1001 Temple Grove Winter Park, FL 32789

## **DREW GRAHAM**

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## I make the games I want to play

### SKILLS

Expert: C#

C/C++, Java

**Beginner**: Python, Javascript

General:

**Proficient:** 

Disaster management

• Sharp eye for quality and detail

• Delivering under strict deadlines

Working closely with designers and content creators

Jumping headfirst into unfamiliar territory

**Technologies**: Unity, Git, Unix, Maya/Mudbox

• Breaking large problems into small, manageable tasks

#### WORK

# Night Kitchen Interactive

#### **Unity Developer**

Fall 2018 - Spring 2019

- Created interactive digital experiences for various clients
  - Developed UI/map functionality for Lost & Founders, a location-based AR app that engages users with historical figures
  - Created Xfinity AR app used to train Comcast technicians, leveraging mixed-reality to streamline training procedures
- Documented iOS TestFlight procedures and trained developers
- Rebuilt/maintained company website during DDOS attack

Acention Unity Developer Fall 2017 -Spring 2018

- Wrote and maintained networking infrastructure used to connect players
- Spearheaded creation of company's newest game, Highway Heist
- Drafted and implemented player profile customization features
  - o This provided an engaging progression system to supplement the core gameplay loop

#### Bayada Home Health Care

### Full Stack Software Developer

Fall 2016 - Spring 2017

- Developed AngularJS web applications used by clients and employees
- Extended .NET backend functionality via test-driven development
  - o Regression testing in Fitnesse allowed us to verify integrity of our sprawling feature base
- Researched viable protocols for integrating employee SSO (single-sign-on), safeguarding credentials from data breaches

### **PROJECTS**

# proc\_map Class Project Winter 2020

- A procedural 2D tile-based map generator written in C++
- Creates landscapes using 3D heightmaps generated via diamond-square algorithm
- Allows user to control size, water level, and foliage of generated maps

Boids! Independent Project Winter 2019

- Flocking simulation that models the movement patterns of birds
- Implemented boid behaviors based on Craig Reynolds' seminal 1987 paper
- Exposed flocking parameters, allowing users to tweak to their liking
- Optimized collision detection, boosting performance by a factor of 4

- A procedurally-generated roguelike dungeon crawler
- Designed and implemented modular enemy AI system, allowing for extensive code reuse and unique enemy behaviors
- Integrated enemies into level generation, allowing designers to stage pseudo-random enemy encounters

<u>Surface Tension</u> Class Project Spring 2018

- Puzzle-platforming game based on manipulating surfaces
- Drove development of systems controlling player/surface mechanics
- Fleshed out level development pipeline, allowing designers to conceive and pump out levels in hours
  - o This resulted in over 20 playable levels created within 5 weeks

# **EDUCATION**

# **Drexel University**

September 2015 - June 2020

- Bachelors in Computer Science 3.14 GPA
- Concentration in Game Development and Al

## **Relevant Coursework:**

- Multivariate Calculus
- Linear Algebra
- Machine Learning / Al

- Systems Architecture / Programming
- Software Design / Engineering
- Game Al

#### **PERSONAL**

# Awards:

- Eagle Scout, 2015
- Drexel Office of Disability Resources Endorsed Note Taker, 2017

### **Bucket List:**

- Learn to ollie kickflip
- Buy a house
- Create an AI that tries to kill me
- Go skydiving (higher)