Dennis Lee

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

EDUCATION

University of California, Berkeley – Berkeley, CA FALL 2015 - SPRING 2019
B.S., Computer Science and Electrical Engineering | GPA: 4.00

Coursework:

Structure & Interpretation of Computer Programs
Data Structures
Efficient Algorithms and Intractable Problems
Artificial Intelligence
Linear Algebra and Differential Equations
Discrete Math & Probability
Designing Information Devices and Systems
Self-paced C

EXPERIENCE

Student Researcher – *Robot Learning Lab, University of California, Berkeley* JUNE 2016 - Present

- Built Mind Meld - interface for teleoperation of robots using virtual reality by connecting ROS and Unity
- Developed new neural network models with Tensorflow to learn policy from human controller
- System trains robots faster in more complex tasks than with traditional methods
- Used deep neural networks, multithreading, GPGPU, networking

CS61A Tutor – *University of California, Berkeley* JANUARY 2016 - MAY 2016

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

Research Assistant – *NovaNano Lab, Villanova University* MAY 2015 - JULY 2015

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

PROJECTS

Strategy Game AI

- AI controls an army of hundreds in a simple turn-based strategy game built in Java
- Genetic algorithm finds ideal army composition and tactics by playing against itself
- Adaptable to various map conditions (different maps, fog of war, known/unknown enemies)

Contour Map Generator

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

Wallpaper Finder

- Python program that searches reddit for suitable 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
- Uses Stanford JavaNLP's MaxentTagger to categorize words; story/character/setting chosen randomly

Chrome Extension Suite

- Constantly expanding set of Google Chrome extensions that perform various menial tasks
- Exercise alarm, website blocker, champion.gg quicksearch, and several jokes

SKILLS AND INTERESTS

Programming Languages – Java, Python, C#, C, C++, Matlab, Scheme, HLSL
Other Software – Unity, ROS, Tensorflow, Solidworks, ANSYS Fluent
Spoken Languages – Mandarin, Spanish
Interests - Soccer, Archery, Gaming, Aquariums, Machine Learning, Artificial Intelligence