

Liv Erickson

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Summary

Virtual and augmented reality open source engineer with experience in building 3D content, tools, and prototypes with JavaScript, C++, and C# for use on desktop, mobile, and standalone devices.

Experience

Engineering Team Lead, Experiences at High Fidelity, Inc.

May 2018 – Present

- Manage daily stand-ups and weekly 1:1 meetings with members of our engineering team of 3
- Provide technical architecture and developer oversight for delivering content related to the development of virtual reality experiences in the pillars of education, work, and entertainment. Meet regularly with executive team for planning experiences and leading the engineering efforts for live VR events and on-demand social experiences.
- Implement interactive scripts for producing the first-time user experience tutorial for the High Fidelity platform
- Develop prototypes and deliver production code for ongoing projects in the Experiences organization pipeline

Engineering Team Lead, Content & Tools at High Fidelity, Inc.

May 2017 - May 2018

- Responsible for the technical architecture and development of a VR shopping experience in alignment with the release of High Fidelity's blockchain commerce system. Collaborated across multiple teams within the company to design and implement a solution for trying on and purchasing avatar accessories for both desktop and VR users.
- Led team through regular prototyping exercises, including hackathons with the goals of finding and filing platform bugs and iterating on delightful new user content for use in public domains.
- Produced technical scoping documents and implemented new engine features to improve user editing tools and SDKs for building content inside of High Fidelity. Worked across the platform stack to implement new server feature for replacing environments from the client and added new API functions across the entity, avatar, and wallet APIs.
- Managed daily stand-ups and weekly 1:1 meetings with members of our engineering team of 4 and was responsible for code completeness and deliverables for the team. Met regularly with executive team in planning and executing on team projects.
- Created a relay API using Node.js and Microsoft Azure to enable users watching live streams of content recorded in High Fidelity to send 3D objects to streamers via Twitch and YouTube
- Lead maintainer of the [hifi-content](#) repository and implemented engineering processes for internal and external contributors

Prototyping and Developer Education at High Fidelity, Inc.

January 2017 - May 2017

- Created prototypes for real time language translation for speech to text inside of the High Fidelity platform and utilized webhooks to create an interface for communicating within VR to a user on a company Slack channel
- Recorded educational videos for beginner-level creator tools for use on the website and the company YouTube channel
- Designed and taught VR development classes inside of the High Fidelity classes to reach global audiences

Software Developer Evangelist, VR at Microsoft

February 2015 - January 2017

- Developed and taught curriculum and projects for the first series of VR development labs in partnership with community groups local to the SF Bay Area and globally with ARVR Academy, Silicon Valley Virtual Reality, and Women Who Code. Planned and presented additional partnerships for one off events with SFVR and ARVR Women. Co-founded ARVR Academy

- Created several open source VR, AR, and MR applications, including KittenVR, a virtual reality game targeting the Oculus runtime utilizing the Unity game engine with Xbox input control for Windows. Other platforms built for include Cardboard, Daydream, Oculus, WebVR, Vive, HoloLens, Vuforia, and Leap Motion. C# and Unity
- Developed virtual reality-enabled websites using JavaScript, ASP.NET, AFrame, and the WebVR API for desktop and mobile VR
- Utilized the .NET framework and Three.JS to create a WebVR site to render and visualize Excel charts in 3D space with the Visual Data project.
- Creator and host of Just A/VR Show on the MSDN Channel 9 network. Released 7 episodes to date with over 250k channel views, and developed a corresponding LearnVR Github Repository
- Developed curriculum around WebVR, Three.JS, Unity, and the Cardboard SDK and taught a one-week introductory level virtual reality development course for university students at the Bremen University Informatica Feminale summer program in Bremen, Germany
- Guest speaker at Stanford's CS 125 course on developing web-based virtual reality sites for social good. Created a simulation of ocean pollution using the A-Frame framework and taught a workshop on how to create the site with a class of 20 students.

Technical Program Manager at Microsoft

July 2013 - February 2015

- Member of the Remote Desktop Virtualization Team at Microsoft's Silicon Valley Campus
- User experience and interaction program manager for RDS clients on iOS, Android, Mac OS. Implemented a solution for rapid prototyping using live UI that was used to reduce design time for remote desktop applications across other teams within the organization.
- Release manager for the Remote Desktop iOS application
- Program Manager for partner management, social media outreach, and release manager for Windows MultiPoint Server
- Vice-President Appointed Lead for the RemoteFX team during the 2013 Microsoft Giving Campaign. Organized and ran charitable giving events for the team, including an auction and team fundraiser that raised money for the Sankura Eye Foundation and the Stanford Children's Hospital.

Program Manager Intern at Microsoft

Summer 2010, 2011, 2012

- Member of the Windows MultiPoint Server team, responsible for designing and implementing prototypes of various features for the team's upcoming features.
- Social Media and partner outreach for the team, including being the lead on a site installation at a school in West Seattle to put Windows MultiPoint Server stations in production in their computer lab

Skills

Software Development: JavaScript, C++, C#, C, HTML / CSS, Python, Node.js, QML, Qt, Java, Objective-C

Tools & Frameworks: Unity3D, High Fidelity, Unreal, Visual Studio, cmake, Microsoft Bot Framework, Azure Functions, WebVR, .NET, OpenGL, Three.js, A-Frame

Devices: Oculus Rift, HTC Vive, Cardboard / Daydream, Microsoft HoloLens

Education

Virginia Polytechnic Institute and State University
B.S, Computer Science, 2009 - 2013