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An accomplished Software Engineer specializing in Game Programming and Design with extensive experience in the full production cycle of video games with an emphasis on 3D graphics, physics, and third-party engine integration.

## S U M M A R Y   O F   Q U A L I F I C A T I O N S

- Strong knowledge of computer graphics and algorithms with experience ranging from OpenGL/DirectX APIs and GLSL/HLSL shader languages to optimization of rendering pipeline.
- Solid understanding of Object-Oriented Analysis/Design and C/C++ Development, skilled at progressing from feature requests to well-documented designs.
- Analytical thinker that consistently resolves system issues or defects, often finding solutions to problems that have eluded resolution by others.
- Possess effective communication skills such as conveying challenging concepts to team members and collaborating with others to maximize levels of productivity.

## T E C H N I C A L   E X P E R T I S E

**Programming:** C/C++/C#, Objective C, Java, JavaScript, Python  
**APIs and Libraries:** OpenGL 4.6/ES, GLSL/HLSL, DirectX, STL, Lua, HTML5/WebGL, Unity3D, and Torque Engines  
**Math:** Linear Algebra (Vector/Matrix 3D Math), Computational Geometry  
**Graphics:** Real-Time Shadows, Lighting, Postprocessing Effects, Particle Engine, shaders  
**Software:** MS Visual Studio, QNX Momentics/Eclipse, XCode, Perforce/Git/CVS/SVN  
**Other Skills:** Bilingual (Russian and English); experience with computer hardware

## P R O F E S S I O N A L   E X P E R I E N C E

**Microsoft**, Redmond, WA 12/2019 – 09/2020  
**Software Engineer**

Worked on the popular Minecraft game for the Chinese consumer market. Provided support for the font rendering system and performance improvements.

**International Game Technology**, Reno, NV 05/2007 – 06/2019  
**Software Engineer**

Developed numerous features for IGT's Advanced Video Platform (AVP) such as graphics engine enhancements, movie playback optimization, support for the Torque 2D/Unity engines, and troubleshooting.

- Worked as primary engineer on five full production slot games utilizing Unity3D game engine. Implemented several celebration/transition effects and custom shaders for the 3D content.

## E D U C A T I O N

**DigiPen Institute of Technology**, Redmond, WA  
M.Sc. in Computer Science (2019)  
B.Sc. in Real Time Interactive Simulation (2007), minor in Mathematics and Physics  
*Dean's Honor List*

## H O N O R S   A N D   A W A R D S

*National Scholar*, The Horatio Alger Association of Distinguished Americans  
*Distinguished Honor Graduate*, United State Army Military Intelligence Battalion