# Benjamin J. Kern

1344 Woodlow Court Westlake Village, CA, 91361 (805) 657-5922 bkern1@lion.lmu.edu

#### **EDUCATION**

# **Loyola Marymount University** — *Physics & Computer Science*AUGUST 2016 - PRESENT

Presently in Junior Standing; set to graduate in 2020 with a double major in Physics and Computer Science, and a minor in Applied Math.

#### **PROJECTS**

## **3D Rendering Engine** — Programmed in Java

Created a 3D rendering engine that also acts as a 3D graphing program, allowing a user to control the camera to view the graph from all angles.

## **Neural Network Games** — *Programmed in Python*

Incorporated the TensorFlow library along with PyGame to have artificial agents learn to play 2-player games against each other in an unsupervised simulation.

### Calculus-Based Physics Simulators —

### Programmed in C++

Cultivated knowledge of Computer Science and Physics to program physics simulators, including a gravitized particle simulator and a fluid dynamics simulator.

#### **EXPERIENCE**

# LMU College of Science & Engineering — Physics & Mathematics Tutor

SEPTEMBER 2017 - PRESENT

- Weekly tutoring to students enrolled in Math and Physics courses.
- Developed efficient ways to teach complex concepts to students, improving their understanding of the Physics & Math coursework.

# Pixelgate Networks — Technical Assistant

MAY 2015 - AUGUST 2016

- Organized company's server facility to optimize process improvement and minimize supply costs.
- Built and performed maintenance on servers to establish internet security systems and optimize power supplies.
- Worked on technical projects to improve computing performance.

# **Baskin Robbins, Thousand Oaks, CA** — *Assistant Manager*MARCH 2016 - AUGUST 2017

- Managed day to day operations, including making cakes, shakes and ice cream creations, working the register, cleaning and closing up.
- Acted as store manager in many situations involving being at the store alone and serving customers.

#### **SKILLS**

- Computer Programming Proficient/Expert\* in:
  - Python\*
  - JavaScript\*
  - HTML/CSS\*
  - Iava\*
  - Microsoft Office\*(Word, Powerpoint, Excel)
  - Matlab\*
  - C/C++
  - OpenGL
- · Excellent Problem Solving Skills
- Outstanding Learning
- Exceptional Leadership
- Accomplished in Communication Skills

#### RELEVANT COURSEWORK

- · Deep Learning
- Artificial Intelligence
- Cognitive Systems
- Data Structures & Algorithms
- Theory of Computation
- · Interaction Design
- Intro to General Relativity and Cosmology
- Quantum Mechanics
- · Electromagnetic Fields & Waves

#### **INTERESTS**

- Quality of Product
- Appreciation for Creativity and the Arts
- Love of Music Listening,
  Creating (Singing, Composing,
  Producing)