ARYEHMISCHEL@GMAIL.COM • ARYEHMISCHEL.COM

ARYEH MISCHEL

Developer & XR Specialist

SKILLS

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

Unity Game Development: 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 Game math, Unity Profiler, playerPrefs, ProBuilder

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

General Web Development: Webflow, nodeJS, Express, webpack

Tools and Technologies: Git, Jira, agile, Blender, Unreal Meta Humans, ZBrush, blender add-ons (facebuilder, faceit, Live Link Face/mocap, auto rig pro), Meshroom, Figma, Gimp, Photoshop

EMPLOYMENT HISTORY

CONSULTANT UNITY 3D/VR DEVELOPER
Beam Imagination
2021 - 2022

• Applied knowledge of proprioception to design and implement an immersive weapon interaction system for a VR FPS game.
• Used Unity's Springs, Hinges, and Physics to create realistic movement of gun parts (e.g., slide, hammer, revolver drum, safety).
• Developed hand interaction systems tailored to the physical limitations of Oculus Quest controllers, ensuring smooth and immersive gun handling.
• Edited 3D Models in blender (seperated weapon parts), allowing for realistic interactions.

CONSULTANT UNITY 3D/VR DEVELOPER
Hooldus Connect
Sep 2020 - Nov 2021

• Developed a VR game in Unity similar to Beat Saber - an MVP that helped secure the company's initial funding.
• Managed the entire project lifecycle, including technical architecture, UI design, animations, VR interactions, and more.
• Built core gameplay mechanics using the XR Interaction Toolkit and the "EZ Slice" component.
• Developed a scalable data pipeline utilizing PlayerPrefs, custom .NET scripts, and Firebase to support rapid testing.

DATABASE DEVELOPER
Diligent Systems
Jun 2020 - Jan 2021

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.

PROJECTS

360-VIEWER   🔗 bit.ly/41miu49
2024

• Developed a user-friendly website for 360-image viewing using A-Frame, HTML, CSS, JavaScript, and jQuery.
• Added support for multi-image uploads with Dropzone.js.
• Implemented Web Workers for multi-threaded image processing.
• Improved performance on CPU-limited devices (VR & Mobile) by converting images to bitmaps in Web Workers, enabling efficient GPU memory uploads.

PORTFOLIO WEBSITE   🔗 aryehmischel.com
2024

• Created a responsive portfolio website using Figma and Webflow for design.
• Added 2D animations with CSS and 3D interactive content with Three.js.
• Built the backend using Node.js and Express.
• Optimized performance with tree-shaking and Webpack.
• Ensured fast content delivery through AWS CloudFront.

XR-VIEWER
2024-present

• Currently developing a full-stack WebXR application for immersive content viewing and sharing.
• Built the frontend using HTML, CSS, JavaScript, and Three.js.
• Developed the backend with Node.js, Express, and AWS for hosting.
• Integrated Passport with the "sign-in-with-google" strategy for OAuth authentication.
• Utilized S3 and CloudFront for storage and content delivery.
• Implemented express sessions for user data management.
• Created a containerized microservice running on ECS Fargate
• microservice leverages KTX command line tools to create, encode, and compress GPU textures.