

## EDUCATION

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### University of California, Riverside, Riverside, CA

M.S., Computer Science, 2021 - 2023 (GPA: 3.63)

B.S., Computer Science w/ Business Applications, 2018 - 2020 (GPA 3.62)

### Saddleback College, Orange County, CA

A.A., Computer Science, 2018

## EXPERIENCE

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- **International Vitamin Corporation** Irvine, CA  
*Business Intelligence IT Intern* Summer 2020
  - **Python Scripting:** Implemented python scripts to pull and compare hundreds of csv report files
  - **BI Migration Testing:** Creating, tracking, and reporting test cases for hundreds of BI reports
  - **Power BI Design:** Proposing/implementing new design ideas to effectively display company data
- **The Battle Buddy Foundation** Los Angeles, CA  
*Tech Support/Social Media Intern* Summer 2015
  - **Website Management:** Utilized HTML/CSS to make changes to e-commerce functionality on WordPress
  - **Technical Management:** Solved various administrative related technical issues to keep operations stable
  - **Social Media:** Made multiple posts daily from four company accounts and gained a 10% increase in followers.

## PROJECTS

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- **GPU Cellular Automata Project** May 2022  
*Tools/Frameworks: PyGame, Unity, Cuda C, Compute Shaders* Language: python
  - **Description:** Implementations of Conway's Game of Life to contrast the performance of CPU vs GPU parallelism using Unity Compute Shaders. CPU implementation uses iterative cell generation vs GPU w/ Parallel Compute Shader cell generation. **Visuals:** (CPU) - Pygame (GPU) - Unity. **Results:** GPU notably faster for all grid sizes.
- **Data Analytics Pipeline** May 2022  
*Tools/Frameworks: Postgres, Numpy, Matplotlib* Language(s): Sql, python
  - **Description:** Project which encompasses data analytics pipeline (schema design, data acquisition, transformation/extraction, cleaning, and analysis/visualisation). dlpb database is generated and stored using postgres and python wrapper. Uses SQL queries to efficiently transform the raw data to represent the schema design. Finally, queries are created/executed and display data along with python generated graphs
- **Feature Selection** March 2020  
*Tools/Frameworks: Numba, Jit, Numpy* Language(s): python
  - **Description:** Implements Forward Selection/Backward Elimination with K-nearest neighbor algorithm to find the best subset of features in a large data set. Uses multithread boosted Euclidean distance to calculate the distance between data points.
- **MLB Machine Learning Data Analysis** May 2020  
*Tools/Frameworks: BeautifulSoup, Pandas, Seaborn, Numpy, sklearn* Language(s): python
  - **Description:** Scrapes MLB.com data into pandas dataframe for cleaning, analysis, feature reduction and training (sklearn - LinReg/Cross-Validation). Model prediction for existing season record is within 5 HR accuracy.
- **Rshell** Fall 2018  
*Tools/Frameworks: POSIX Operating System API* Language(s): C++
  - **Description:** A Linux command shell implemented in C++. Supports all Linux recognized commands with Connectors (and/or operators), I/O, piping, and redirection

## SKILLS

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- **Languages:** : Python, C++, C, CUDA C, SQL, Standard ML, Java, Assembly, HTML/CSS
- **Technologies:** Jupyter Notebook, VSCode, Git, Bash, VIM, Eclipse, Atom, Unity
- **Soft Skills:** Leadership, Adaptability, Problem Solving, Interpersonal/Technical Communication, AGILE