Logan Harvell

Game Programmer

(407) 462-2434 | logan@harvell.biz | logantharvell.github.io



Technical Skills

Languages: C/C++, C#, Assembly, Bash, Lua Versioning: Perforce, Git

Engines: Unreal Engine 4/5 (UE4/UE5), Unity IDEs/Tools: Visual Studio, XCode, Jira

Experience

Epic Games Cary, North Carolina — remote Orlando, Florida

Special Projects, Engine Programmer Intern

Aug. 2020 – Present

Support designers by creating flexible UI and gameplay systems

• Integrate, test, and debug new project and engine features in C++ with UE5

Studio Chili Orlando, Florida

Keepers of the Trees, Lead Programmer

Dec. 2019 – Aug. 2020

Created a local co-op, puzzle-platformer with a team of 22 people in UE4

Implemented a flexible shared screen camera system and a checkpoint-based respawn system in C++

University of Central Florida

Orlando, Florida

Institute for Simulation and Training, Research Assistant

Dec. 2018 - Aug. 2019

Built a UE4 plugin in C++ for reading geospatial data using GDAL

Created an editor tool for generating meshes/materials from attribute data embedded in GeoTIFF files

Outback Steakhouse

Winter Springs, Florida

Delivery/Takeout/Host

May 2015 — Jun. 2019

Projects

Fiea Game Engine

- Custom linked list, vector, hash map, and adapter containers in C++ modeled after STL
- Property-centric reflection system using custom runtime type information (RTTI)
- Hierarchical game object composition, including data-driven game objects using JSON
- Recreated Super Bomberman's battle mode using the engine and OpenGL with five programmers

Astral Pathfinder

- Created a 2D, procedural, galaxy conquest RTS, where players increase population for a high score
- Prototyped in C with ncurses, and developed using C++ with SDL2 frameworks
- Built an interface to use Lua as a configuration language to drive gameplay parameters
- Designed a generic collision component with circle, axis aligned, and oriented bounding box collision

Bounce Off

A head-to-head competitive game written in **68K assembly**. Players use momentum to control a ball and be the first to pick up 9 randomly spawned points while bouncing off all surfaces, including each other.

Education

University of Central Florida, Florida Interactive Entertainment Academy

Orlando, Florida

M.S. Interactive Entertainment, 4.0 GPA

Aug. 2019 - expected Dec. 2020

University of Central Florida, College of Engineering and Computer Science

Orlando, Florida

B.S. Computer Science, Cum Laude, 3.78 GPA

Aug. 2015 – Dec. 2018