Alan Li

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Education

Cornell University Ithaca, NY

B.S. Computer Science, Minors in Applied Math and Operations Research *Aug 2019 - May 2023*

- Coursework: Probability and Statistics, Machine Learning, Analysis of Algorithms, Functional Programming, Linear Algebra, Differential Equations, Discrete Structures, Multivariable Calculus.
- Skills: Java, Python, OCaml, C, C++, SQL, Javascript, R, MATLAB, Git, Unix, sklearn, PyTorch

Work Experience

Financial Industry Regulatory Authority (FINRA) Rockville, MD

Software Developer Intern *May 2021 – Aug 2021*

- Developed software for the Alfresco Content Services team, which helps store and manage over 30 billion financial documents for FINRA analysts to use while regulating the market.
- Updated automation tests with Typescript, Selenium, and Cucumber, allowing the team to migrate to a newer version of the Alfresco Application Development Framework.
- Developed new features for the Alfresco platform, improving FINRA analyst productivity and efficiency.

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.
- Built membrane complex models by generating script inputs 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 and Competitions

Covid-19 Hospitalization Prediction | *Python, sklearn, PyTorch*

- Developed and trained neural network regression model to predict number of hospitalizations due to Covid-19 in European countries using PyTorch.
- Achieved over 85% accuracy in predicting an increase or decrease in the number of Covid-19 cases in European countries by implementing a soft-margin SVM classifier with sklearn.

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^{th} in U.S. tournament, and 45^{th} in scrim rankings out of 550+ teams.

March Madness Prediction Model | *Minitab*

- Constructed a logistic regression model to predict match results 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 *2019 - Present*

- Committed around 25 hours per week to training and competing as a Division I student athlete.
- Cornell Athletics Letter Winner, awarded to top performing student athletes.

Big Red Leadership Institute *2019 - Present*

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