Allen Li
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Achievements

- ICPC North American Championship Competitor
  - Among the top 50 teams nationwide in ICPC, the most prestigious collegiate algorithms competition.
- Google Codejam Round 2 Qualifier
  - Top 4% competitor in Google's annual international open algorithmic competitive programming competition.
- USACO Platinum
  - Platinum is the highest division in the national USA Computing Olympiad, an algorithmic competition.

Education

University of Michigan, Ann Arbor — Ann Arbor, MI
Bachelor's Degree in Computer Science, GPA: 4.0/4.0 — Aug. 2020–Current (Expected May 2023)

  - A+ in EECS 281 (Algorithms), A+ in EECS 376 (Theory of Computation)

Work and Research Experience

Amazon, Inc. — Santa Clara, CA
AWS SageMaker Edge Software Development Intern — May 2021 - July 2021

  - **Python Bindings:** Generated bindings for existing C APIs using pybind11, a feature highly requested by customers. Integrated bindings into CMake project. Project generates wheel file customers can easily install.
  - **Containerization:** Created Docker images to allow binaries to run isolated in their own container. Containers collect and display model metrics. Also integrated containers into Nightly testing.

UMich Biomedical and Clinical Informatics Lab — Ann Arbor, MI
Undergraduate Researcher — Sep. 2020 - May 2021

  - **Disease Diagnosis with Machine Learning:** Extracted useful imaging features from chest x-rays to train a model and diagnose patients with ARDS, a highly deadly respiratory distress syndrome.

Vivalink, Inc. — Campbell, CA
Software Engineering Intern — May 2019 - Sep. 2019, Dec. 2020 - Feb. 2021

  - **Language Conversion:** Converted novel blood pressure algorithm from Python to C++ to create a fast executable for the company's mobile app to use.
  - **Data Migration:** Wrote C++ scripts to quickly migrate existing outdated data to expedite testing the updated heart rate monitor.

Projects

See project source code at github.com/allenli873

- "Pysheen Bot" (Python, Discord.py)
  - Short Python Discord bot made for my competitive programming/gaming discord server.
  - Leverages Discord API and web scraping to perform useful and fun tasks.
- Retrace (iOS, Swift)
  - iOS App that allows users to catalog their items in order to reduce "retracing" time to find misplaced items.
  - Built using Swift Storyboard and additional Cocoapods (external libraries).

Technologies

- **Skills:** Experienced with Computer Algorithms. Proficient in Python, C++, Java, MATLAB, and using Docker and AWS services. Familiar with HTML, CSS, Swift.