Marietta, GA 30062 706.844.6399 ewilson72@gatech.edu

#### **EDUCATION**

### Georgia Institute of Technology, Computational Media

Dec 2019

Bachelor of Science (College of Computing and College of Literature, Media, & Communication)

GPA: 3.54

#### WORK

### Teaching Assistant, CS 1371 (Computing for Engineers) - Georgia Tech

Aug 2017 – Dec 2018

- Weekly recitation, teaching current week's topics and answering student questions
- Hosted and facilitated student-centered help sessions
- o Created, proctored, and graded the semester's three tests and final exam

#### Teaching Assistant, CS 3451 (Computer Graphics) – Georgia Tech

Aug 2019 – Present

- Assist students in understanding fundamental graphics topics and provide guidance on project implementations (ray tracer, subdivision surfaces, etc.)
- o Host weekly office hours structured to assist students in all aspects of the course
- Assist professor in assignment creation and proctoring of exams
- o Grade student homework and projects in a timely and constructive manner

## Lab Assistant / Logo Designer - IDC Makerspace at Georgia Tech

June 2018 - Sept 2018

- Assisted in the assembly of a newly renovated space into a functioning ECE Makerspace / Laboratory
- Worked closely with an executive board's feedback to produce a visually appealing, effective, and highly modular logo

#### RESEARCH

#### Using a Genetic Algorithm to Implement Pose Tracking for Locomotion Control

Sept 2019

- Independent research project advised by Greg Turk, Ph.D. and Yunbo Zhang at Georgia Tech
- O Developed a training method to generate stable walk cycles within a physics simulation while retaining the keyframe data storage structure used in traditional character animation

# **PROJECTS**

Dark Souls IIII

April 2018 – May 2018

- Solo developed a platformer demo with industry level quality and polish on the Gameboy Advance (GBA) platform in a timespan of two months
- o All code was written in C, and multiple self-written programs were used to assist in content generation

### Worm Wranglers

Nov 2018 - Dec 2018

- Collaborated with a team of 5 to create a procedural, asymmetric racing game in which one player controls the racetrack being generated
- Assumed both programmatic and artistic roles with a focus on procedural generation

## The Big Monkey

Feb 2019 – Sept 2019

- o Created a results and scoring application that operates in real-time
- o Yearly golf tournament with 160+ participants
- Worked with tournament directors to establish requirements
- Backfilled application with results from previous years

## **SKILLS**

- o <u>Proficient</u>: Java (5+ years), Python (3+ years), C# (3+ years; Unity game engine), MATLAB (3+ years)
- o <u>Familiar</u>: JavaScript/Typescript(2+ years; Angular, Node.js), C (1+ years; experienced with pointers)
- Experience in audio engineering and manipulation of sound data
- o Leadership and communication skills refined from multiple projects and vast teaching experience
- o Familiar with networking concepts, primarily learned from Unity's low-level UNET framework
- Experienced in use of software version control systems, primarily Git