

JACK LECKRONE

Los Gatos, CA | jack.leckrone5@gmail.com | 408-300-3384

[LinkedIn](#) [GitHub](#) [Website](#)

EDUCATION

UNIVERSITY OF CALIFORNIA, SANTA CRUZ | Cum. GPA: 3.19

Sept. 2016 – June 2020

B.S. Computer Science | Major GPA: 3.35

- Strong focus on programming in **JavaScript**, **Python**, **C**, and **Java**
- Excelled in courses implementing algorithms and data structures to build mobile and web applications, data visualizations, and computer graphics, along with systems design principles (Synchronization, Multithreaded HTTP, Caching)
- Completed Coursework: Algorithms and Data Structures, Computer Architecture, Computational Models, Computer Graphics (JavaScript and WebGL), Intro to Software Engineering, Computer Systems Design (C / C++), Comparative Programming Languages, Database Systems (PostgreSQL), Programming for Data Visualization, Web Applications

B.A. Economics | Major GPA: 3.41

- Thorough understanding of econometrics, regression analysis, and hypothesis testing

Dean's Honors Fall 2019

PROJECTS

HUNGRY SNAKE | Web Application

May 2021

- Devised an inverse snake game with **React (JavaScript)**, where the player places a food cell, and the snake uses pathfinding algorithms Breath-First and Depth-First Search or follows a Hamiltonian cycle to move to the food
- Player wins when the snake runs into itself, and snake wins when it fills the entire board

ALGOVIS | Web Application

April 2021

- Created AlgoVis with **React** and **Redux (JavaScript)** to refine my knowledge of popular sorting algorithms and their implementation differences, and help those learning computer science visualize how these daunting algorithms work
- Experience Selection, Insertion, Bubble, Gnome, Quick, Merge, and Heap Sorts

THEWAVE | Mobile Application

Feb. 2021 – Present

- For fun, designing and developing an iOS mobile app with **React Native** and **Firebase** with **Redux (JavaScript)** to encourage fellow drivers and car enthusiasts to connect while out on the road. As an avid car enthusiast, I wish there were an easier way to connect with other enthusiasts' social medias, so I'm creating a solution myself!

DATA VISUALIZATIONS | Course

April 2020 – June 2020

- Created 6 interactive web-based data visualizations with **D3.js** presented as bar graphs, multi-line graphs, scatter plots and TopoJSON maps to visualize countries' GDP, energy consumption, population density, and parallel economic factors
- Wrote **Python** scripts to select and transform the most important data from multi-thousand-point csv datasets

WEB APPLICATIONS | Course

April 2020 – June 2020

- Designed and deployed 3 single-page websites with **Vue.js** and **Py4Web**. **PhoneBook** helps users keep track of contacts and phone numbers. **Postlandia** inspires community with posts and a thumb rating system. **PostoMatic** creates discussions with posts and the ability to reply directly to any
- **JavaScript** frontends with **HTML** & **Bulma CSS** connected by **AJAX** to **Python** backends with **pyDAL** and **RestAPI**

PROJECT QUIET PLACE | Mobile Application

Sept. 2019 – Dec. 2019

- Developed an iOS and Android mobile app on **React Native** and **Firebase** with **Jest** Unit Testing in 10 weeks as part of a 5-member, SCRUM based agile development group to help housemates be more courteous of noise and avoid confrontations caused by high noise levels

Awards

Winner of Xilinx Capstone Project Showcase 2016