# **JUSTICE SHULTZ**

## **TECHNICAL ARTIST**

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## SUMMARY

I am a gamer first and foremost with a deep passion for making games.

Technical Artist with years of experience blending programming expertise and art pipeline mastery to drive visually stunning, performance-optimized game development. Proficient in shader authoring/optimization, lighting, rendering, environment design, and VR, with a focus on creating cross-discipline tools that accelerate workflows and enhance team productivity. Adept at leveraging GPU analysis and data-driven strategies to solve complex technical challenges, ensuring seamless cross-platform performance. Solution-oriented collaborator dedicated to elevating visual innovation while supporting team success.

## PROFESSIONAL EXPERIENCE

#### Warner Bros. Games Technical Artist - Unannounced Title

October 2023 - April 2025

- Contributed to several high-profile franchises, ensuring top-tier visual fidelity
- Designed and implemented complex shader pipelines and workflows, enhancing artist efficiency and creative flexibility
- Optimized thousands of assets while maintaining strict quality standards across all projects
- Developed robust optimization solutions, enabling smooth performance across multiple platforms
- Engineered shaders incorporating cutting-edge rendering techniques to push visual quality

#### World's Edge Technical Artist - Age of Empires IV

August 2022 - June 2023

- Worked across multiple engines (UE4, UE5, Unity3D) to support diverse development needs
- Specialized in Deferred & Forward Rendering in Unreal Engine 5.0 5.2, leveraging new advanced rendering techniques
- Spearheaded the development and implementation of custom shaders, enhancing both visual effects and workflow efficiency
- Attained exceptional performance optimization results, ensuring smooth execution on legacy hardware
- Orchestrated the successful migration of substantial content from a proprietary engine to Unreal Engine 5
- Utilized new advanced features such as Nanite, Lumen, PCG, Strata(now Substrate), and Scriptable Tools

## **AEXLAB** Lead Technical Artist - VAIL VR

January 2022 - August 2022

- Demonstrated mastery of Unreal Engine 4, specializing in VR Forward Stereoscopic Instanced Rendering
- Made significant contributions to elevating the game's graphical quality in the VR domain, successfully rivaling industry-leading standards
- Maintained vigilant performance monitoring and optimization protocols
- Spearheaded the development of a comprehensive shader pipeline, equipped with advanced toolsets to empower artists
- Collaborated with all teams to streamline development and enhance pipeline efficiency
- Utilized Material Graph extensively for the creation of artist friendly shaders and materials
- Developed interactive gameplay and visuals using Blueprint, C++, and custom shaders

### **343 Industries** Technical Environment Artist - Halo Infinite

February 2020 - November 2021

- Designed and executed workflow enhancements, custom engine tools, and external utilities to optimize performance and enhance productivity
- Developed and deployed batch tools to automate large-scale asset corrections, improving workflow efficiency
- Skillfully implemented performance optimization techniques, including real-time lighting shadow geometry integration, with significant impact
- Adapted assets for minimal memory consumption on older generation hardware, ensuring peak performance across various platforms
- Identified and resolved content issues through extensive troubleshooting, ensuring optimal performance and quality

Peeka VR Full Stack Developer

May 2019 - December 2019

Academy of Interactive Entertainment Computer Science Teacher

September 2019 - February 2020

## DigiPen Institute of Technology Computer Science & Game Design Course Writer

July 2018 - February 2020

Spearheaded the development and ongoing management of a comprehensive AP CS course.

 $Designed\ and\ curated\ engaging\ lessons,\ demonstrations,\ assessments,\ assignments,\ documentation,\ and\ other\ relevant\ course\ materials.$ 

Proactively engaged with students to identify and resolve issues, offering guidance on debugging projects and promoting sound coding practices.

Delivered instruction on working in Unity and C#, equipping students with essential skills in game development and programming.

Demonstrated technical prowess by creating software using .NET Core, as well as an entire networking library, serving as both instructional resources and practical teaching tools used to develop a interface for students to learn within.

## **SKILLS**

TOOLS: Unity 3D, Unreal Engine, Maya, Blender, Visual Studio, Wing, 3ds Max, Discord .NET, Git, Perforce, SteamVR, PIX, RenderDoc, Azure Dev Ops, Substance, ZBrush, Houdini, Steam SDK, Unreal/Unity Material Graph, Proprietary Software, Illustrator, After Effects, Photoshop, OBS

LANGUAGES/MARKUP: C#, C++, HTML, GLSL, HLSL, Python, CSS, JavaScript, Shader & Material Graphs

PLATFORMS: VR, Windows, Mac, Linux, Xbox (Durango/Scorpio/Scarlett/Anaconda/Lockhart), Playstation, iOS/Android/Mobile

**GENERAL SKILLS:** Optimization, 3D Pipelines, foveated/deferred/forward rendering, Leadership, Data Analysis, Workflow Streamlining, Problem Solving, Advanced Mathematics, Database Architecture, Hardware and Software Expertise, Animation, Rigging, UV Packing Pipelines, Code Enforcement/Reviews, Artificial Intelligence, Art Direction, Gameplay Programming, Deep Computer Graphics Comprehension, Tool Building, Communication