# **Dennis Lee**

Phone 484-686-3882 | Email dennisl88@berkeley.edu Linkedin linkedin.com/in/dennisl88 | Website dennislee.me

## **EDUCATION**

## University of California, Berkeley - Berkeley, CA

FALL 2015 - SPRING 2019

B.S., Electrical Engineering and Computer Science | GPA: 4.00

**Coursework** (italics in progress):

Structure & Interpretation of Computer Programs

**Practical Programming** 

**Data Structures** 

Designing Information Devices and Systems

Linear Algebra and Differential Equations

Self-Paced C

Discrete Math & Probability

## **EXPERIENCE**

CS61A Tutor - University of California, Berkeley

JANUARY 2016 - Present

- Tutor and Lab Assistant for the Structure & Interpretation of Computer Programs (CS61A)

Research Assistant - Villanova University

MAY 2015 - JULY 2015

- Designed, tested, and produced nanoaquariums to study behavior of microbubbles
- Wrote in-depth tutorials on CAD and simulation software for graduate students

## **PROJECTS**

### **Contour Map Generator**

- Perlin Noise, Square-Diamond, Teleological generation algorithms, written in C++, rendered with Unity

#### Strategy Game AI

- Al controls an army in a simple turn-based strategy game
- Genetic algorithm finds ideal army composition and tactics by playing against itself

#### **Survival Game AI**

- Randomized characters face each other in an arena style deathmatch
- Al attempts to find optimal strategy based on starting stats and encounters with other characters

#### Wallpaper Finder

- Python program that finds images suitable for wallpapers and website backgrounds
- Performs k-means to find clustered colors, uses clusters to determine uniformity of image.

### **Shakespeare Generator**

Combines words and sentence structures commonly used by Shakespeare to generate a short dialogue

## OTHER CLASSES

Design and Analysis of Algorithms Advanced Algorithms Machine Learning

## SKILLS AND INTERESTS

Programming Languages - Java, Python, Matlab, Scheme, C++, C

Other Software - Solidworks, ANSYS Fluent, Excel

**Spoken Languages** - Mandarin, Spanish

Interests - Soccer, Tennis, Gaming, Aquariums, Machine Learning, Artificial Intelligence