
Work Experience

- Sep 2021 - Present **Software Engineer**, *HaptX Inc.*, Redmond, WA.
- Writing C++ API and plugin code supporting HaptX Gloves G1.
 - Improving plugins for Unreal Engine 4 and Unity with a focus on enhancing interactions and animations.
 - Developing nodes to support ROS 1 and 2.
- Aug - Nov 2022 **UI Engineer**, *Tangible Research*, Redmond, WA.
- Competed in the ANA Avatar XPrize competition with a team of 5 engineers.
 - Wrote a plugin for OdenVR's Voysys VR streaming application which created various pieces of interactable UI that connected to ROS.
 - Resulted in a smooth user experience on a powerful and flexible telerobot.
- May - Aug 2021 **Fellow**, *WPI IDEaS Studio*, Worcester, MA.
- Developed an app to teach students about free body diagrams using Unity.
 - Created a sitemap and recommendation list for how to improve the Jazz History Database website.
- May - Aug 2019 **Senior Student Intern**, *AMICA Mutual Insurance*, Lincoln, RI.
- Created a database interface alongside another intern that displayed metadata about distributed jobs running on company's mainframe.
 - Learned ReactJS to modify the existing Neo4j interface.

Education

2017 - 2021 **Computer Science (CS) + Interactive Media & Game Development (IMGD)**, *Worcester Polytechnic Institute (WPI)*.

Programming Skills

Proficient Languages:	C++, C#, Rust, C	Databases:	SQL, Neo4j, MongoDB
Familiar Languages:	JavaScript, Python, Java	Cloud:	AWS, S3
Version Control:	Git, GitHub, Perforce	OS:	Ubuntu, Windows
Game Engines:	Unity, Unreal Engine	Other:	ROS, React, HTML, LaTeX

Projects

- Aug 2020 - Jun 2021 **Gameplay Programmer & Audio Engineer**, *Factory Reset (WPI)*.
- Won WPI's **Provost Award** for the best Major Qualifying Project in the IMGD department.
 - Worked in a team of 4 designing a 3D first-person puzzle game focused on accessibility.
 - Implemented core gameplay systems and accessibility settings.
 - Composed 2 music tracks and created 15+ unique sound effects.
 - Shipped *Factory Reset* for free on itch.io.
- Oct - Dec 2019 **Front End Programmer**, *Star Trek Mashup (WPI)*.
- Worked in a team of 4 designing and implementing a cloud-based application using AWS to upload and combine *Star-Trek* clips.
 - Developed an API for interaction with the app's backend.
 - Produced an app that fulfilled assignment specifications and utilized a variety of AWS's features.
- Dec 2019 **Lead Designer**, *Dungeons and Dragonflies (WPI)*.
- Worked with a teammate to create a game with a procedurally generated map.
 - Designed and implemented creation of random maps using the *Dragonfly* engine.
 - Resulted in a game that fulfilled its original design and was well received by classmates.