ALEXANDER W. LEE

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EDUCATION

Amherst College, Amherst, MA **Expected May 2022**
Bachelor of Arts in Computer Science and Mathematics; GPA: 3.92/4.00

- Relevant Coursework: Computer Security, Evolutionary Computation, Data Structures, Computer Systems, Linear Algebra, Multivariable Calculus, and Discrete Mathematics

International School of Beijing, Beijing, China **May 2018**
High School; GPA: 3.92/4.00

School Year Abroad Italy, Viterbo, Italy **May 2017**
Study Abroad Program; GPA: 4.00/4.00

WORK EXPERIENCE

Health Sqyre, Denver, CO **June 2019 – August 2019**
Software Development Intern

- Developed microservice in **Python** to improve parsing **API** responses for patient insurance data; more accurate data allowed for stronger pitch deck to investors
- Built web applications for interacting with company utilized **APIs** in order to test and develop new company software; developed with **Flask**, **PostgreSQL**, **JavaScript**, and **HTML/CSS**
- Created first iteration of company's new web homepage with **HTML/CSS**
- Wrote **Python** scripts to automate product mapping process for newly-onboarded partners

Amherst College Computer Science Department, Amherst, MA **January 2020 – Present**
Data Structures Peer Tutor

- Verbally and/or visually explain core data structures that tutee found confusing during class
- Advise tutee on how to best approach weekly projects and homework assignments
- Sessions are twice a week for one hour

PROJECTS

Weather Reminders **December 2019 – January 2020**

- Created **AWS Lambda Functions** in **Python** to send reminders via email about recommended outdoor attire based on weather conditions of the day
- Used **AWS CloudWatch Events** to call aforementioned Lambda Function every morning
- Weather data queried from the weatherbit.io **API** and emails sent with **smptlib**
- **Github:** https://github.com/alexlee311/weather-reminders

IntSeq **March 2020 – Present**

- Utilize **symbolic regression** techniques from **genetic programming** to find functions for integer sequences that do not have functions describing them yet; algorithms implemented in **Clojure**
- Runs are done using **HTCondor** on Amherst College's **computing cluster**
- Newly discovered functions may have profound consequences in **number theory**
- **Github:** https://github.com/alexlee311/intseq

SKILLS

Languages and Tools

- Proficient in **Python**, **Java**, **Clojure**; familiar with **C, JavaScript**, and **HTML/CSS**
- Proficient in **Flask**, **PostgreSQL**, **Unix** command line, and **Git**; familiar with **React/React Native** and **Docker**

Software

- Proficient in **Bitbucket**, **GitHub**, **Postman**, **Confluence**, and **Jira**

LEADERSHIP

- Co-President of the Computer Science Club at Amherst College
- Co-Chair of Asian Men's Collective for the Asian Students Association at Amherst College

INTERESTS: Cello (10 years) – Section Leader, Ice Hockey (10 years), and Rugby (3 years)