# Alan Li

# 9201 Paddock Lane, Potomac, MD 20854

### EDUCATION

Cornell University Ithaca, NY

B.S. Computer Science, Minors in Applied Math and Operations Research

Aug 2019 - May 2023

• GPA: 3.5

• Coursework: Machine Learning, Artificial Intelligence, Computer Systems, Functional Programming, Object-Oriented Programming, Data Structures, Discrete Structures, Linear Algebra, Statistics.

#### Work Experience

## Financial Industry Regulatory Authority (FINRA)

Rockville, MD

Software Developer Intern

May 2021 - Aug 2021

• Will develop software using Java, SQL, and AWS.

#### Rockville Swim Center

Rockville, MD

Private Swim Coach

Jun 2019 - Aug 2019

- Provided one on one lessons to competitive athletes ages 13 through 17 preparing for championship competitions.
- Developed individualized training plans to improve swim technique, race strategy, and mental training.

## University of Maryland, College Park

College Park, MD

Research Intern

Jun 2018 - Jul 2018

- Developed and ran simulations that modeled interactions between proteins and membranes on the molecular level.
- Built membrane complex models by generating inputs with CHARMM-GUI and simulating it with CHARMM.

## Montgomery County Public Schools

Gaithersburg, MD

Teaching Assistant

Jun 2014 - Aug 2017

- Assisted teacher of 20 students by assisting with worksheets, tutoring individuals, and grading homework.
- Created learning materials for K-5 students to help them develop their reading, writing, and math skills.

# PROJECTS

#### Monopoly | OCaml

- Collaborated with other developers to build a fully customizable version of the popular board game Monopoly.
- Implemented the backend, handling all user commands and keeping track of dynamic and static game data.
- Handled board customization which lets players input JSON files to customize game boards.

# Battlecode | Java

- Competed in MIT's Battlecode competition, which features a turn-based strategy game where robots need to demonstrate a mastery of both resource management and combat tactics.
- Placed 27<sup>th</sup> in U.S. tournament, and 45<sup>th</sup> in scrim rankings out of 500+ teams.

### March Madness Prediction Model

- Constructed a logistic regression model to predict every match result in the 2019 March Madness tournament.
- Placed in the top 10% in the 2019 Men's Google Cloud and NCAA Kaggle competition with 0.46 log loss.

#### Extracurriculars

#### Men's Varsity Swim and Dive

Committed around 25 hours per week to training and competing as a Division I student athlete.

#### Big Red Leadership Institute

Participated in biweekly workshops that focus on improving leadership skills for student athletes.

#### Association of Computer Science Undergraduates

• Attended monthly talks about computer science.

#### TECHNICAL SKILLS

**Programming Languages**: Java, Python, OCaml, C/C++, SQL, HTML, CSS, Javascript, R, MATLAB **Software & Tools**: Git, Unix, LaTex, NumPy, VS Code, PyCharm, IntelliJ, Eclipse, MS Office