Ben Hoffman

https://benhoffman.tech

Skills

Languages: C/C++, C#, JavaScript, Haxe
Engines/Libraries: Unreal Engine, DirectX 11, Vulkan, NodeJS, Unity, ImGui, PlayStation 4 SDK
Tools: Visual Studio, Git, Perforce, Jenkins, Elasticsearch, Docker, CMake, Jira

Work Experience

- **Engine Programmer** at Epic Games   *(January 2020 - Current)*
  - Various improvements and bug fixes for the Unreal Engine gameplay framework with a main focus on Blueprints and their creation process from editor to runtime
- **Gameplay Programmer Intern** at Epic Games   *(May 2019 - August 2019)*
  - Work alongside a team of senior engineers to improve the Unreal Engine gameplay framework
  - Make various optimizations to the *Fortnite*, specifically towards improving startup time
- **Founder and Lead Developer** of Bull Horn Games LLC   *(August 2017 - Current)*
  - Develop and design *Aurum Kings* in Unity (C#) available at https://bullhorngames.com/
  - Steamworks Services integration, gameplay programming, Twitch Integration, and more
  - Remote contract work in Unreal Engine (C++ and Blueprints) and Unity
- **Junior Developer Co-Op** for Workinman Interactive LLC   *(May 2017 - August 2017)*
  - Collaborated with teams of artists and designers to iterate on multiple projects quickly
  - Developed *SpongeBob's Next Big Adventure,* specifically on questing, inventory, and leveling content
- **Interactive Data Visualization Co-Op** for RIT Dept. of Computing Security   *(January 2017 - May 2017)*
  - Utilized Unity to represent devices and netflow traffic captured by tools such as Bro, Snort, and Packetbeat
  - Configured Elasticsearch to integrate with Unity via HTTP GET and POST requests
  - Available at http://ergowitness.info
- **Teaching Assistant** for RIT   *(August 2018 - December 2019)*
  - Aid students in an intro C++ course with topics such as memory management, the STL, and threading
  - Assist students in a foundations of game programming course in C# with core OOP concepts
  - Grade assignments, guide students through issues, and host tutoring/review sessions

Personal Projects

- **Fling Engine** (available at https://fling-engine.site)   *(Engine Programmer, August 2020 - Current)*
  - Cross platform Vulkan game engine with a focus on data oriented design and how it relates to graphics
  - Physically Based, Deferred lighting pipeline with a basic material system
  - Gameplay Framework that allows for simple additions of "systems" with managed lifetimes
- **Multi-Threaded Voxel Engine**   *(Engine Programmer, August 2018 - Dec. 2018)*
  - An engine with a focus on data parallelization while bringing a new look to voxel worlds
  - Develop the job system, configure continuous integration with Jenkins, and develop tools
  - Ported to run on the PlayStation 4 SDK

Education

Rochester Institute of Technology
Bachelor of Science in Game Design and Development   *December 2019*
3.54 GPA

Organizations

- **President** of RIT Game Development Club   *(2017 - 2019)*
  - Present weekly on game development topics, create demos in Unity, and organize game jams
- **Founder** of IGDA Academic Chapter at RIT   *(2017 - 2019)*
  - Organize meetings, create a community where students can network with other IGDA members