Matthew Berger

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WORK EXPERIENCE

Scientific Games

Software Engineer

Reno, NV

July 2019 - Present

- Collaborated with remote engineers to integrate TextMeshPro into a Unity-based production casino game development framework.
- Assessed and quickly resolved batches of defects that were crucial to the release of major games.

Hamilton Robotics

Reno, NV

Software Engineer

December 2017 - July 2019

- Designed and built safety-critical software in a cross-disciplinary environment that calibrates and operates liquid-handling medical robots.
- Reduced development time for new calibration routines from two months to less than two weeks by consolidating multiple applications into a single GUI and reusable-plugin framework.
- Decreased development environment setup from a day to a few clicks by creating a bootstrapper that installs dependencies and configures settings on a Windows virtual machine.
- Worked directly with Hamilton's largest OEM customer to architect an application that commands the firmware in their robots for rapidly diagnosing and resolving mechanical issues.
- Mentored new hires and interns on team processes and coding practices.

Hamilton Robotics

Reno, NV

Software Engineering Intern

October 2014 - December 2017

- Decreased time spent quality testing robots by more than a week per robot by automating the process of gravimetric analysis.
- Saved developers hours of time per day on common tasks by creating a suite of in-house tools.
- Improved instrument sales by creating software adapters for both SiLA and non-SiLA compliant devices through collaboration with third-party device manufacturers.

Washoe REOC

Reno, NV

Software Engineer (Contract)

October 2014 - May 2016

• Created a SQL database and web application for emergency response teams to quickly search local subject matter expert contact information.

SKILLS

Languages: C#, C++, Rust, Powershell, Python, Bash, Ruby, Javascript, Vimscript DevOps: Git, TFS, Perforce, JIRA, Swarm, Confluence, Scoop, Cmake, Premake 3D Graphics: OpenGL, Vulkan, GLSL, RenderDoc, Unity, SDL2, Assimp, Bullet, Ogre3D

Linux: Linux CLI, SSH, Arch, Systemd, Ubuntu, Fish, Vim, Emacs
Web Development: ASP.NET, MVC, IIS, Razor, Jinja, Flask, Jekyll, WASM, HTML

Desktop Applications: WPF, MVVM, XAML, MEF, MahApps Metro, MvvmLight, WiX Toolset

Mathematics: Linear algebra, Geometry, Trigonometry, Multivariable Calculus

Other: JSON, XML, Markdown, SiLA, Pester, YAML, LaTeX, GDB, Wireshark

EDUCATION

University of Nevada, Reno

Reno, NV

BS Computer Science and Engineering (Minor in Mathematics)

August 2013 - Dec 2017

Personal Projects

DragonGlass Vulkan, Rust, GLSL/SPIR-V A cross-platform gltf scene renderer.

https://github.com/matthewjberger/dragonglass

A cross-platform gitt scene renderer

https://github.com/matthewjberger/superbible

Superbible OpenGL, Rust, GLSL A rust port of the OpenGL superbible.

https://github.com/matthewjberger/Iceberg3D

Iceberg3D C++, CMake, OpenGL, GLSL A small, structured game engine.