NICKON MIR

Los Angeles, CA
https://www.nickonmir.com

EDUCATION

UCLA — UNIVERSITY of CALIFORNIA, LOS ANGELES
B.S. Computer Science

Courses—Computer Graphics, Vision, Networks, OS, AI, Linear Algebra, Multivariable Calculus, VR Art, Game Design.

EXPERIENCE

AR TECHNICAL ARTIST (VIRTUAL PRODUCTION) — Unreal   JUL '20 — Sept '20
Fox Entertainment, The Zinman Company
+ Built AR stages, pipeline tools [Shell], virtual screens, level streaming, and profiled/optimized lighting/reflections.
+ Programmed [C++, Blueprints, C#] for Pixotope control systems, timecode triggers, and ArtNet DMX lighting.
+ Made video/material shaders, UE4 style guides, and converted [Maya] Lidar point-clouds to accurate AR holdouts.
+ Operated 5 virtual production machines, live video, and Stype tracking for the Fox broadcast "The Masked Singer".

VR SIMULATION and TOOLS ENGINEER — Unreal   JUL '19 — DEC '19
Intuitive Surgical
+ Rapidly prototyped in UE4 to create a multi-user VR design review tool for posing surgical robot prototypes.
+ Programmed a pipeline automation tool [C++, Blueprints, Python, Bash/Shell] to take Solidworks exports and make poseable Unreal assets, for spawning real-time in the simulation.
+ Utilized OptiTrack motion capture hardware to track and synchronize a real operating room to immersive VR.
+ Prototyped point-cloud and ray-marching medical visualization techniques.

VR DEVELOPER and RESEARCH ASSISTANT — Unity   MAY '17 — DEC '18
Johns Hopkins Medicine
+ Developed Unity game-like puzzles for "Joey's Room", intended to prove VR's ability to elicit child OCD symptoms.
+ Programmed a C# serial port interfaces and event-based level managers, modifying Unity's VRTK plugin.

TECHNICAL ARTIST — Unity   SEP '16 — JUN '18
Escality Games
+ Designed, 3D modeled [Maya], integrated, and shipped the Unity VR escape room game—"Conjuror's Eye".

PROJECTS

UNREAL DEVELOPER   JAN '20
VidShift - Video Editor
+ Developed a layered video-panel editor [C++, BP] for VR playback in Unreal Engine, allowing 3D-transform editing.
+ Programmed timecode UI systems to scrub through the playback sequence and import and trim videos.

LEAD UNITY VR DEVELOPER and GAME DESIGNER   AUG '18
Art Trip at UCLA
+ Coded a C# quest system with tasks to be completed between two Tilt Brush worlds linked by a portal-painting.

SKILLS

Languages	Proficient with	C++, C#, UE4 Blueprints, Python, Bash/Shell, C.	Fluent: **English**
	Familiar with	Java, JavaScript, Batch, Lisp, HLSL, HTML/CSS.	Conversational: **Japanese**
Technologies		Unreal Engine 4, Pixotope, Unity, AR Foundation, SteamVR, Maya, Blender, Stype, Optitrack MoCap. WebGL (three.js), Mobile, Linux, Adobe Premiere, After Effects, HoloEdit, TCP/IP, JSON, Git, Perforce.	
Skill Sets		**Software** — VR, XR, AR, Game engines, Pipeline / Tools, Shaders, Client-server networks, GUI.	
		Hardware — Audiovisual A/V (sound boards, switchers, signal flow), Computer building, HTC Vive, Oculus.	
		Art — Volumetric Video, Virtual + AR Stages, 3D modeling, UVs, Materials, Video Editing, Motion Graphics.	