

EXPERIENCE

RETRO STUDIOS

Mar 2019 - PRESENT

Metroid Prime Remastered (2023)

- Working for Nintendo is a dream come true: I'm a Fan, my goal is to make other Fans happy!!
- I combine HLSL, Houdini, Game Editor Scripting, and C++ Coding to create Complex Visuals for Retro
- Author HDAs to procedurally generate Data-encoded Models and Textures, FlowMap simulations, etc
- Interactive Environmental Effects: Rain, Steam, Lava, Shot Reactions, Visor Effects, etc
- Collaborate across Disciplines to make sure game-world comes to life with details and flourishes (I hope Players notice)
- Specialize in authoring Energy-Based visuals: Holograms, Force Fields, Projections, Sci-Fi Glass, etc
- Optimize Content to help our projects maintain 60 Hz on Nintendo Hardware
- I occasionally model, script, animate, narrative, etc whatever it takes for sincere features to get into the game!

ARKANE STUDIOS

Apr 2018 - Feb 2019

RedFall (2023)

- Procedural Generation with Houdini: Tools for Architects to easily populate World
- Using C++ to extend Engine features, expose parameters, create new classes
- Complex Visuals for both Gameplay and Environment through shaders and scripting

SANZARU GAMES

Feb 2016 - Jan 2018

VR Sports Challenge (2016) | Marvel Powers United VR (2018) | Asgard's Wrath (2019) | Spyro Reignited Trilogy (2018)

- Unreal C++ and Blueprint programming for Menus, UI, Developer Tools, and visuals
- Complex gameplay visuals; Interactable Ocean, Procedural Lightning, X-Ray World
- Developed Shaders using Unreal's Material Editor, HLSL, and Shaderlab

WAYFORWARD TECHNOLOGIES

Feb 2014 - Jan 2016

Ultimate Spider-Man (2014) | Dora and Friends (2014) | Goosebumps: The Movie (2015) | Shantae: Half-Genie Hero (2016)

- Gameplay programming, including Enemy AI and Dynamic Spawning System for Shantae
- Created Post Process Ocean Shader in HLSL within WayForward's Proprietary Engine
- Optimized art content to meet hardware and memory limitations (from 3GB to under 1GB)

PERSONAL PROJECTS

x86 NES Emulator: Conntendo

2018-2019

- Using C++ and SDL2 API, Plays over 90% of NES Library
- Emulates the 6502 CPU, PPU, APU, and over a dozen Mappers

Unity Fan Game: Super Mario Super Show

2015-2017

- Created Art, Programming, Materials, Custom 2D Physics and Rigging System

SOFTWARE AND SKILLS



EDUCATION

DEPAUL UNIVERSITY

Sep 2009 - Jun 2013

Bachelor of Science in Videogame Development

- Graduated with Summa Cum Laude Honors: 3.9 GPA