Spencer Lin

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Education

University of Southern California (2020-present)

Los Angeles, CA

Major: Computer Science Minor: Immersive Media

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GPA: 3.28

Relevant Coursework

Data Structures and Object Oriented Design

Introduction to AI

Principles of Software Development

Video Game Programming

Experience

For Traum | Game Director

July 2020 - Present

- Recruited and leads a team of 44 multidisciplinary students from USC, Pasadena ArtCenter, UCLA, and NEU to work on an F2P 2.5D fast-paced platformer for PC/Mac built in Unity
- Directs vision and implementation of the game, communicating with programming, game design, illustrations, animations, sound, UI, and marketing divisions
- Implemented an Agile development cycle with a controlled-decentralized command structure to boost efficiency and morale, culminating in a highly organized and effective cross-functional team with great member retention
- Created detailed documentation of programming and standard practices to streamline production
- Rapidly prototyped core gameplay functions in two weeks
- Administers an 18 person Git repository via GitKraken and GitHub Desktop

NASA SUITS Team Aegis | Lead Developer

January 2022 - June 2022

- Led multiple interdisciplinary divisions to create an AR HUD for Hololens 2 to assist astronauts on lunar EVAs by minimizing cognitive load and improving safety using terrain sensing, vitals monitoring, and smart navigations systems
- Set up a streamlined toolchain setup process to expedite development on the Hololens 2, a novel platform
- Sourced Windows PCs from USC through Planet Save to enable macOS team members to develop on Hololens 2

Planet Save | Co-Founder & Project Manager

May 2017 - Present

- Runs a 501(c)(3) environmental nonprofit by leading engineering projects and coordinating with sponsors
- Coordinates with the local city government to host annual educational events such as Earth Day festivals that showcase sustainable tech such as aquaponics and drones
- Created an interactive AR experience using Unity and Vuforia which projects a holographic character that responds to voice input, offering visitors an interactive learning experience
- Built an interactive educational kiosk in Unity and Live2D for Planet Save events. Users use voice and touch-screen input to interact with a virtual character, significantly enhancing learning experiences
- Engineered an aquaponics model using repurposed plastic waste that improves environmental sustainability by increasing crop yields and reducing 90% of water waste in a compact and affordable soilless environment
- Gave a keynote speech about aquaponics at Alibaba's 2018 Xin Philanthropy Conference in China to a live audience of two hundred as well as networks including CCTV which aired the event internationally
- Engineered and programmed two specialized sUAS to gather NDVI data for the San Gabriel Valley Water District to streamline irrigation systems for municipal green spaces

USC Makers Club | Software Team

January 2021 - Present

- Programmed a voice recognition script to handle wakewords to control a rover-type robot that retrieves objects
- Programmed an object recognition script using OpenCV to identify fruits for a robotic arm to cut

USC Information Technology Services | **IT Student Worker**

August 2021 - Present

• Images and deploys Mac and Windows computers

Foothill Family | IT Help Desk Student Worker

June 2021 - August 2021

Took the initiative and wrote Batch scripts that automated deployment of Windows desktops and laptops

Skills & Interests

Coding Languages	Proficient	Intermediate	Exploring
	C#, C++, Java	Python, HTML, CSS	Batch, Javascript, Ruby
Software	Unity game engine, MRTK, Vuforia, OpenCV, Git, Microsoft Office, Fusion 360, Cura, ChituBox		
	MySQL, Pix4D, Bootstrap, Jekyll, Jetbrains Suite, Visual Studio, Live2D, any OS		
Hardware	Soldering, FDM + SLA 3D printing, CNC laser cutting		
Interests	Hololens, AR, sustainability, AI, drone racing, 80's music, sci-fi		