# Kyle Bridburg

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## PROJECT AND WORK EXPERIENCE

Current June 2016 Game Developer

E 2016 | *Relax :*)

Current project in Unity3D, solo designed and developed everything from game concept to current state. Programmed a perlin noise based procedural land generation system using threading. Also scipted a functioning, auto focusing third person camera. Currently working on art assets and implementing class structure.

Current AUGUST 2016

Biologically Plausible Spiking Neural Network

JavaScript implementation a biologically plausible spiking neural network framework based on the specifications in J. E. Smith, Biologically Plausible Spiking Neural Networks, self-published monograph, Missoula MT, June 19, 2015. Currently working to expand individual neuron learning capability.

**JULY 2016** 

Level Designer at TECHX

Designed levels for HackMIT 2016 Velociraptor Escape Puzzle. Identified interesting problems and designed levels to highlight various unique facets of the unique programming language created for the puzzle. Created a tool for conversion of puzzle ideas to playable format for testing.

JUN-JULY 2016

Data Analyst at McGovern Institute, Boston

Developed a tool to sync up, display and deliver relevant statistics given large sets of Fiber Photometry data and behavioral/location data in Matlab. Created simple method for data navigation and manipulation.

**JUNE 2016** 

Genetic Investment Algorithm

Engineered a genetic algorithm for development of investing strategies across historical data sets. Future plans to increase gains and implement real time investing.

#### **EDUCATION**

2018 Massachusetts Institute of Technology

BS in Computer Science and Engineering

GPA: 4.1/5.0

2014 Belmont High School

GPA: 3.6/4.0

#### Relevant Coursework

**6.01-** Introduction to EECS

**6.004- COMPUTATION STRUCTURES** 

**6.005-** Elements of Software Construction

**6.042- MATHEMATICS FOR COMPUTER SCIENCE** 

CMS.617- INTRO TO GAME DESIGN

### **RELEVANT SKILLS**

PROGRAMMING JavaScript, CSharp, Python, HTML/CSS, Java, MatLab

GAME DESIGN Unity3D, GameMaker Studio, Blender