Michael Tubinis

Experience

Website Manager at One Niagara, LLC (April 2018 - Present)

- Redesigned front and backend in line with modern standards to improve usability.
- Saved the business \$800 annually by changing the hosting provider.
- Actively maintains the website by updating content when requested by management.
- Assists with miscellaneous on-site duties like sales and providing information for tourists.

Technical Intern at Niagara County Department of Health (May 2017 - September 2017)

- Redesigned the front end of the N.C. Department of Health website to improve the look and feel by making it more modern and simple.
- Reduced the loading time of pages by roughly 40% by reducing unnecessary content and reformatting media.
- Created educational web based content to help users understand public health hazards.
- Improved on an existing SQL database containing financial information about public health fees.

Selected Projects

Serenity - C++ Game Engine (2015 - Present)

An open source game engine featuring stunning visual effects and custom user created functionality.

- Uses OpenGL as a graphics framework, lighting is a physically based BRDF.
- Entity Component based logic system.
- Multi-threading support using boost ASIO.
- Uses the bullet physics engine for rigid body interactions.
- Uses SFML for window creation and event polling.

Solar System - C++ Simulation Application (2015 - Present)

A simulation of our solar system using Serenity as the framework.

- The solar system is created using a real-life scale, giving a true sense of the size of space.
- All major planets and several moons are visitable by the player.
- Several camera modes are present to provide various views of each object.

Python Math - Game Project

github.com/danShumway/python_math

Game programmer in a team of 4, written in python for the One Laptop Per Child (OLPC).

- Designed the level layout and python snake movement on a grid.
- Solved various problems of integrating the project onto the Sugar XO operating system.
- Iterated the project based on feedback from elementary school students that played the game.

Skills

Languages: C++, LUA, HTML, JavaScript, CSS, Python, Java, C# Tools: Visual Studio, Git, Unity, Blender 3D, GIMP, Eclipse, Autodesk Maya, MS Office

Education

Rochester Institute of Technology, Rochester, NY B.S. Game Design and Development, 3.67 GPA

Graduated August 2018

github.com/mstubinis/Serenity