JACKSON LUFF

SOFTWARE ENGINEER

10 YEARS XP

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INTRODUCTION

G'day! As a solutions-oriented software engineer, I refine core systems and implement custom tools to reduce developer iteration time and enhance pipeline scalability. I leverage emergent graphics and engine technologies to shape immersive, high-performance interactive experiences. I tackle problems with unconventional methods—driving innovation, optimizing workflows, and delivering tangible technical results.

EXPERIENCE

- 4   year(s) Gameplay development
- 1.5 year(s) UIUX development

PROFICIENCIES

- 3   year(s) Proprietary Engines → C++20 | C++23
- 4   year(s) Unreal 4 → C++19 & Blueprints
- 1   year(s) Unity → C# (v9.0)
- 1.5 year(s) TypeScript | Javascript | CSS

SOFT SKILLS

- Team health is just as important as the final product
- Clear and transparent communication
- Scheduling and time awareness

PLAYSIDE - SOFTWARE ENGINEER II
2.9 YEARS   2022 - 2025

Sid Meier's Civilization VII - XR

- UIUX Technical Lead
  - Rewrote the existing UIUX backend → *improving performance by* **2000%**
  - Worked with design to meet and revise design and technical requirements
  - Mentored and assisted both frontend and backend UI teams
- Built and maintained core XR gameplay mechanics
- Implemented Meta's achievement system
- Assisted in XR device motion noise reduction for a pleasurable UIUX experience
- Reverse engineered low-level *20 year old proprietary* engine & tools
- Reverse engineered COPPA and online signing system to interlace XR platform services
- Excellent peer collaboration and communication

ZERO ONE STUDIO - MID PROGRAMMER
5.5 YEARS   2016 - 2022

Overall Responsibilities & Expertise

- Solo developed 13 projects across multiple platforms, engines and languages
- Built an internal DRM keygen system in C++/CLI, leveraging WMIC
- Custom light-weight model viewer to review assets prior to batched UE import
- Built offline stereoscopic rendering tools
- Server maintenance

Age of Empires III Definitive Edition

- Technical director for cinematic production
- Built UE editor tools to procedurally generate content
- Built UE visual effects pipeline → painterly style post effects (+ fake GI)
- Low level raytracing and rendering optimization

Table of Tales: The Crooked Crown [VR]

- Porting existing PS4VR Unity project to Steam VR & non-XR, Quest 2 & Switch
- Built low profile lighting and shading systems for Quest 2 & Switch
- Converted VR experience into a non-XR experience
- Built dynamic camera system for Steam non-XR
- Bug fixing and optimization across multiple disciplines

Audio mixing VR project

- Built backend system using experimental Audio Mixing module in UE
- Users could use their virtual hands to interact with faders & pots
- Instanced stereoscopic rendering & instanced interactables? **23 FPS → 70 FPS**