Andrew Vo

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EDUCATION

University of California, Berkeley   *August 2017 - May 2021*
B.A. **Computer Science**
GPA: 3.5 / 4.0

SKILLS

Languages
> Python   > Java   > Javascript
> C   > Golang   > SQL
> HTML   > CSS

Frameworks and Development Tools
> React.js   > Node.js   > Express
> Git   > Vim   > Selenium
> JUnit

EXPERIENCE

Berkeley Computer Science Department | Berkeley, CA
Academic Computer Science Intern   *January 2019 - May 2019*

> Used Python to tutor over 40 computer science students programming concepts such as iteration, recursion, and data structures.
> Debugged student computer science projects and homework assignments with the assistance of graduate student instructors.

Stanford University | Stanford, CA
Research Intern   *June 2017 - August 2017*

> Developed data analysis program to predict future population size of 11 marine species affected by plastic pollution in Australia and the Mediterranean Sea using R.
> Analyzed butterfly size evolution over geological time scale by collecting data from 3000 butterfly body size measurements to contribute to environmental research mentor's academic publication.

PROJECTS

Artificial Intelligence (AI) Chess Bot | jsfiddle.net/L462Z5jt/1/   *December 2019 - January 2020*

> Implemented chess move generation and board visualization libraries using Javascript, HTML, and CSS with JQuery framework.
> Used Minimax algorithm to create a recursive search tree that explores all possible chess moves of certain depth from the current position of all chess pieces. This allows the AI to choose the best possible chess move in the current turn.
> Optimized the performance of Minimax algorithm by utilizing Alpha-beta pruning to reduce the number of required chess moves for the AI to evaluate, resulting in a decrease of inefficient calculations of chess positions in the recursive search tree by 50%.

Bear Maps | bearmaps-sp19-s177.herokuapp.com/map.html   *March 2019 - April 2019*

> Developed a web mapping application of Berkeley for users to find the shortest route between places through search queries.
> Used Java to implement Priority Queues and KD Trees to determine shortest routes, Tries for auto-completed user queries, and A* Search Algorithm for graph traversal. Created client-facing interface using Javascript, HTML, and CSS.
> Deployed Java application to the Heroku platform, allowing users to access the web map online using their internet browser.

Personal Website | andrewvo.me   *December 2018 - February 2019*

> Created a computer science portfolio using React.js and CSS to display personal side projects hosted using GitHub Pages services.

Stanford Marine Pollution Research Project   *June 2017 - August 2017*

> Parsed 5000 rows of marine population and pollution data from 8 scientific studies to accumulate data for final research project.
> Analyzed environmental data using R, resulting in the discovery of a correlation between pollution and marine population size.

AWARDS AND INVOLVEMENTS

Fiat Lux Scholarship — Scholarship provided to 10% of admitted Berkeley students that covers the full cost of university tuition.
Computer Science Scholars — Program dedicated to providing students with professional mentorship in the computer science field.