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ARYEH MISCHEL

VR Dev...

SKILLS

Languages: C#, JavaScript, TypeScript, jQuery, HTML/CSS, SQL

Unity Game Dev: Unity 3D, URP, Popular VR Libraries & Frameworks (XR Interaction Toolkit, Oculus Integration, SteamVR, autohands, hurricane, and more), Unity Particle Systems, ShaderGraph, 3D Lighting, Mecanim Animation Sytem, 3D math, Unity Profiler, playerPrefs, ProBuilder

WebXR: ThreeJS, A-Frame, WebXR, WebGL/GLSL, basis universal textures, draco compression

General Web dev: Webflow, nodeJS, Express, webpack

Tools and Technologies: Git, Blender, Figma, Jira, Unreal Meta Humans, ZBrush, blender add-ons (facebuilder, faceit, mocap, auto rig pro)

EMPLOYMENT HISTORY

UNITY 3D/VR DEVELOPER

2021 - 2022

Beam Imagination

Applied knowledge of proprioception to design and implement an immersive weapon interaction system for a VR FPS game, enhancing player realism. Used Unity's Springs, Hinges, and Physics to create smooth weapon animations and interactions. Developed hand interaction systems tailored to the physical limitations of Oculus Quest controllers, ensuring smooth and immersive gun handling. Created and modeled 3D assets for weapon parts, contributing to overall in-game realism.

UNITY 3D/VR DEVELOPER

Sep 2020 - Nov 2021

Hooldus Connect

Developed a VR game similar to "Beat Saber" for a startup aiming to use in-game player metrics for diagnosing ADHD. This MVP helped secure the company's initial funding. I was responsible for the entire project lifecycle, including technical architecture, UI design, animations, VR interactions, data capture, and final implementation. The core gameplay mechanics were built using the XR Interaction Toolkit and the "EZ Slice" component. I also developed a scalable data pipeline utilizing PlayerPrefs, custom .NET scripts, and Firebase to support rapid testing and development.

DATABASE DEVELOPER

Jun 2020 - Jan 2021

Diligent Systems

Handled various independent tasks such as database design, writing and optimizing SQL queries, managing MS SQL databases, and developing stored procedures. Gained expertise in backup and restore processes while learning advanced database management and performance optimization techniques.

2024

PROJECTS

PORTFOLIO WEBSITE

2024

Designed and developed a responsive portfolio website using Figma and Webflow for layout design, CSS for animations, and Three.js for interactive 3D content. Implemented a Node.js and Express backend, optimized performance with tree-shaking and Webpack, and used AWS CloudFront for fast content delivery.

360-VIEWER

2024

Developed simple and easy to use website for 360-image viewing, using the A-frame Library, HTML, CSS, JavaScript, and jQuery. Integrated Dropzone.js for multi-image uploads and utilized Web Workers for multi threaded image processing. Optimized performance on CPU-limited devices by converting images to bitmaps in W eb Workers for eff icient GPU memory uploading.

XR-VIEWER

2024-present

Currently building a full stack WebXR application for immersive content viewing and sharing. The frontend is using HTML, CSS, JavaScript, and Three.js, while the backed leverages Node.js, Express, and AWS for hosting. The application uses Passport for OAuth, S3 and CloudFront for storage and content delivery, and Sessions for managing user data. For backend services, ECS Fargate runs a containerized microservice which uses KTX command line tools for creating, encoding, and compressing GPU textures.