

Scott Edward Holzknecht

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Summary

Experienced programmer of 10 years with a strong background in C++, C#, Lua, and Python. Having contributed significantly to the development of *Fortnite Creative* at Heavy Iron Studios. An interest in continuing work with C++ or moving into backend or full stack roles, Scott brings expertise in networking, user interfaces, and system architecture.

Skills

Languages: C++, C, C#, Lua, Python, JavaScript, Typescript, React, Visual Scripting, PHP, SQL, HTML/CSS

Tools: Unreal Engine 5, Unity3D, Visual Studios, Visual Studio Codes, Perforce, Git, Adobe Photoshop

Areas of Knowledge: Networking, Object Oriented Programming, User Interfaces, Databases, Web Development, Mobile App Development, Performance Optimization, Multithreading, Computer Graphics, Media Processing

Awards: First Place at Fortnite Game Contest 2015

Experience

Gameplay Programmer, Heavy Iron Studios – Remote, US

Oct 2023 – Present

- External gameplay programmer for Epic Game's *Fortnite Creative*.
- Contributed to the expansion of *Fortnite Creative* by coding and integrating gameplay systems from Battle Royal mode in Unreal Engine 5, applying C++ and visual scripting tools to match project requirements.
- Built and implemented *Creative* devices in Unreal Engine 5, incorporating scripting and visual logic to enhance in-game player customization.
- Collaborated with Epic Games and internal teams to align technical solutions with design goals, ensuring smooth feature implementation into *Creative*.

Programmer III, Volition – Champaign, IL

Feb 2018 – Aug 2023

- Developed and shipped *Saints Row (2022)*, contributing to UI, multiplayer, and core systems.
- Developed core UI systems, including the world map, HUD, and objective indicators, to enhance player experience.
- Engineered multiplayer networking features in C++, optimizing connection handling, packet compression, and session management for seamless cross-generation play.
- Integrated Xbox, PlayStation, and Steam platform services, implementing friends lists, voice chat, and delta compression to improve online functionality.
- Collaborated with designers, artists, and producers to translate creative vision into technical solutions.

Game Programmer, Games for Entertainment and Learning Lab – East Lansing, MI

Oct 2014 – Dec 2016

- Developed educational games in Unity3D, balancing performance and engagement to enhance learning outcomes.
- Optimized game performance through profiling and debugging, improving frame rates and memory usage.
- Worked with cross-functional teams of designers, artists, and programmers to deliver contracted game projects.

Student Technician, MSU RHS Information Services – East Lansing, MI

Sept 2013 – Oct 2014

- Diagnosed and repaired software and hardware issues for university computers, reducing downtime for staff.
- Provided customer support via phone, email, and in person, resolving issues with clear and effective communication.
- Collaborated with a team of technicians to execute IT projects and improve system reliability across departments.

Projects

One Tap Adventure

<https://holzbot.itch.io/one-tap-adventure>

- Solo-developed minimalist, one-tap mechanics rouge lite game developed in Unity3D.
- Shipped on Android and web platforms.

Education

Michigan State University – BS in Computer Science with Minor in Game Design and Development