Max Fischer

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Portfolio Site
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EXPERIENCE

Washington State University Tri-Cities, Richland, WA
Teaching/Learning Assistant

August 2022 - May 2024

Serving as a Teaching/Learning Assistant for multiple different computer science classes at WSU Tri-Cities, my role varied depending on the class. For CS 121, the Introductory Computer Science class, I was tasked to assist with running labs every week while hosting office hours every week. For CS 322, the Software Engineering Principles class, I served as an assistant to the Professor; I helped him with scoring assignments such as Requirement Specification documents as well as held office hours weekly to assist students on their semester project of building a Turing Machine.

Washington State University Tri-Cities, Richland, WA
TRIO Support Staff – Summer Course Instructor

May 2023 - August 2023

In my role as TRIO Support Staff, I was hired on to construct and teach a summer class in 2023 for video game design, specifically an Introduction to the Unity Engine course for WSU's TRIO program. In the months prior to starting class, I built a game and curriculum to instruct a top-down action game with multiple different kinds of mechanics. Movement, combat, pathfinding and more were incorporated into the project. The class itself lasted 3 weeks from the end of July until halfway through August.

Pacific Northwest National Laboratory, Richland, WA
Tech Student

June 2019 - June 2021

As a Tech Student at PNNL, I worked alongside my mentor in the Data Integration group to build a full-stack application to create a system for easily viewing radar images in a web application. This project helped build a lot of skills that made me the programmer I am today; requiring me to learn PHP, JavaScript, and ReactJS. To this day, this project has been the biggest impact on my abilities as a software engineer.

PROFICIENT SKILLS

Unity Engine

2D and 3D Engines

C#

C++

Git

Software Development

Systems Programming

Game Development

Javascript

ReactJS

Team Management

VR Development

Meta Quest Development

Windows Forms

Blender

FAMILIAR SKILLS

Teaching

PHP

R

Java

Matlab

UML

CSS

HTML

mySQL

User Interface Design

EDUCATION

Washington State University, Richland, WA

BS in Computer Science

Estimated Graduation May 2024

For the last five years, I've been pursuing my Bachelors of Science in Computer Science at Washington State University, Tri-Cities (WSUTC). During this time, I have worked in many different environments and with many different languages. I have become proficient in both C and C++, having been a Teaching Assistant for classes that involve both languages.

Tri-Tech Skills Center, Kennewick, WA

August 2017 - June 2019

During my Junior and Senior years of High School, I attended Tri-Tech Skill Center's Video Game Design program. During my time at Tri-Tech, I began to familiarize myself with the Unity game engine and programming in the C# language, building multiple games in the class as well as multiple side projects. Some projects of note were a multiplayer battle royale game, a real-time strategy game that won second place for the Congressional App Challenge in Washington State's 4th district in 2018, and a Virtual Reality dungeon exploration game.

PORTFOLIO PROJECTS

Making Connections — *Crimson Code 2024 Hackathon*

Making Connections was a 24 hour hackathon project that I worked on alongside two other people. My main role in the development of this app was all of the general programming, while the other two worked on the database and UI respectively. I utilized the Unity engine, C#, and mapping tools to generate a working phone app that could run natively on Android devices with a test data set.

The Bonely Dragon — *Tri-Tech VR Project*

Between March and May of 2019, myself alongside two other people worked on a virtual reality project at Tri-Tech Skills Center. The two teammates of mine worked on 3D Modeling and Texturing, while I myself programmed and developed the rest of the project. I was required to learn how to program for virtual reality using the Unity Engine and developing with an Oculus Rift headset. In the end, we managed to make a short but fully playable game.

Untitled Tower Defense Game — *Side Project*

In my final semester at WSUTC, I have been working on a Tower Defense Game as a side project alongside my classwork. I have been taking a very modular approach to the game's design, allowing for easy changes to be made to all sorts of aspects of the game. These

decisions have made development far easier than previous projects I have worked on.

Epidemic Interventions — *Computer Science 323 Project*

Epidemic Interventions was a group project for my Software Design class at WSUTC. In this class, each group was tasked to make the same application; a program that would simulate a virus spreading through a given community and analyze who in that community would be the best to give a vaccine to in order to prevent the most people from getting infected. I build the primary application for the project utilizing Windows Forms, C#, and a Google Maps API.

Topdown Action Game Prototype — WSU *TRIO Unity Course*

In order to construct my curriculum for my Introduction to Unity course for the TRIO program during Summer 2023, I needed to create a game to test and apply all of the features that I would be teaching. This project is a top down action game that teaches basic game mechanics such as omni-directional movement, basic combat mechanics, event management, pathfinding, and much more.

Relics — 2023 *Game Jam Project*

Relics was an entry in the 54th Ludum Dare game jam, in which I constructed the game in less than 72 hours. Relics is a 2.5D platformer game in which you navigate a long abandoned facility and collect objects to aid in navigating the difficult terrain of the structure. The game was built in Unity and written in C#, with a WebGL build also being constructed to allow the game to be run in a web browser.

Fight or Flight — *2021 Game Jam Project*

Fight or Flight was another Ludum Dare entry; made in less than 72 hours, Fight or Flight is a platformer game in which your only goal is to go up. Your character is equipped with a pair of mechanical wings that allows them to jump multiple times in the air, though those wings are prone to breaking mid-flight. The game is about risk/reward and either rewarding or punishing the player for taking risky moves to progress further. This project was built in Unity and written in C#, and really helped improve my design capabilities.

REFERENCES

Neil Corrigan — (509) 554-7553
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