
Education	Carnegie Mellon University, Entertainment Technology Center Master of Entertainment Technology The Juilliard School Master of Music, Violin Performance Columbia University Bachelor of Arts, Computer Science Columbia-Juilliard Exchange Program Participant	09/2017 – 05/2019 09/2015 – 05/2017 09/2012 – 05/2015
Projects	Pupil: ETC, Graphics / Interaction Programmer etc.cmu.edu/projects/pupil/ <ul style="list-style-type: none">Set up a custom Mixed Reality development platform capable of passthrough VR, realtime spatial mapping, and hand interaction.Designed and implemented playful interactions for a classroom learning environment, using the Leap Motion SDK.Platform: Mixed Reality w/ Oculus Rift, Zed Mini, and Leap Motion Music in Motion: ETC, Graphics / Audio Programmer etc.cmu.edu/projects/music-in-motion/ <ul style="list-style-type: none">Authored custom materials for water and other visual elements, using Unity CG Shaders.Designed and implemented interactive virtual instruments and audio effects in SuperCollider.Implemented a 12-speaker ambisonic sound setup for use in conjunction with virtual reality.Platform: HTC Vive Vango: Painterly representations of images, Columbia github.com/yariza/vango <ul style="list-style-type: none">Implemented an image analyzer and brushstroke renderer to convert pictures to painting representations, in C++ and OpenCV. Rainborg: GPU-accelerated Position-based Fluid Simulation, Columbia github.com/yariza/rainborg <ul style="list-style-type: none">Implemented a position-based fluid simulation in CUDA C/C++, running 60,000 particles at 30 frames per second.	09/2018 – present 01/2018 – 06/2018 10/2015 05/2015
Experience	Unity Technologies (unity3d.com) Software Development Intern, Spotlight Team <ul style="list-style-type: none">Developed a low-level Memory Profiler for analyzing memory usage and fragmentation in the Unity engine, in C++ and C#.Collaborated with a Technical Art Director to create shaders in Unity for translucent materials. Snapchat (snapchat.com) Software Development Intern, Camera Team <ul style="list-style-type: none">Client and server code related to the scanning of Snapcodes, and other features, in C++, Objective-C, and Java.	06/2017 – 08/2017 06/2016 – 08/2016 06/2015 – 08/2015