Josette Lauren Seitz

268 Vernon Street APT 304
Oakland, CA 94610
(919)302-3985
josetteseitz@gmail.com
josetteseitz.com

CARRER OBJECTIVE

I am seeking a development position that requires strong analytical and problem-solving skills, as well as communication between technical and non-technical team members specifically within the Virtual Reality, Augmented Reality, or 3D spatial field.

TECHNICAL SKILLS

Programming: C#, Java, SQL (T-SQL, PostgreSQL), HTML, CSS
Hardware: Meta Quest & Quest 2, Microsoft Hololens2, Azure Kinect camera, Intel RealSense camera, Leap Motion, iPad, HTC Vive
Applications: Unity3D, Visual Studio, Xcode, IntelliJ IDEA, Unreal, MS Dynamics 365 for Hololens
Source Code Management: GitLab, GitHub, Bitbucket, Plastic SCM, Innersource

XR WORK EXPERIENCE

Baltu Technologies Inc.
April 2023 – Current

XR Developer
San Francisco, CA

- XR Developer primarily creating immersive experiences in Unity3D using C# programming and utilizing the MonoBehaviour base class.
- Lead developer on a workforce AR training application called “SuperDoc”. This AR training application is intended to help workers on the field to complete daily tasks given by the manager/administrator or help train workers on new procedures using iPads.
- Implemented new features including retrieving or updating user’s data via Web Request calls to a WordPress server. Led C# code refinement and bug fixes throughout the entire AR application.
- Developed VR training application for a non-profit organization called Chicanos Por La Causa (CPLC). This VR application was to influence and educated high schoolers on what it’s like to be within the semiconductor or aerospace field as a full-time worker. Used UltimateXR plugin for cross-device compatibility, locomotion, and object manipulation.
- Managed iOS AR application by building and deploying to Apple’s mobile testing service- TestFlight. Used Meta Quest Developer Hub to improve optimization and deploy VR application to Quest 2 headsets.
- Attended Apple Vision Pro Lab session at Apple Headquarters in Cupertino, California to learn more about the visionOS platform. Tested both hardware and software of the Vision Pro headset. Converted and deployed “SuperDoc” iPad application to Vision Pro using Xcode 15.1 beta version and Unity 2022 LTS visionOS ‘experimental’ mode. Researched framework and tools including SwiftUI, Reality Composer Pro, and PolySpatial visionOS.

Accenture
November 2018 – April 2023

XR Developer
San Francisco, CA

- XR Developer Consultant for various clients including Disney, Goodwill, Docomo, Volumetric Capture studios, Syracuse University, Boeing, and power companies.
- Led development team on 2 VR training applications for Quest and Quest 2. Quest project involved developing an application to train service members, veterans, and military spouses prepare for civilian job interviews. Quest 2 project involved developing an application to help formerly incarcerated individuals prepare for civilian job interviews.
- These 2 projects contain the same architecture and framework which is available to reuse for future VR training applications. Technologies involved were Unity3D, C#, Speech to Text services, and video production. Used AVPro plugin extensively for the video portion of the project.
- Developed 2 Augmented Reality proof of concepts using Microsoft Toolkit (MRTK) and the HoloLens2. First PoC involved video calling and 3D annotations using WebRTC and Photon Unity Networking (PUN). Second PoC involved using Google Maps Platform, navigation for Landmark and Optical Character Recognition (OCR) detection.
- Managed various XR Media technologies including, Volumetric Capture, Looking Glass, Virtual Reality, and Augmented Reality solutions. Constructed 2 different medium fidelity Volumetric Capture studios with partners Forma Vision and Imverse. Developed Looking Glass applications with Hand Tracking technologies in Unity. Completed a fan-to-athlete Volumetric Live Streaming interview for the ESPN Edge account which included filming an NFL player in the San Francisco studio. Used Azure Kinect and Intel RealSense cameras for many volumetric productions.
- Helped Accenture Disney StudioLab team in developing an AI Storm Trooper. Created configuration files on Python backend system and Unreal C++ modules. Worked with animators to create Montages in Unreal. Modified and wired-up Blueprints including Animation Blueprints, Widgets, ClassBP to add more functionality to the AI character. Used Intel Distribution of OpenVino toolkit to detect user’s presence and pose. For face and speech detection used Azure Cognitive Services. Completed regression and unit testing of entire application and responsible for project builds and delivery.
- Converted Unity3D Virtual Reality applications using a specific SDK to display experiences in the Igloo 360 Projection Dome within the Accenture San Francisco Innovation Hub. Implemented data analytics and multiplayer in Virtual Reality. Data analytics platforms used are Cognitive3D and Observer Analytics. Multiplayer platforms used are Immerse and Normcore. Improved experiences in Unity3D modifying C# scripts and lighting.

XR Bootcamp
June 2020 – August 2020

Hand Tracking Development with Unity
San Francisco, CA

- Attended online 8-week course on how to create Hand Tracking applications for Quest.
- Certified in completing all the requirements of the Hand Tracking and Interaction Design Master Class.
- During the attendance of XR Bootcamp, developed holographic UI, locomotion, kinematic grabbing & interactions, and DOTween animations with Hand Tracking.
- Spent much time learning the appropriate project structure to set up basic Quest Hand Tracking in Unity.
- Teleporting assignments included teleporting around 3D environment by using your fingers to pinch and release, implementing a vignette effect to prevent motion sickness when teleporting smoothly, and added a mechanic to teleport to some specific “Snap Point” on the floor.
- Holographic UI assignments included opening and closing main menu panel with a double pinch gesture, animating the menu by scaling up and down using DOTween, implemented a new UI component for radio buttons, and added an animated bar sliding up and down to certain UI panels.
- Grabbing and Interaction assignments with objects using hand gestures in a kinematic way included building the proper colliders to make objects grabbable and scalable, respawning these objects when object is below a certain height, and grabbing an object making it breakable when the collision velocity is higher than a certain threshold.

Circuit Stream (formally Academy of VR) ***September 2017 – November 2017***
Virtual Reality Development with Unity
Vancouver, Canada Area

- Attended online 10-week course on how to create Virtual Reality applications.
- Used Google VR SDK for Unity, OpenVR SDK in Unity with Valve's Interaction System, SteamVR plugin and VRTK Toolkit.
- Following the completion of Circuit Stream courses, designed storytelling piece in Unity called "Lifestyle." Combined modern dance movements with visuals and music into one performance piece. The application and dance movements describe how music can be someone's lifestyle, highlighting specific words in the song using TextMesh Pro and Trail Renderers.
- Created Educational VR Google Cardboard application called "Hide and Seek Kitty Cat". This application is a 1st grade Math Quiz/Hide and Seek game implementing EventTriggers (Pointer Click), creating custom Particle System GradientColors, Physics.Raycast, and modification of Animator component through C# script.
- Created Unity application called "Dancing Queens", which showcases 2 different ways to code GameObject paths in C#. First implementation focuses on adding Rigidbody to the GameObject and calling Rigidbody.MovePosition. Second implementation uses iTween plugin but added "easetype" property to amplify GameObject path.

XR PROJECT CONTRACTS & HACKATHONS

Alice in The Gardens ***October 2023***

- Developed and showcased HoloLens2 immersive AR storytelling experience at various art and light festivals including Art Basel Miami, Oakland Autumn Lights Festival, and the San Francisco Visitacion Valley Light Festival.
- Marketed and promoted HoloLens2 application creating this demo video: Alice in The Gardens to showcase the experience outside of the headset.
- Collaborated with a digital artist to enhance and make the art work more interactive and immersive using MRTK3- Hand Tracking technologies.
- Created green screen studio for Virtual Production to record actress and used chromakey shader to transform actress into a hologram.
- Used Unity3D and C# programming utilizing DOTween and Animator components for animations.
- Minted one of the digital art pieces from the experience on OpenSea and used a Looking Glass Portrait device to show and sell NFT to the public.

San Diego Comic-Con ***July 2022***

- Created Quest 2 Hand Tracking VR comic book experience to promote Comic-Con artist's newest comic book, "Captain A-Hole's Guide To Getting Old(er)".
- Deployed application on SideQuest VR platform for users to sideload to device: Guide To Getting Older and created thorough documentation on experience and sideloading procedures.
- Used MRTK2 for Hand Tracking and created hand tracking user tutorial in the experience.
- Attended San Diego Comic-Con to guide users and make sure VR storytelling experience was well executed with partnership of the physical comic book.

Mixed Reality Dev Days- Microsoft Hackathon ***June 2022***

- Created a Hololens2 AR experience for Figure Skating coaches.
- Transmitted United States Figure Skating Rulebook into a digital AR experience using MRTK3, the third generation of Microsoft Mixed Reality Toolkit for Unity: Figure Skating AR Digital Rulebook
- Customized hologram UI canvases and implemented video capture to store videos on Hololens2 device.

2113 Labs ***August 2018***

- Developed VR music video experience called Permissions VR. Currently for HTC Vive and Quest shown to users at Comic Cons and musical events.
- Used SteamVR plugin and Oculus SDK to implement controller input where user can move around and explore the environment.
- For Steam version, created start menu screen containing UI canvas, panel, button, SteamVR laser pointer, and TextMesh Pro.
- For Oculus version, added reflection probes, modify/added various lighting including point lights, and spent numerous hours baking the application to improve the look and performance of the environment.
- Converted original Steam version to Oculus analyzing entire project structure to optimize for Android.
- Used profiler to analyze performance and delete/deactivate unused objects, prefabs, and scripts that were unnecessarily activated in the scene.
- Help build game content for Steam via Steamworks tools. Build and package game in Steampipe to upload application to Steam for public users to download.

ForeverBlu ***June 2018***

- AR political advertising application. User points iPhone or Android camera over political poster and an animated character appears to notify users of future campaign events happening in their area.
- Worked primarily on serializing and deserializing JSON objects within Unity. Created C# scripts to read JSON file from AWS URL and parse data to play video of animated character depending on user's demographic by age and gender.
- Use Vuforia Cloud Recognition Service to store metadata containing video URLs associated with multiple Target Manager images.

NON-XR WORK EXPERIENCE

February 2014 – November 2018

- Software Engineer for various companies including Tax Management Associates, Syntelli Solutions, & Tata Consulting Services (TCS).
- Converting Ruby on Rails HTTP application into Java Spark to have better support for threading and performance.
- JUnit testing framework used to test application functionality. Implemented BeforeClass methods to make sure preconditions were completed before executing regular test cases. Extensive use of Java Assume and Assert methods to ensure test cases are passable.
- Worked on ETL use case in Hive and Spark (Pyspark). Input CSV files into Spark from HDFS using sc.textFile (SparkContext). Create User-Define functions (UDF) in Python.

EDUCATION

University of North Carolina at Charlotte – Charlotte, North Carolina ***December 2013***
College of Computing and Informatics
Bachelor of Science- Software and Information Systems
Minor- Dance