



SANDY DEMIAN

Software Engineer



Contact

- (216)785-1700
- sdemian95@gmail.com
- <https://sademian.github.io/>
- [linkedin.com/in/sandy-demian](https://www.linkedin.com/in/sandy-demian)

Programming

C++, Python, C#, JavaScript, HTML, CSS, Java

Software

Visual Studio, Perforce, Frostbite, Unreal Engine 4/5, Unity, Jira, GitLab

Education

Interactive Entertainment, M.S.

Florida Interactive Entertainment Academy
December 2020
GPA: 3.80

Computer Science, B.S.
University of Central Florida
December 2018
GPA: 3.77

Work Experience

Software Engineer II - Electronic Arts May 2021-Present Maxis, Central Tech | May 2024- Present

- Prototyped Advanced AI based custom character creation for The Sims
- Maxis, Unpublished Sims Game | Oct 2022-May 2024
- Iterated on the custom animation system integrated into UE5 for next gen Sims title
 - Added support for more flexible layering of animations to achieve multitasking behaviors in characters
 - Worked with animators to improve authoring animation content that supports layering
 - Collaborated with gameplay engineers and expanded on the animation system's API for requesting animation to support character multitasking needs
 - Created a custom plugin that extends UE5's Animation Rewind Debugger

EA Studios, Central Tech | May 2021-Oct 2022

- Expanded on the replay capabilities of the Frostbite engine to allow for user generated content
- Worked on a major feature from start to end including gathering requirements, system design, implementation, integration, and maintenance
- Collaborated with the Frostbite development team to develop and integrate engine modifications to support the feature
- Collaborated with stakeholders and game teams to ensure requirements were aligned and integrated the project into one of the current titles using Frostbite

UI Programmer Intern - Epic Games Aug 2020-Mar 2021 Fortnite UI Team

- Worked on Fortnite's quest system to extend and improve the NPC quests
- Collaborated with gameplay engineers to add UI support for a new gameplay feature
- Fixed bugs in various areas of Fortnite including the store, locker, HUD, and settings

Other Experience

Izcalli of the Wind - C++/Unreal Engine 4 Jan-Aug 2020 Florida Interactive Entertainment Academy | Capstone Project

- Collaborated with a multidisciplinary team of 16 on an Aztec inspired action-adventure game using a hoverboard movement
- Implemented gameplay features including directional force paths using Unreal splines, a payload challenge system, two-level fog of war map and a mini map, and an in-editor replay playtest tool using network replication

Procedural Building Generator - C++/Unreal Engine 4 May-Aug 2020 Florida Interactive Entertainment Academy | Personal Deep Dive

- Implemented a building generator with random floorplans
- Added the ability to customize number of levels, wall segment size, number of segments, and style
- Created a spline editor to allow manual modification to the generated floorplan

Game Engine - C++ Jan-May 2020 Florida Interactive Entertainment Academy

- Created a data driven game engine with Json scripting, custom runtime type identification, a multithreading event system, and unit tests