

## Qualifications and Key Competencies

- Advanced experience (~ 4 years) with programming languages C++, C, and C#
- Moderate experience (~2.5 years) with Vulkan Graphics API and GLSL
- Minor exposure with programming languages Cg, HLSL, Python, HTML, and Java

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## Education

**Champlain College, Burlington, VT**

Pursuing a **B.S. Degree in Game Programming, Minor in Mathematics**

3.6 GPA

Anticipated Graduation: May 2021

## Relevant Coursework

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|---|--|--|
| • Game Engine Design and Implementation | • Intro to Modern Graphics / Intermediate Graphics Programming | • Real-Time Debugging                      |
| • Game Architecture                     | • Game Production I / II / III                                 | • Game Physics                             |
| • AI for Games                          | • Animation Programming  | • Calculus I / II / III and Linear Algebra |

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## Technical and Communicative Skills

- Experience building a renderer from the ground up using Vulkan SDK
- Familiar with Visual Studio Enterprise IDE for use in various programming languages
- Developed C++ code following the programming standards and guidelines of Unreal Engine 4
- Developed C# code and C++ plugins for Unity Game Engine
- Ability to model in both Blender and Autodesk Maya
- Worked and Participated in SCRUM based team environments for entirety of university
- Determined to have a conflict-free environment to not let production come
- Produced a game alongside 13 other team members with over 70,000 downloads

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## Released Works

### **“Fission Editor”**

**Graphics Engineer, Graphics Programmer, Animation Programmer**

- Sole Developer of this ECS based Editor
- Created Renderer using Vulkan SDK backend
- Formed two separate renderers that share instance properties
- Developed Scene Structure with Options Menu to Add or Remove Objects
- Programmed GLSL shaders for Phong lighting and Toon lighting
- Created Keyframing System with Clip Controllers
- Implemented Skeletal Creation and Animation

Link: <https://github.com/Colton-Soneson/FissionEditor>

Freelance (Personal Project)

February 2019 to Present

### **“Forkdrift”**

**Lead Graphics Programmer, Vehicle Programmer, Environmental Lighting, etc.**

- Coded adjustable Cg water and grass shaders
- Developed physics and constraints for forklifts in game
- Handled lighting of environment and Light Weight Render Pipeline settings

Link: <https://store.steampowered.com/app/1318940/Forkdrift/>

Developer: *Endless Suffering*

March 2020 to July 2020

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## Work Experience

**iD Tech Camps and OPL**

**Tech Coordinator/ Instructor**

- Taught Unity with C#, Python, Java, Maya, and Blender to students whose ages range from 9 to 19
- Learned important communication skills required when teaching coding or 3D modelling

CT and Online

June 2019 to Present