Logan HarvellGame Programmer(407) 462-2434logan@harvell.bizlogantharvell.github.io			
Technical Skills			
Languages: Engines: Experience	C/C++, C#, Assembly, Bash Unreal Engine (UE5 / UE4), Unity	Versioning: IDEs/Tools:	Perforce, Git Visual Studio, XCode, Jira
Epic GamesCary, North CarolinaSpecial Projects, Engine ProgrammerAug. 2020 – Present• Support designers by creating flexible frameworks and gameplay systemsAug. 2020 – Present• Integrate, test, and debug new project and engine features in C++ with UE5Vorked on The Matrix Awakens: An Unreal Engine 5 Experience			
Studio ChiliOrlando, FloridaKeepers of the Trees, Lead ProgrammerDec. 2019 – Aug. 2020• Created a local co-op, puzzle-platformer with a team of 22 people in UE4, released for PC on Steam• Led technical design and managed the programming team, coordinating with cross-discipline teams			

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

University of Central Florida

Institute for Simulation and Training, Research Assistant

- 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 •

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 M.S. Interactive Entertainment, 4.0 GPA

University of Central Florida, College of Engineering and Computer Science B.S. Computer Science, Cum Laude, 3.78 GPA

Orlando, Florida Aug. 2019 – Dec. 2020 Orlando, Florida Aug. 2015 - Dec. 2018

Orlando, Florida

Dec. 2018 - Aug. 2019