

# Patrick Leonard

## Software Engineer

Programmer and Designer with 1+ years industry experience

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### Technical Skills

<b>Languages</b>	C#, Python, Java, C++, SQL
<b>Distributed Systems</b>	Client/Server Networking(C & Java), Performance Profiling, Fault tolerant Systems
<b>Tools &amp; Frameworks</b>	Git, CI/CD pipelines. Unity, Unreal Engine, Visual Studio
<b>Core Strengths</b>	Scalable Systems, Low-Latency Runtime Optimization, Reliability Engineering, Cross-Functional Collaboration, Agile/Scrum

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### Professional Experience

#### AR/VR Unity Programmer and Level Designer | Catapult Tactical XR

December 2025 – Present

- Lead programmer for optimization efforts in older software using Unity engine improved frame rate, performance and visual fidelity in all software modules
- Designed and programmed UI for several of our software modules
- Created and updated simulation and physics systems within Unity using C#

#### AR/VR Unity Programmer | Catapult Tactical XR

July 2025 – December 2025

- Lead programmer for a real-time fire simulation using Unity engine
- Implemented automated testing practices to improve runtime reliability and reduce build failures
- Coordinated development within a 4-person engineering team using Agile methodology and Git source control
- Designed and profiled performance-critical systems to ensure high availability and minimal resource consumption during simultaneous multi-user operations

#### Junior Software Engineer | Aboot Studios

May 2025 – July 2025

- Built network-aware XR input and tracking components emphasizing runtime efficiency and stability under dynamic workloads using Unity engine
- Partnered with senior engineers on feature design aligned to performance and security requirements

#### Software Engineer | Tiny Ghost Studios

March 2025 – April 2025

- Developed audio systems in Unreal Engine with scalable asset management and asynchronous streaming for smooth runtime performance
- Worked across departments to resolve reliability issues and deliver on milestone availability goals

### **Programming Team Lead | Goopi Inc | University Capstone Project**

September 2023 – May 2024

- Designed and programmed gameplay systems with Remote Play capability, supporting synchronized input across multiple clients
- Optimized runtime performance through memory diagnostics, profiling, and stable framerate delivery across hardware configurations
- Managed version control workflows, sprint planning, and release QA for Steam deployment

### **Programming Intern | Raven Rune Entertainment**

September 2023 – December 2023

- Ported Unity systems to a new engine while documenting new standards enabling increased team productivity and future scalability
- Ensured maintainability and operational reliability through modular architecture and code review processes

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## **Education**

### **Bachelor of Science in Game Programming (honours) | Brock University**

September 2020 – April 2024

**Relevant Coursework:** Algorithms & AI, Distributed / Network Programming, Computer Hardware, Math & Physics for Engineers, Graphics Programming

**Relevant Project:** Real-Time Networking System

- Built TCP-based server-client architecture in C and Java supporting concurrent sessions
- Applied fault-handling mechanisms to prevent client disconnect cascade failure

### **Advanced degree in Game Development | Niagara College**

September 2020 – April 2024

**Focus:** Performance Optimization, DirectX11 Graphics, Unity Netcode, DevOps for Game Deployment