

Creative software engineer focused on low-level systems. Strives to write code that runs fast and is memory-efficient, but is easy for the whole team to use and understand. Enjoys debugging and learning about the next big problem.

Experience

Behaviour Interactive

Systems Programmer

Montreal, QC Canada

Nov 2021 - Present

- Optimizing both memory and performance in systems that have to scale from high-end to mobile platforms
- Diagnosing and solving common problems - such as load times, memory usage, and performance problems - to improve the robustness of the engine
- Previously worked as a full-time intern on back-end server development

Network Programming Intern

May 2017 - Aug 2017

Blizzard Entertainment

Software Engineer

Albany, NY USA

Jul 2020 - Oct 2021

- Member of the systems expertise group with a focus on performance
- Authored core engine components for Diablo II: Resurrected including the C++17 job system, file streamer, and render graph
- Owned the "Translation Layer" system which remapped events and information from the underlying 2D game into 3D
- Location was previously Vicarious Visions, an Activision studio; past projects include Destiny 2: Forsaken and support on Call of Duty: Black Ops 4

Associate Software Engineer

Mar 2019 - Jul 2020

Junior Software Engineer

Jun 2018 - Mar 2019

Emergent Media Center

Platform Programming Intern/Co-op

Burlington, VT USA

Sep 2017 - May 2018

- Solved gameplay tasks for projects using the Xbox Kinect 2, Oculus Rift, and HTC Vive
- Lead the mobile optimization effort for BREAKAWAY, a Unity game targeting low-end Android devices
- Assisted on an interactive art project currently installed in Burlington Airport

Moment Factory

Creative Developer Intern

Montreal, QC Canada

Jan 2017 - Apr 2017

- Used advanced technology, including a Velodyne LiDAR Puck, to develop gamified experiences with the Interactif Team
- Partnered with other interns and full-time team members to build Unity and TouchDesigner prototypes
- Completed tasks involving gameplay and network programming

Education

Game Programming, BS Champlain College

Burlington, VT USA

Aug 2014 - May 2018

Completed solo and team projects, including PC, mobile, and virtual reality games.

Studied abroad in Montreal (Jan-May 2017). Experience as a gameplay, AI, network, and tools programmer.

Selected coursework:

- Vectors & 3D Math
- OpenGL Programming
- Game Architecture
- AI for Games
- Networking for Games
- Artificial Opponents

Skills & Tech

Languages

C++; C#; C; Python;
JavaScript.

Software

Visual Studio; Perforce; Git;
Clang/LLVM; Jira.

Personal

Native English; limited working French; team leadership; strong public speaker; musician and gamer.

