzzle Game and Solver on the Web | C++/TypeScript

Winter 2018

- Designed the first-ever online 15-puzzle player with a modern UI and an optimal solver.
- Implemented an optimized A-star searching algorithm compiled to WASM to solve any given state.
- Received positive feedback from dozens of users.
- Hymnia Face Recognition Music App | Frontend ReactNative

May 2017

- Created music recommendation algorithm based on emotions detected from selfies.
- Built a music player with React that stream songs from youtube.

Contests and Awards

- Competitive Programming
 - Placed 4 / 105 at 2017 ACM-ICPC Southern California Regionals
 - Placed 4 / 94 at 2016 ACM-ICPC Southern California Regionals
 - Bloomberg Codecon 2016 Global Finalist (Placed third at Regionals)

Activities

• ICPC President at UCLA ACM

Jan 2018 - Present

 Organize weekly trainings for ICPC Regional Competition; teach topics on various algorithms; write problems and server for school-wide coding challenge.

Skill Set

- Good At: C/C++, Javascript, Python, C#, OCaml
- Familiar With: Java, Scheme, PHP, Prolog