Irvine, California

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EDUCATION

Irvine, CA   **University of California Irvine**   **Fall 2016 – June 2020**

- B.S. in Computer Science with a Minor in Mathematics

- **Relevant Coursework**
- Neural Networks and Deep Learning, Machine Learning and Data-Mining, Algorithms for Probabilistic and Deterministic Graphical Models, Applications of Probability in Computer Science

EMPLOYMENT

Sprouts, Inc   **Courtesy Clerk**   **Summer 2016 – Fall 2017**

- Provided Customer service, restocked shelves, bagging groceries, handling damaged or returned products
- Maintained the front end of the store and parking lot, assisting customers to their cars and collecting shopping carts from the parking lot

Self Employed   **Math Tutor**   **Fall 2017 – Summer 2018**

- Tutored students ranging from kindergarten to college, helped explain mathematical concepts in easy to understand language, broke down complex problems.
- helped create goals, gave students quizzes and assessed progress, helped students build continuously increasing knowledge.

UC Irvine   **Research Assistant**   **Summer 2019-Current**

- Simulated Cancer cell growth using numerical methods

- applied machine learning algorithms in PyTorch/sklearn to try and detect cancer cell growth early in patients

PROJECTS

Minesweeper AI (2019).

- Created an algorithm in C++ for consistently being able to solve 80% of beginner, 70% of medium, and 30% of expert worlds when ran 10,000 on each difficulty level.
- Used pattern-finding such as 1-1 and 1-2 patterns, applied concepts of linear algebra to find known bombs in unknown tiles, and applied probability when no known guaranteed move could be made.

Pac Man (2017).

- Recreated an identical version of the 2D Maze Game using Java Swing/AWT
- Applied object-oriented practices

Search Engine (2019)

- Created a web crawler in python that would only crawl our UCI domain pages. Pruned and ranked the documents using porter stemming lemmatization, TF-IDF ranking, and cosine similarity
- Saved relevant Doc ID's and URLS into a database using MongoDB and created a GUI for multi word searches using pySimpleGUI

EXTRACURRICULARS

- Member of the Camping Club and the AI club at UCI

LANGUAGES

- C++; C; Python; Java; Mips;JavaScript;Node.js;Libgdx
- Linux; Visual Studio; Unity; Mars; Android Studio