

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

### Blizzard Entertainment

#### Software Engineer

Albany, NY USA

Jul 2020 - Present

- Member of the systems expertise group with a focus on performance
- Author of core engine components for Diablo II: Resurrected including the C++17 job system, file streamer, and render graph
- Owner of the "Translation Layer" which remaps events and information from the underlying 2D game into 3D
- Replaced a 20-year-old DirectSound implementation with FMOD, enabling multi-platform support; designed and implemented in-game tooling for audio designers
- 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

### Behaviour Interactive

#### Network Programming Intern

Montreal, QC Canada

May 2017 - Aug 2017

- Worked as a full-time intern on back-end server development
- Created general systems for the server as well as game-specific extensions in a test-driven environment
- Participated in code reviews for all team pull requests and actively responded to feedback

### 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.

