# Abby Welsh (she/her)

# Game Developer & Programmer

### **Personal Info**

Location

Bellevue, WA

**Phone** 

(610) 742-8624

E-mail

contact@abby.dev

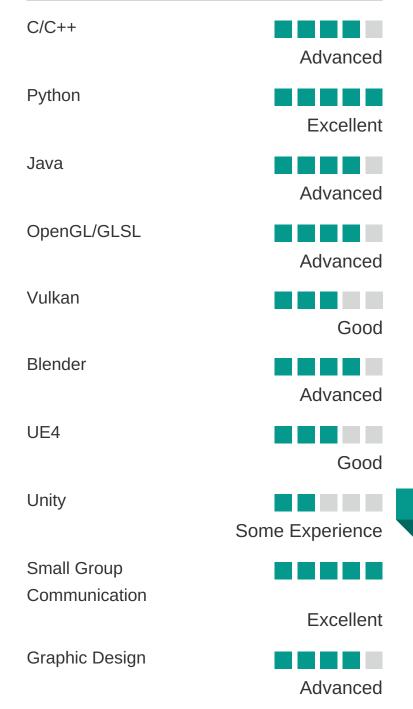
portfolio

www.dubthink.com

LinkedIn

https://www.linkedin.com/in/abby-welsh

# Skills



#### **Featured Courses**

Computer Networking

3D Game Dev & Tech

Computer Vision

**Computer Graphics** 

Formal Languages and Compilers

Graphic Design II

Artificial Intelligence

#### Interests

Team Fortress 2 Mapper

Competitive Team Fortress 2 Player

Portal 2 coop Speedrunner

Ballroom Dance

# Education

**Sep 2016 - May 2020** 

### Ithaca College | Bachelors of Science in Computer Science

raytracing with Vulkan for my senior project.

Naturally curious programmer and game developer with a passion for

solving problems creatively and efficiently. Working at Bungie with a

fantastic team on Destiny 2. Built a non-euclidean puzzle game using

Minors in Graphic Design and Mathematics

3.8 GPA

# **Employment**

May 2020 -

**Present** 

# Gameplay Engineer | Bungie

- Developed clean and effective C++ code to implement and improve a variety of gameplay mechanics
- Coordinated with designers to assess requirements and develop technical specs
- As a member of shared engineering, developed skills to quickly familiarize myself with new areas and get up to speed quickly

May 2018 -Oct 2018

# Research programmer | Ithaca College - Summer Scholars program

- Processed raw enrollment data into several graph models
- Developed creative ways of analyzing and interpreting the data using Markovian systems and forced-directed layouts
- Wrote interactive web-based and Java-based visualization tools
- Presented work to the Ithaca College community at the IC Data Day

Jun 2017 -Aug 2017

# Project Intern | Perfect Prototype

Perfect Prototype creates interactive experiences for museum and exhibit environments

- Focused on stability due to the long-term nature of museum exhibits
- Built a shader-based image manipulation component of an interactive museum exhibit created with Unity
- Performed QA and provided constructive feedback on ongoing projects

# **Relevant Experience**

Aug 2019 - present

# Senior Project | Non-Euclidean Raytraced Puzzle Game

Build an engine using C/C++ to support non-euclidean environments Simulate non-euclidean physics using the PhysX physics engine Set up raytracing using Vulkan on an RTX card Novel puzzle design in non-euclidean space

RGL.gg | Division Admin

RGL.gg is the premier NA Team Fortress 2 competitive league

Handled conflicts quickly and effectively

Participated in major decision-making discussions and processes Authored rule documents and responses to sensitive situations

Ithaca College Game Development Club

Vice President Jan 2018 - May 2019

#### **Game Jams**

Participated in Global Game Jam in 2017 and 2018 and Ludum Dare 40 and 43

## **Published Content in Team Fortress 2**

Designed, modeled, textured and rigged wearable medals for competitive leagues and tournaments that were added to the game

#### **Independent Study with UE4**

Created a C++ based portal system in Unreal Engine 4