# **CHARLES BOUDOUSQUIE**

Bellevue, WA • 425-429-5260 • <u>charlesboudousquie@gmail.com</u> • <u>LinkedIn</u> C++ Software developer with 3+ years of professional experience.

#### RELEVANT SKILLS AND TOOLS

• **Programming Languages**: C++, Python

• Technologies: OpenGL, Linux, Windows, Pybind11, Apache Thrift

• Game Development: Unity, Unreal Engine 4

• Version Control: Git. Mercurial

• **Development Environments**: VS Code, Visual Studio

## **EXPERIENCE**

Meta, Seattle, WA

Apr. 2022 – Apr. 2024

Software Developer

- Optimized build processes for multiple projects, achieving a reduction in build times by up to 87.5%, including a significant improvement from 8 minutes to just 1 minute on a major project.
- Developed interfaces using Pybind11, enabling seamless collaboration between Python and C++ developers.
- Implemented fast C++ Apache Thrift serialization, doubling the speed of our data processing.

## Cornered Rat Software, Seattle, WA

Sept. 2021 – Apr. 2022

Software Developer

- Fixed game breaking C++ bugs in the video game World War 2 Online enhancing gameplay stability and backend performance.
- Fixed various UI bugs and features in Javascript.

## **EDUCATION**

Digipen Institute of Technology, Redmond, WA

Sept. 2024 - Present

M.S. in Computer Science

Digipen Institute of Technology, Redmond, WA

Sept. 2016 – Apr. 2021

B.S. in Computer Science

• Completed C++ coursework in Graphics programming, AI pathing, and working in large teams to develop video games programmed from scratch.

## **PROJECTS**

- Personal Project: Full flight 3D Octree navigation (pathfinding through an octree)
- 3D Editor: Created a full fledged custom 3D game editor using C++ (essentially recreating unity from pure scratch for our game designers)
- Behavior Tree System: Implemented memory efficient behavior tree system in C++ for AI in my team's game project (based on behavior tree system used for Halo 2's AI).