

Creative software engineer focused on low-level systems. Strives to write code that runs fast, 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 and render graph. Owner of the "Translation Layer" which remaps info from the underlying 2D game into 3D. Assisted with audio engineering, replacing a 20-year-old DirectSound implementation with FMOD and enabling multi-platform support. Location was previously Vicarious Visions, an Activision studio. Past projects include Destiny 2: Forsaken.

Previous titles: *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

Developed software for the Sandbox Team. Implemented games and new media using the Xbox Kinect 2, Oculus Rift, and HTC Vive. Solved tasks related to gameplay and artificial intelligence. Lead the mobile optimization effort for BREAKAWAY. Assisted on an interactive art installation project for Burlington Airport which is now in their 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 this 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

Developed gamified experiences for Moment Factory's Interactif Team. Worked with advanced technology, including a Velodyne LiDAR Puck. Closely interacted with other interns and full-time members of the team to implement engaging and innovative Unity and TouchDesigner projects. Completed tasks involving gameplay and network programming.

Education

Game Programming, BS

Aug 2014 - May 2018

Champlain College

Burlington, VT USA

Completed several solo and team projects, including PC, mobile, and virtual reality games. Studied abroad in Montreal Jan-May 2017. Experience as a gameplay, artificial intelligence, network, and tools programmer. Often worked as repo manager and build master on team projects.

Relevant coursework: *Vectors & 3D Math; Graphics Programming; Game Architecture; AI for Games; Networking for Games; Artificial Opponents.*

Technology & Skills

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.

