Daniel Yu

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EDUCATION

University of Southern California   Los Angeles, CA
B.S. Computer Science (Games); Minor: Cinematic Arts   Aug. 2021 - Present
GPA: 3.95   **Expected Graduation Date:** May 2025
Relevant Coursework: Calculus II, Linear Algebra and Differential Equations, Intermediate Game Design and Production, Video Game Programming, Advanced Gameplay Programming, Introduction to Artificial Intelligence, Computer Graphics

WORK EXPERIENCE

Student Worker - *USC East Asian Studies Center*   Aug 2023 - Present
- Managed Instagram and Facebook accounts by designing and producing weekly graphics
- Updated old website pages to be more visually cohesive and up-to-date
- Assembled and maintained information about upcoming events and job opportunities
- Assisted in daily operations by taking calls, preparing events, and directing guests

Video Technician, Technical Assistant - *Trojan Event Services*   Oct. 2021 - Aug. 2023
- Set up and operated video cameras and video switchers during live events
- Assisted staff in the transportation of equipment

Orientation Advisor - *USC Office of Orientation Programs*   Mar. 2022 - Jan. 2023
- Gave presentations with a partner to groups of 10-20 students twice every week
- Held one-on-one talks with incoming students over Zoom and directed guests 3 times every week
- Communicated with co-workers and provided customer service to students and parents daily

PROJECTS

Programmer, Designer - *[Free Will](#)*   May 2023 - Present
- Implemented a save and load system that saves data to a user-modifiable JSON file in Unity C#
- Implemented data persistence between levels and a level manager to control scene transitions
- Created functionality for reading, writing, and correcting a text file to create an in-game invisible maze
- Implemented a mouse cursor-repelling force within a radius around an in-game enemy
- Programmed a sequence of external dialog boxes opening and respawning outside of the game window

Sound Designer - *[Sorelle](#)*   Apr. 2023 - Present
- Designed the sonic identity and 8 sound effect assets for a main character using Ableton Live
- Recorded foley, designed UI sounds, and produced minor jingles and flourishes
- Adjusted and finetuned various RTPC parameters and effects in Wwise

Programmer, Sound Designer - *[Unnamed Surgeon Game](#)*   Jan. 2024
- Implemented functionality for picking up and placing down interactable items in Unity C#
- Implemented a gradually dimming light that can be reactivated through interaction

● Recorded and implemented voiceover for all sound effects

Sound Lead - *Boo's There?*   June 2023 - Dec 2023
● Implemented a layered music system in Wwise that seamlessly adds layers to the BGM track per level
● Implemented a set of clock ticking sounds that vary in intensity depending on the in-game timer
● Hosted group and individual Wwise and Ableton workshops for new team members
● Managed and maintained communication with a team of 5 sound designers weekly
● Integrated Wwise into the Unity project
● Implemented a dialogue sound blip system that plays unique sounds for each letter typed for each NPC, in conjunction with Yarn Spinner
● Wrote Wwise documentation detailing basic Wwise functionality and previously implemented features
● Collaborated with the Design team to create an asset list and establish the game's experience goals
● Communicated with the Programming team to assist in fixing Wwise-related bugs

Programmer - *Portal Recreation*   Mar. 2023 - Apr. 2023
● Programmed all core functionality in C++ with the SDL Library
● Implemented an AI state machine to control sentry turret searching, priming, firing, and death
● Utilized view matrices and quaternions to calculate and create portal views
● Implemented player movement with forces, FPS controls, and 3D box collision

Backend Developer - *UScheduler*   Feb. 2023 - Apr. 2023
● Created 4 Java Servlets on the backend to allow for access to the MySQL database
● Created input validation for registering, logging in, and creating events
● Implemented functionality to a JDBC connector class to retrieve all events on a specified date
● Created weekly documentation under the Waterfall design methodology

Lead Programmer, Designer, 3D Artist - *Hear Your Fear*   Jan. 2023 - Apr. 2023
● Collaborated with one other programmer to establish and fulfill the game's core gameplay loop in Unity C#
● Created all 3D models and environments in Autodesk Maya
● Implemented a pathing system in C# that allows for enemies to follow fixed paths
● Implemented player movement
● Worked under the Agile design methodology
● Implemented a layered audio track system using Unity's built-in sound engine
● Implemented a level manager, game manager, and audio manager
● Created and implemented all HUD assets, including a healthbar and hint text
● Facilitated weekly playtests and analyzed player feedback to iterate on the game's design
● Implemented all sound effects and music, and finetuned spatial audio distance attenuation
● Debugged and finetuned the player vision's raycasting

Composer, Sound Designer, Audio Programmer - *Bone Boy*   Jan. 2023 - Apr. 2023
● Composed two music tracks in Ableton Live
● Created and recorded various sound effects, including most enemy and NPC sounds.
● Utilized Audacity and Ableton Live for sound mixing and layering
● Implemented sound effects and music into Unity using Audiokinetic Wwise

Composer, Programmer, UI - *Cellulose*   Nov. 2022
- Composed and implemented the entire soundtrack, consisting of 4 tracks total, with additional mixing in Audacity
- Programmed the Lives and Score systems, as well as a Game Over state in Unity C#
- Implemented and programmed all UI, including the HUD, main menu, and pause menu
- Implemented a toggle that allows players to switch between 8-bit and non-8-bit soundtracks

Sound Designer, Audio Programmer - *Mom, Please Respect My Privacy*   Oct. 2022
- Created sound effects for the player walk cycle
- Created and implemented sound effects for placing and removing various item types
- Ideated that the mother would search while the player hides items simultaneously
- Ideated the light switch mechanic, enabling players to hinder the mother temporarily

Audio Designer - *Ho Ho Who Did It?*   Nov. 2021
- Composed the entire soundtrack, consisting of 7 tracks
- Reduced the workload of artists and programmers by suggesting the use of non-square puzzle shapes
- Created sound effects for pushing and pulling puzzle pieces
- Created sound effects for the player walk cycle

EXTRACURRICULARS

Sound Lead, Sound Team Member - *Open Alpha USC*   Jan. 2023 - Present
- Composed music tracks and sound effects in Ableton Live and implemented them into Unity projects through Wwise
- Collaborated with the design team to create an audio asset list for a video game every semester
- Developed Wwise, music theory, and sound design curriculum for new members

SKILLS

Computer Programming: C++, C#, Java, Python, Web   **2D Graphics:** Adobe Illustrator
Game Development: Unity, Unreal Engine 5   **3D Graphics:** Autodesk Maya
Sound: Audiokinetic Wwise, Ableton Live   **Video Editing:** Adobe Premiere Pro, Adobe After Effects

HONORS AND AWARDS

Dean's List - *USC Viterbi School of Engineering*   Jan. 2023, June 2023, Jan. 2024
Dean's List - *USC Annenberg School for Communication and Journalism*   Jan. 2022