

Strengths

C/C++
Software Engineering
Project Design

Unreal Engine 4
Software Development
Project Scoping

Unity Game Engine
Software Design
Project Management

Git
Perforce
Project Startup

Work Experience

SMU Guildhall

Technical Manager
Tools Developer

Jan 2020-May 2021

- » Lead initial team on \$1.5 million NSF research project
- » Developed a data pipeline between Canvas API and vanilla Minecraft Education Edition using AWS Lambdas
- » Extended the Rete.js framework to create a node based planner based in the Minecraft universe
- » Designed the UI/UX for the node based planner in Adobe XD

Engine:

Javascript

Team Size:

10-20

BALANCED Media | Technology

Software Developer

May-Aug 2019

- » Updated score multiplier calculation and visual display based on conveyance feedback
- » Integrated four separate image segmentation algorithms into Unity
- » Implemented touch based UI framework and ported the PC control scheme to touch to increase playable device space
- » Scripted new tutorial section for touch control interface

Engine:

Unity / Javascript

Team Size:

15-20

Team Game Development

Crystal Call

Lead Developer

Jun-Nov 2020
Available on Steam

- » Managed the design and public interface for the movement, momentum, and heat systems
- » Implemented an object oriented user interface system on top of UE4s widgets to work with both keyboard/mouse and controller input
- » Finalized the full python build pipeline including log files, variable arguments, lighting builds with swarm, and environment configuration

Engine:

Unreal Engine 4

Team Size:

10

Haberdashers

Lead Developer

Jan-May 2020
Available on Steam

- » Drove decision to use a hybrid physical and scripted kart movement system for greater designer control
- » Developed python build pipeline integrating P4V and Unreal Build Tools into a customizable environment build suite
- » Designed the high-level architecture for kart swapping, grand prix scoring, and item interactions between players and karts

Engine:

Unreal Engine 4

Team Size:

57

Neon

Lead Developer

Aug-Dec 2019
Unreleased

- » Developed highly tweakable acceleration based player movement system and modular ability system
- » Created fire and forget audio management system to spawn, play, and destroy audio sources
- » Integrated a multi-pass GLSL glow shader into Unity's render pipeline

Engine:

Unity

Team Size:

6

Education

M.S. Interactive Technology, Software Development - May 2021

3.8 GPA

SMU Guildhall

B.S. Computer Science + Mathematics - May 2019

Graduated SMU Cum Laude

Southern Methodist University

Upsilon Pi Epsilon

Elected treasurer of this organization during my junior and senior years at SMU

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