John Welter

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TECHNICAL ARTIST

A developer based near Oslo, Norway with a passion and enthusiasm for game development. Extensive personal and academic experience in using scripting languages such as C# or C++ for engineering creative solutions that realize an artistic vision to create engaging gaming experiences. Able to collaborate with teams in agile environments. Experienced at working on projects at all stages from defining requirements to releasing and supporting the final application. Outstanding communication skills and leadership ability. Experience in Unreal and Unity pipelines

Vector / Raster Graphics | Prototyping | Modeling | Surfacing | Gameplay Programming
Animation | Expert C# / Unity Engine | Virtual Reality | Augmented Reality | Tech Art | Locomotion | Game Mechanics | SFX

Education

Master of Fine Arts, Digital Production Arts – Clemson University
Bachelor of Arts, Computer Science – Clemson University

Technical Proficiencies

Unity Development, Unreal Engine 4/5, C#, C++, Python, ZBrush, Maya, Blender, Topogun, Substance Painter, Photoshop, Illustrator, Clip Studio, WPF / XAML, 6502 Assembly

Professional Experience

Technical Artist – Deck Nine Games — March 2020 – December 2024
- Specializing in player locomotion tech, including creating anim BPs, custom anim BP nodes, state handling systems in C++, and working closely with animators to ensure animations are to specifications.
- Working on maintaining and expanding in-house engine and cinematics tech.
- Working closely with game designers to ensure the tech is tunable and to specifications.

Research Assistant – Clemson University — Summer 2019
- Engineered a physically based hand-interaction simulator using Unity's built-in physics to capture force-based motion (grip release), matching tracked hand movements.

Software Engineer – AVNT — Summer 2018
- Created an iPhone AR app in Unity allowing a user to look at shirts and pants in a virtual closet, synching with the backend and generating real-time textures, allowing users to take pictures of existing shirts and pants and add them to their virtual closet.

Research Assistant – Clemson University — May 2016 – Jul 2016
- Created an immersive VR experience to simulate riding in a battle mech, assisting in level design and layout, creating signposts and HUD design, and composing the backing track and SFX.
- Coded many of the scripts for the game mechanics, including the drones, intro, level section transitions, and aiming behavior.
- Defined a chunk loading system, optimizing processing load during game play by toggling level details based on player location.
- Presented at SIGGRAPH 2016

Academic and Professional Experience

Life is Strange: Double Exposure — July 2023 – October 2024
- Rebuilt and lead the way on the entire Locomotion system to better match proper Unreal use, using a robust state machine
- Expanded the functionality and abilities of the player camera system
- Worked with Control rigs to handle real-time animation fixes for more fine-tuned blends
- Built a functioning emotional response system for dynamic look at targets
- Working on Maintaining and expanding on new in-house cinematics tech
- Streamlined NPC locomotion handling

Academic and Professional Experience (cont.)

Deck 9 R&D March 2020 – December 2024

- Helped to Build an on-rails combat system
- Developed some experience using modular Anim BP layers
- Built a soft and hard togglable targeting system for real time combat, including enemy priority and camera handling
- Worked to condense, streamline, and make modular a lot of character handling systems in C++
- Created a custom and more portable custom camera rig that was better suited to our needs
- Created solutions for seamless and hard cut transitions in a new cinematics system
- Created an entire system for running a real time, data-based dialogue system that included full capture animation with synched audio, reaction animations, looping idles, and camera control
- Worked with the new UE Motion Matching system
- Converted prototype blueprint behavior into C++ code

The Expanse: A Telltale Series September 2021 – July 2023

- Specialized in player locomotion, building 2 locomotion handling systems and a camera rig from the ground up.
- Worked on Initial UI and UI utilities during pre-production.
- Created and implementing dynamic materials.
- Worked on Maintaining and expanding on in-house engine and cinematics tech
- Made special gameplay for the DLC

Life is Strange: True Colors March 2020 – September 2021

- Inherited, maintained, and expanded on a custom-built player locomotion state machine in C++.
- Worked closely with animators to solve problems with animations and ensure smooth locomotion transitions.
- Worked on various custom engine solutions for input, worked on certain UI tech issues, and implemented the branching high score table implementations for the arcade games in the story and the extras menu.
- Worked on an additive facial animation system, as well as implementing a look-at system.

Narrative and Environmentally-based Character Animation System for Video Games Jan 2019 – Apr 2019

- Modeled, surfaced, created blendshapes, and animated a game character in Maya for Unity, making a set of animations to match different environmental reactions and points in the narrative arc.
- Engineered a system to switch between animation and reaction sets in the narrative arc.
- Created extensive customization by building shaders for character's skin, clothes, and eyes.

Ship VR Jan 2018 – Apr 2019

- Created a virtual reality (VR) starship fighting simulation in Unity, using procedural terrain to generate an infinitely looping level allowing seamless warping back to the point of origin without losing floating point precision at far distances.
- Built an additive control scheme using 2 control sticks attached to a motion simulator.
- Defined custom particle effects and shaders portraying a minimal vector style with distance terrain darkening for a seamless appearance.
- Implemented work-arounds in the Unity physics engine to enable additional artistic control of collisions.
- Created a custom torsional spring-based rotation model to increase flight realism.

For a Rainy Day Aug 2018 – Apr 2019

- Created a physics-based side-scroller in Unity, including a boss fight scenario as well as the auto side-scrolling mechanics.
- Collaborated with the art team to align the game's goals with technical capabilities, creating the modeling, rigging, animation, and surfacing for the boss and main character concept.
- Created content such as the model, rig, animation, and surfacing for the boss, as well as concept art for the boss and main character.