

**EMPLOYMENT****Chief Technology Officer** **Modest Tree** **May 2013- Present**

- Designed overall architecture for a general purpose Unity3D based IDE designed for non-programmers
- Implemented a custom GUI system, UI pipeline, a custom visual programming language, an undo system, a package management system, a custom serialization system, and a web server backend
- Provided the devops for the team including build and deploy pipeline and automated testing
- Managed technical team and acted as point of contact for clients regarding technical matters

**Senior Software Engineer** **Ubisoft Halifax** **January 2012 – April 2013**

- Developed games for the PC and the Wii U with a focus on animation, general gameplay, and AI
- Games included Rocksmith 2 and ESPN Sports Connection
- Worked primarily in an Ubisoft internal engine

**Software Engineer** **Atlantis Systems Eduplus** **March 2011 – January 2012**

- Developed software to train aircraft marshallsers using the Unity engine with Microsoft Kinect
- Created a gesture recognition system from scratch to verify the accuracy of the various marshaller signals

**Senior Software Engineer** **HB Studios** **August 2008 – March 2011**

- Developed games for the Wii, Xbox 360, PC, PSP, and Playstation 3
- Responsibilities varied between AI, gameplay, physics, networking, graphics, and in-house engine/tools
- Primarily worked in C++ with scripting in Lua and C# for tools
- Games included Cricket 09 (PC), FIFA 2010 (PC), FIFA 2011 (PSP), Tiger Woods 2010 (PSP), Backyard Baseball: Sandlot Sluggers (Wii/Xbox360/PC), Rugby 2012 (Xbox360/PS3)

**Programmer** **SED Systems** **Oct 2006 – July 2008**

- Developed and maintained software for space engineering/communications
- Real-time server design and implementation in C++ for Linux/Windows
- GUI design and implementation in Java using CORBA as middleware

**EDUCATION****Saskatoon, SK** **University of Saskatchewan** **2001- 2006**

- Bachelor of Science (Honours) in Computer Science
- Bachelor of Science (3 year) in Mathematics
- Graduated with distinction

**OPEN SOURCE PROJECTS**

- [Zenject](#) – Created in 2013 and has since become the most popular DI framework for Unity3D
- [Projeny](#) – Package management system to help scale and modularize large Unity3D projects
- [AsyncAwaitUtil](#) – Library that adds support for using C# async-await in Unity3D
- **Vim Plugins** – Created many plugins for the Vim/Neovim text editor, most notably [vim-easyclip](#)

**SKILLS, LANGUAGES, AND TECHNOLOGIES**

- C#, C/C++, Java, Python, Ruby, Lua/MoonScript, VimL
- Game development using Unity3D and Unreal
- Web development in ASP.NET MVC, Node.js, Django, AWS, CSS/SASS/LESS, JavaScript, CoffeeScript, Bootstrap, jQuery
- General software architecture and code design, especially object-oriented programming using dependency injection, data-oriented approaches such as ECS, and reactive programming