

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

Software Engineer

Jun 2018 - Present

Blizzard Entertainment

Albany, NY USA

- 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

Previously Junior Engineer (Jun 2018 - Mar 2019); Associate Engineer (Apr 2019 - Jul 2020).

Platform Programming Intern/Co-op

Jan 2016 - Dec 2016; Sep 2018 - May 2018

Emergent Media Center

Burlington, VT USA

- 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 the Burlington Airport North Concourse

Network Programming Intern

May 2017 - Aug 2017

Behaviour Interactive

Montreal, QC Canada

- 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

Creative Developer Intern

Jan 2017 - Apr 2017

Moment Factory

Montreal, QC Canada

- 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 projects
- Completed tasks involving gameplay and network programming

Education

Game Programming, BS Champlain College

Aug 2014 - May 2018

Burlington, VT USA

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; Graphics 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

Moderate French proficiency; team leadership; strong public speaker; musician and gamer.

