# Website/Portfolio

#### stevenharolds.com

### Education

Associate of Applied Science in Computer Science, Networking Emphasis (2019)

**Utah Valley University** 

## **Work Experience**

#### Software Developer I (Unity) – Improvement Interactive (May 2020 – July 2020)

- Worked on the development of a cycling/fitness game using C# with the Unity Engine. (See cvrcade.com)
- Did testing and worked on improvements for the game daily.
- Worked remotely with a team, using Microsoft Teams for communication.
- Used Git for file management.

# Engineering Support Administrator – Cascade Corporation (contracting agency: E-Mobile Group) (February 2020 – March 2020)

- Redrafted and updated engineering drawings from Cascade's branch in Japan using Solid Edge.
- Updated relevant information and files in Teamcenter.
- Position was eliminated due to Covid-19.

#### Game Development Intern – Beach Day Studios (January 2020 – March 2020)

- Worked on the development of hyper-casual mobile games using C# with the Unity Engine.
- Worked remotely with a team, using Microsoft Teams for communication.
- Used Git for file management.
- Non-paid internship.

#### Engineering Intern – Wencor Group (April 2016 – February 2020)

- Involved in the reverse engineering process of commercial airplane parts.
- Used various instruments to take precise measurements of parts.
- Used CAD software, Microsoft Excel, and Siemens Teamcenter regularly.
- Created various VBA scripts to improve the automation of processes for the engineers.

#### Insulation Installer – Sunroc Building Materials (November 2017 – December 2017)

Installed insulation in homes and apartment complexes.

#### Missionary – The Church of Jesus Christ of Latter-Day Saints (February 2014 – February 2016)

- Taught interested individuals and performed service work.
- Non-paid volunteer work.

#### CAD Technician – Vivint Solar (December 2012 – April 2013)

- Drafted layouts of rooftops and houses properties with AutoCAD.
- Assisted in the solar panel layout design process.

## Unity 3D Experience

- **Combined experience:** used Unity actively for 3 years, including employment at Improvement Interactive and Beach Day Studios, as well as several hobby projects and a game development class at Utah Valley University.
- **Procedural meshes:** created large twisting tree branches that move, a music-reactive mountain range, music-reactive waves and spikes, scripts to change meshes into other shapes.
- **3D** math, physics, and movement: player and vehicle movement, a physics-based gear system, a per-object grid building system that works with moving physics objects, custom movement interpolation, various use of rigidbodies, raycasts (as well as other casting/overlapping), physics joints, vectors, quaternions, physics layers, etc.
- **General Unity features:** thoroughly familiar with the Unity GameObject system, inspectors, editor navigation, canvas system, project hierarchy, camera objects, transforms, lighting, prefabs, etc.

**Debugging**: profiler, memory profiler, Visual Studio/Unity debugger.

- **Optimization:** monitor profilers to see which items consume the most CPU and memory usage, don't use excessively large meshes and textures, limit use of Update and FixedUpdate and especially avoid usage of loops in these functions when possible, use coroutines for timed and delayed operations, use different canvases for portions of the UI that are often updated together, etc.
- **Other:** UI design and functionality, custom shaders, importing/exporting asset packages, both PC and mobile projects, publishing to Google Play Store, creating and importing 3D objects and textures, etc.

# Other Programming/Software Experience

**Programming languages**: C# (3 years), C++ (1.5 years), C (2 years), Java (1 year), VBA (1 year), JavaScript (0.5 years)

Markup/query languages: HTML (1 year), CSS (0.5 years), SQL (0.5 years)

**General programming info**: familiar with both object-oriented and procedural programming, C# and VBA used in work environments, nearly all of the above languages were used in both school and various hobby projects, the years of experience for above languages is an approximation based on work, scholastic, and hobby use.

**Version control software:** Used Git daily while working at Improvement Interactive and Beach Day Studios. Also used for my personal website.

**Microsoft Office**: Extensive experience over several years, including writing various VBA macros for Excel and Word.

**Microsoft Teams:** Used daily for team communication and regularly for meetings while working at Improvement Interactive and Beach Day Studios.

**CAD software**: several years of combined hobby and work experience with various software including Autodesk Inventor, SolidWorks, CATIA, AutoCAD, Rhino 3D, Solid Edge, and FreeCAD.

Other modeling software: some use of Blender and Maya.

IDEs: Visual Studio, JetBrains Rider, Android Studio, NetBeans, etc.

Computer utilities: Windows Command Prompt, Linux Terminal, Device Manager, Registry Editor, etc.

Computer virtualization software: Oracle VM VirtualBox, VMware Workstation, Windows Virtual PC.

Media editing tools: Vegas Pro, Audacity, GIMP.

#### Other Information

Eagle Scout (Boy Scouts of America)

Studied computer engineering and mechanical engineering during part of my schooling.

Completed beginner and advanced GD&T training courses from QC Training Services, Inc.

Skilled at problem solving/troubleshooting.

Very attentive to detail.