

## NATE STROHMYER

Gameplay Programmer | B.S. in Computer Science – systems track | Masters in Entertainment Arts and Engineering – Engineer (May 2022)

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**SKILLS** 

 $\textbf{Familiar Languages:} \ \, \texttt{Java} \bullet \ \, \texttt{C} \bullet \ \, \texttt{C++} \bullet \ \, \texttt{C\#} \bullet \ \, \texttt{Python} \bullet \ \, \texttt{SQL} \bullet \ \, \texttt{HTML/CSS} \bullet \ \, \texttt{JavaScript} \bullet \ \, \texttt{ARM}$ 

Assembly • Unreal Blueprints

Familiar Tools: JetBrains IDE's (CLion, IDEA) • Visual Studios 2019 • MySQL • Unity • Unreal Engine

4 • Vim • Linux • Flask • React • GitHub • Perforce • Creation Kit • UNET

**EMPLOYMENT & EXPERIENCE** 

TEACHING ASSISTANT • UNIVERSITY OF UTAH • AUGUST 2020 – PRESENT

Graded and provided feedback to undergraduate EAE students related to course content.

2FIX LEAD TECHNICAL ASSISTANT • BUENA VISTA UNIVERSITY • MAY 2019 - MAY 2020

Managed a team of other technical assistants to help diagnose and solve hardware and software issues for teachers and students.

**PROJECTS** – MORE PROJECTS ON GITHUB!

- The Archon Project This Unreal Engine 4 project is a third-person, rouge-lite, action game built over a semester by a team of 9 students. I worked as an engineer on the project and worked on the game from prototyping all the way to polish and release to itch.io. For this game I specialized in map creation and level streaming, while also assisting in other areas of development.
- Familiar Soul An Unreal Engine 4 game that has unique and interesting interaction with Twitch as chat helps guide the player through a maze. I worked in an 11-person team to develop the game in around 3-4 weeks.
- **Memory Management System** A built from scratch heap allocator implemented in **C++** that can dynamically store and keep track of memory. I maintained industry standard code and implemented interesting features such as dynamically aligned addresses.
- **Game Engine** I developed a simple 2d game engine in **C++** that includes an entity component system that manages many complex systems like physics, rendering, collision and more.
- Stream Processing Engine A data processing framework that executes queries while consuming an endless amount of data, implemented in C++.
- I.T.O.M. Item Trading Over an online Marketplace is a website that allowed players to trade in game Minecraft items over the web and transfer them into their own game. This was a full stack application that even required a TCP connection and networked protocols, implemented in Java.

## **EDUCATION**

MASTER OF ENTERTAINMENT ARTS AND ENGINEERING - ENGINEERING • UNIVERSITY OF UTAH • MAY 2022 BACHELOR OF COMPUTER SCIENCE • BUENA VISTA UNIVERSITY • MAY 2020 •

GPA – 3.7, Magna cum laude, Dean's List: 2017-2020

## **SELECTED COURSEWORK**

**Rapid Prototyping** – Working in 5-11 person multidisciplinary teams to fully develop game prototypes.

**C++** - Applying the intricacies of C++ to game development. Covered best programming practices, concepts and low-level understanding of code

**Networks and Distributed Systems** – Covered and implemented protocols and theory related to the transmission of information over the internet. Covered topics such as TCP/UDP protocols and centralized vs decentralized systems as well as client-server models and the network stack.