

Drew Cornfield

SOFTWARE ENGINEER

Canadian citizen, eligible for TN status

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Experience

AMD

Markham, ON, Canada

SENIOR SOFTWARE ENGINEER

July 2021 - PRESENT

- Scrum Master and Technical Lead of an 8 developer team
- Leading the development of **C++** and **Python** telemetry tools that deliver critical debugging data from millions of system crashes to engineers working on the Windows graphics driver
- Designed and implemented an internal GPU hardware debugging tool for WinDbg using **C++17**
- Experienced mentor assisting the development of multiple interns and new-hires

SOFTWARE DEVELOPMENT ENGINEER II

January 2019 - June 2021

- Maintained a **C++** GPU benchmark tool used to evaluate and improve driver stability in code promotion cycles
- Developed a **Python** + **Groovy** CI infrastructure that enables dozens of driver developers to submit code for build and test each day (>90% adoption)
- Stabilized, automated, and extended **C++** crash dump parsing tools to support 10x data throughput
- Experience with new hardware bring-up, designing and deploying a nightly regression testing kit that runs on unstable platforms

Projects

Yare 3D Rendering Engine

[GitHub](#)

YARE

2020 - PRESENT

- A graphics renderer using **C++17** and the **Vulkan** API. Written to get closer to the hardware.
- Features include; texture mapping, GUI rendering (imgui), shaders, scene & resource management
- Utilizes object oriented design & class abstractions, design patterns (singleton, factory, etc.)
- Compiles and runs cross-platform on Windows and Linux

OpenGL / D3D11 3D Rendering Engines

[GitHub](#)

OPENGL-3D-ENGINE - BONSAI-ENGINE

2017 - 2018

- A pair of renderers written in **C++** that use the **OpenGL** and **DirectX 11** graphics APIs
- Features include; texturing, basic shader lighting, occlusion culling, and importing models

Personal Portfolio Site

[GitHub](#)

RIYU.CA

2021

- Designed and built a static portfolio using **Gatsby** and **Javascript**

Education

Ryerson University

Toronto, ON, Canada

BACHELOR OF SCIENCE - COMPUTER SCIENCE

2015 - 2018

- Focused Studies: Computer Graphics, Computer Vision

Skills

Languages C++, Python, C, Groovy, Powershell, Javascript
Tools Git, WinDbg, Perforce, MongoDB, Jira, Jenkins, Coverity, CMake
Libraries Google Mock, Pytest, Catch2, Boost, ImGui
Misc. Mentoring, Scrum/Agile, Product Ownership