

# JONATHAN PEARL

Software Engineer and Game Developer

Portfolio: [jonpearl.com/portfolio](http://jonpearl.com/portfolio)

LinkedIn: [jonpearl.com/linkedin](http://jonpearl.com/linkedin)

**Core Competencies:** Fun and Fairness, Modern C++, C#/.NET, Unity

**Additional Skills:** Game Physics, Graphics Programming, ECS, Playful Video Editing

## EXPERIENCE

### Meta

**Specialist Software Engineer - Horizon Worlds** 10/2021 – Present

C#, Unity, VR, Hack, Mercurial

- Led cross-functional effort to implement and launch new physical motion controls through scriptable springs
- Championed first party experiences, embedding as engineer point of contact to unblock design and optimize runtime
- Improved gameplay e2e testing by implementing waypoint navigation and articulating test players through script

### Blizzard Entertainment

**Senior Software Engineer** 08/2019 – 09/2021

C++, Kafka, Python, LUA, Premake, Linux, Git

**Software Engineer** 07/2017 – 08/2019

- Reduced frame update packet size by designing and implementing codegen for automatic runtime delta generation
- Architected low-latency message at-most-once routing for new Battle.net HA initiative powered by Kafka
- Company-wide Kafka contact maintaining internal C driver – contributing bugfixes back to upstream OSS librdkafka
- Led interviews, mentored both interns and new hires through 1:1 guidance, onboarding documentation, and tasking
- Acted as liaison for other teams consuming our framework to promote cross-team collaboration and adoption
- Improved CI automation and internal package manager developer experience with tool authoring and codegen magic

### Microsoft

**Havok Developer Relations Engineer** 10/2015 – 07/2016

C++, Havok, Python, ASM, Perforce

- Provided expertise to customers on AAA game development leveraging Havok in 3D Physics, AI, and Animation
- Maintained key client relationships by providing direct support and creating tools that solve customer-unique problems
- Debugged and optimized clients' code through crash dumps and disassembly on affected platforms and consoles

### React! Games

**Game Engineer** 02/2015 – 09/2015

C#, Unity, Java, SVN

- Wrote asset manager to synchronize audio assets with Google Drive and automate localization mappings for producers
- Promote designers' and artists' workflow by creating automated tools and custom asset editors for VFX in Unity
- Ported *The Sleeping Prince* from iOS to Android – featured on Google App Store and Amazon Underground

### Viewpoint

*Personal Project*

C#, Unity, VR, C++, OpenCL, Git

- Sole creator, creating a scripting language to model abstract structures and fractals in VR with domain transformations
- Developed keyframe animation system for tweening variables and transformations to export flythrough videos
- Implemented hardware accelerated ray tracing and ray marching rendering with heuristic previews and VR reprojection

## EDUCATION

Neumont College of Computer Science – *B.S. Software and Game Development (Valedictorian)*