

# Sean Kennedy

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## EDUCATION

### UT DALLAS

#### BS IN COMPUTER SCIENCE

Expected May 2020 | Dallas, TX

Cum. GPA: 4.0 / 4.0

Major GPA: 4.0 / 4.0

### COURSEWORK

C/C++ in Unix Environment

Honors Discrete Math I & II

Honors Computer Architecture

Computer Science I & II

Linear Algebra

Calculus I & II

## SKILLS

**Languages:** Python, C/C++, Lua, SQL, Java, Octave, R

**Graphics:** OpenGL, GLFW

**Machine Learning:** Tensor Flow, MXNet

**Editors:** Emacs, Vim, XCode, PyCharm

**OS's:** macOS, Windows, Linux, Unix

**Software:** Microsoft Office

## HONORS & AWARDS

### Dean's List:

Fall 2017

**CS<sup>2</sup> Honors:** Honors program at the University of Texas at Dallas restricted to the top 10% of CS students.

### USACO Gold Division Competitor:

Obtained competitive scores in the Bronze and Silver divisions of the USACO to qualify for the Gold division, which is limited to the top 1000 contenders in USACO competitions.

### Stanford Machine Learning Course

**Certificate:** Studied the basics of machine learning, including techniques such as logistic regression, neural networks, and k-means.

## OBJECTIVE

To attain an internship during the summer of 2018.

## WORK EXPERIENCE

### PROCEDURAL REALITY | SOFTWARE ENGINEERING INTERN

May 2017 - Aug 2017 | Baton Rouge, LA

- **AI System Architecture:** Designed and implemented the architecture for an AI navigation system for the game Limit Theory based on flow fields, as well as a dynamic economy centered around AI traders, all written in Lua.

### LSU CODING CIRCLE | TEACHING ASSISTANT

June 2017 | Baton Rouge, LA

- **Teaching Python:** Used extensive knowledge of Python to mentor students working on projects in machine learning, networking, and audio-synthesis, as well as a variety of other topics.

## SIDE PROJECTS

### HYDRA GAME ENGINE | PERSONAL PROJECT

Dec 2017 - Present

- **OpenGL Graphics:** Used OpenGL and GLFW to write a graphics library with custom shaders written in GLSL.
- **Entity Component System:** Implemented an ECS architecture to facilitate a dynamic system to keep track of objects in the engine.

### AUTONOMOUS CAR | ACM PROJECTS MEMBER

September 2017 - November 2017 | Dallas, TX

- **Machine Learning:** Used TensorFlow to develop an image processing system that would assist the car in navigation through a room and around obstacles.

### 2D MINECRAFT | PERSONAL PROJECT

July 2017

- **Physics:** Simulated entity movement through a physics engine, restricting movement around objects through a collision detection algorithm.
- **Procedural Generation:** Procedurally generated coherent and randomized environments through perlin noise functions.