# ­Summary

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| I am a driven Software Engineer with 2 years of industry experience, and 1 year volunteer programming with independent game developers. Programming experience includes Graphics, Particle Systems, built from scratch 3D editors and Behavior Trees. I am passionate about writing top- quality maintainable code, and I am eager for opportunities that combine team driven development and individual component ownership. |

# Computer skills

## Languages

* C++ (3 years professional, 8 total)
* Python(2 years professional)

## Operating Systems

* Windows, Linux

## API

* OpenGL 4.3, ImGui / ImGuiZmo
* Assimp, Bullet3, GLFW, SDL
* Berkeley Sockets, Apache Thrift, Pybind11

## Tools

* Visual Studio, VS Code, Git
* Unity, Unreal Engine 4, Buck Build Tool

## Soft Skills

* Working on large collaborative codebases.

# Education

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## Bachelor of Science in Computer Science in Real-Time Interactive Simulation – Redmond, WA 9/2016 – 4/2021

DigiPen Institute of Technology

* Basic Networking
* OpenGL 3D Rendering, Reflection, Refraction, Texture, and Deferred Shading.
* AI path planning and problem solving

# Professional experience

**Cornered Rat Software** 9/2021 – 4/2022

* Generalist Programmer (bug fixing)
* Full time (40 hours a week)

**Meta (XR Maps Team, Contracted by Advantis Global with a 2 year limit)** 4/2022 to 4/2024

* Software Engineer
* Reduced build times to 1/8th
* Wrote Pybind11 code to connect our C++ and Python code.
* Wrote custom, fast Thrift serialization

# School projects

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| Engine Programmer | 1/2018– 4/2018 |

**Gun Garden** – 2D Action Bullet Hell

* Developed Customizable Particle System
* Created Menus and Tutorial level

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| 3D Editor Programmer | 9/2018– 3/2019 |

**Project Abyss** – 3D First Person Light Mixing Puzzle Platformer

* Researched and integrated tools for custom 3D video game editor
* Build a graphics framework with OpenGL
* Added Translation, Rotation, and Scale Gizmos
* Integrated Bullet3D physics
* Ray Picking to move objects with mouse
* FPS Camera and Editor Mode Viewing
* Undo/Redo functionality (save state)

**AI Programmer**  9/2019 – 4/2020

**Reformed Studios**

* Implemented efficient, shared behavior tree system
* Created Behavior trees with said system

**Personal Project** 5/2020 – 8/2020

* Created full flight 3D Octree navigation