# RYAN BIRNIE

### SOFTWARE DEVELOPER

# **Profile**

- Focused Computer Science Graduate with strong teamwork, communication, and creative problem-solving skills.
- Seeking a junior developer position with an innovative and professional company where I can obtain growth and utilize my software development skills to solve unique challenges.
- Six years of experience in game development, and software engineering from various passion projects with a focus on learning many different aspects of software development.

## PROFESSIONAL EXPERIENCE

### SURGICAL ROBOTIC TRAINING INTERNSHIP

Advent Health, Celebration, FL / August 2019 - April 2020

- Utilized Open-CV, TensorFlow, and Python to aid in surgical robotic skills assessment of surgeon trainees using a da Vinci Surgical System.
- Worked with teams consisting of Mechanical Engineers, and Electrical Engineers to incorporate sensors on the Fundamentals of Robotic Surgery (FRS) Dome.
- Used data generated from a Convolutional Neural Network to create a grading assessment system used by robotic surgeon trainers.

# PERSONAL PROJECTS

# Bander App

 Developing a social media app that helps musicians find local bands, and producers to collaborate with. Using Google Firebase, Google Maps API, Android Studio, and Java.

# Zombie Siege – Two Week Game Design Challenge

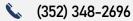
 Developed three levels of a 3D physics-based tower defense game for the Florida Polytechnic Game Expo 2019 Two week challenge, using Unity, C#, and Blender – Currently recreating in Unreal Engine 4 for mobile devices.

# Alteria - Indie Game Development

• Added realistic bullet penetration and ricochet to a 3<sup>rd</sup> person shooter indie project in Unreal Engine 4.

### CONTACT

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github.com/RYBIRN

# **EDUCATION**

Florida Polytechnic University GPA: 3.25

Lakeland, FL

B.S. Computer Science (Graduated May 2020)

Relevant Coursework

- Algorithm Design and Analysis
- Data Structures
- Mobile Device Applications
- Game Design 1 & 2
- Computer Graphics
- Software Engineering
- Human Computer Interaction
- Artificial Intelligence
- Unix
- Database

#### Awards and Honors

- Presidents List (2016–2017)
- Dean's List (2018-2019)

# ADDITIONAL SKILLS

- C#
- Unreal Engine
- Unity
- Blender
- Android Studio