# Alan Li

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## Education

**Cornell University** Ithaca, NY

*B.S. Computer Science, Minors in Applied Math and Operations Research* *Aug 2019 – Dec 2022*

- 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 helping 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 $27^{\text{th}}$ in U.S. tournament, and $45^{\text{th}}$ 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