Steven **Li**

San Jose, California

(408)-841-1213 | listeven8841@gmail.com | www.stevenli.dev | itz-shiny | steven-gin-lin

Education

San Jose State University — *San Jose, California*

Masters of Science in Software Engineering — *June 2020 - PRESENT*

San Jose State University — *San Jose, California*

Bachelor of Arts in Physics & Minor in Computer Science | 3.4 Overall GPA — *May 2019*

Skills

Computer	Powerpoint, Excel, Word
Programming	Python, Java, C++, C#, Mathematica, Node.js, LaTeX, SQLite, Flask, SQL, MATLAB, Unity, Spark, Assembly, OpenGL, Git
Web	HTML5, CSS, JavaScript, PHP, MySQL, AWS
Languages	English, Cantonese (oral)
Other	LabView, LTspice, EAGLE, SOLIDWORKS, Troubleshooting & Debugging , Soldering

Experience

Undergraduate Research, Optics (Prof. Christopher Smallwood) at SJSU — *San Jose, California*

Researcher — *Aug. 2018 - May 2019*

- Designed and constructed a prototype of a high frequency photo-detector that detects and corrects for room variations in optical spectroscopy experiments of novel solid-state materials.
- Reduced original circuit design dimensions by 50% allowing the device to be more compact and flexible.

Projects

Machine Learning Classification of Foreground Dwarfs and Background Giants in the Perseus Cluster — *San Jose State University, California*

Topics in Modern Astrophysics - Research on Galaxies and Dark Matter Final Project — *May 2019*

- In collaboration with another classmate, we classified foreground dwarfs within the Perseus cluster with a 95.58% accuracy and background giants with a 100% accuracy with machine learning and presented it to our instructor and peers within a shorten deadline.
- Collected known data on galaxies in the Perseus and nearby clusters NGC 383 and 507, catalogued them into foreground and background data set and performed SVM on the data sets in Jupyter Notebook with sci-kit python library and feature engineering to construct a model that discriminates between them using unconventional and non-obvious feature relationships.

Audio Signal Frequency Dependent Spectrum Analyzer — *San Jose State University, California*

Intermediate Physics Laboratory - Electronics and Data Acquisition Final Project — *May 2019*

- Circuit device simulated in LTspice and constructed to take an audio signal and split it into low and high frequency bands which are quantified and visualized by LED level indicators.

Exhaustive Algorithm Approach to tRNA Secondary Structure Prediction — *San Jose State University, California*

Bioinformatics I Final Project | Programmer — *May 2019*

- Developed and launched a XAMPP server-side web application with a PHP back-end and MaterializeCSS front-end framework hosted on a AWS EC2 Ubuntu instance to predict tRNA secondary structure pairings.
- Application implements a brute-force algorithm constructed specifically to predict the most probable tRNA secondary structures pairings with 100% accuracy for the 4 standard RNA bases that was developed in partnership with a Biology major classmate.

Paper Warriors — *San Jose State University, California*

Introduction to Game Studies - Videogame Group Final Project | Producer and Secondary Programmer — *Dec. 2018*

- Collaboratively worked with a team of 4 to plan and develop a simple fighting game centered around Rock-Paper-Scissors type of attacks as a core mechanic featuring three playable stages, characters and soundtracks made in Unity.
- Planned and coordinated the development flow and direction of the game's content and mechanics as the project's main producer and the game's secondary developer.
- Showcased final project to a open house project presentation as a live demo.

Grapple Jump

San Jose State University, California

Introduction to Game Studies - Videogame Prototype | Programmer and Producer *Oct. 2018*

- A simple side-scrolling game centered around using a grapple hook to transverse terrain containing a timer and scoring feature made in Unity.
- Responsible for planning and coordinating the development procedure and direction of the game's content and mechanics alongside being developer.

Ultrasonic Thermometer Proof of Concept and Performance Benchmark

San Jose State University, California

Methods of Research and Communication in Physics Final Project *May 2018*

- Explored the theory of a Ultrasonic Thermometer and constructed a proof-of-concept from an Arduino and an ultrasonic sensor.
- Benchmarked efficiency, accuracy and precision of Ultrasonic Thermometer against conventional counterparts and analyzed potential technological use cases.

Analysis of Hydrophobic Coating on Absorbent Fabrics

San Jose State University, California

Methods of Research and Communication in Physics - Group Project *Mar. 2018*

- Explored how efficiently a commercially available hydrophobic coating protects absorbent fabrics against water.
- Determined if the coating was more or less effective against different types of water exposures: submersion, droplets, and high humidity, and the product's limitations.

Sun's Evolutionary Process into a Red Giant Simulation

San Jose State University, California

Computational Methods in Physics Final Project *Dec. 2017*

- Conducted the simulation by modeling the sun as a non-rotating spherically symmetric object, an ideal gas, and a black-body isolated from any unexpected interaction that may change it's stellar evolution in Python.
- Tracked the sun's physical properties as it underwent stellar evolution while maintaining hydrostatic equilibrium that governs the star.