Benjamin Welsh

Software Engineer & Game Developer

Naturally curious software engineer and game developer with a passion for solving problems creatively and efficiently. Worked on research modeling and visualizing Ithaca College's network of courses as part of the college's internal review of their general education program. Built a game in 54kb for Ludum Dare 43. Also studying Graphic Design and Mathematics.

Personal Info

Location

Westtown, PA

Phone

(610) 742-8624

E-mail

hello@benjaminwelsh.com

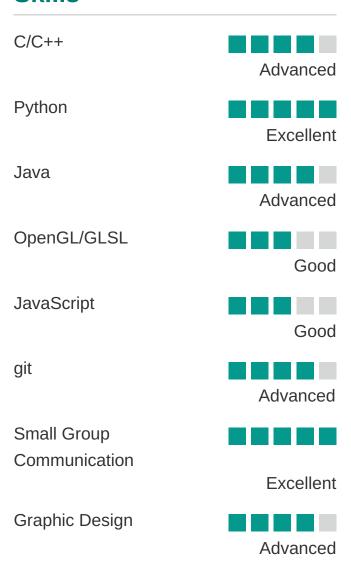
portfolio

www.benjaminwelsh.com

LinkedIn

https://www.linkedin.com/in/benjaminwelsh-dev/

Skills



Featured Courses

Computer Networking

Computer Vision

Computer Graphics

Formal Languages and Compilers

Graphic Design I

Artificial Intelligence

Interests

Game Development

Team Fortress 2 Mapping

Data Visualization

Amateur Radio

Experience

Jul 2019 -

MacOS IT Administration

Aug 2019

Open Connections

Researched and orchestrated the deployment of a management system for the computers at a small private school

May 2018 -

Research programmer

Oct 2018

Ithaca College - Summer Scholars program

Responsibilities

- 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

Sep 2017 -**Dec 2017**

Research Assistant

Ithaca College - Tots on Bots

Responsibilities

- Assembled Arlo robot platform
- Wrote Propeller C firmware to control robot over serial
- Programmed a Raspberry Pi to control robot based on orientation sensor attached to baby

Jun 2017 -**Aug 2017**

Project Intern

Perfect Prototype

Perfect Prototype creates interactive experiences for museum and exhibit environments.

- Focused on reliability and stability due to the long-term nature of museum exhibits.
- Developed a shader-based image manipulation component of an interactive museum exhibit created with Unity.
- Developed interactive effects using LEDs, sensors, and Arduinos
- Performed QA and provided constructive feedback on ongoing projects

Education

Sep 2016 -

Ithaca College

present

- Bachelors of Science in Computer Science
- 3.8 GPA
- Graphic Design Minor
- Mathematics Minor
- Graduating Spring '20

Additional Activities

Non-Euclidean Game built with Raytacing using Vulkan and C++ (Senior Project)

Currently working on building a 3D puzzle game set in a non-euclidean environment. Using a technology stack of Vulkan raytracing running on an RTX card and a C++ engine.

Ithaca College Game Development Club

Vice President Jan 2018 - Present Active Member September 2016 - Present

Game Jams

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