# [BRANDON JARVINEN](http://brandonjarvinen.com)

**Personal Focus**

I take pleasure in creating tools for easy tweaking of gameplay mechanics, to produce highly refined and exciting games. I can't help but get back into games like Super Smash Bros Melee, Counter-Strike and Minecraft every few months due to the many memorable moments I have had with friends. My love for games and eSports has led me to create powerful social experiences that can be shared.

**Technical Skills**

* Languages and tools: C++, C#, Python, Unity, Visual Studio, Git, HTML5, Monodevelop, Javascript
* Academic Subjects: Game Design Process, Scrum/Agile, Game AI, 3D Math, Comparative Programming Languages, Data Structures, Debugging, Database Design, Web Apps, Arduino

**Project Highlights**

* Engine Programmer - [Birds at Arms](http://birdsatarms.com) - (12/2015-Current) **Nominated for Technical Achievement**   
  Casual 2D MOBA built with a custom C++ engine using SDL, including networking and animations.
  + Engine built from the ground up, dynamically loads resources and uses object pooling.
  + Packaged network packets for syncing game state among up to 8 players on Steam.
  + Runner-up for the 2016 Sammy Awards Technical Achievement Award at UC Santa Cruz.
  + Take a look at the [Github Repository](https://github.com/EthanShimooka/BAA)
* Gameplay/Lead Programmer - PROJECT HYPETRAIN, with [Ursa Major Games](http://ursamajorgames.com/), an indie dev project (04/2014 - 09/2015)
  + In C# and Unity, implemented BFS companion AI, gun kickback which gives the player aerial mobility, in-game menus, shop system, as well as train car and item spawning.
  + Create programming team sprint tasks as well as manage bug reports for the project.
  + [Check out our site](http://ursamajorgames.com/) or [Github Repository](https://github.com/BJarv/UrsaMajor/)
* Network/Gameplay Programmer - KrabKlashers - (Winter 2015)  
  3D Online Multiplayer Arena Combat game made utilizing the SCRUM methodology. Made with Unity3D using Photon Unity Networking.
  + Implemented player movement, combat system with melee, dash attacks, and parrying.
  + Used Photon for chat, and game room systems as well as syncing data for scoreboard.
  + Take a look at the [Github Repository](https://github.com/BJarv/CS115/)
* Engine Programmmer - IncognitOwl - (Winter 2014)  
  In a world of Patriot Owls vs Soviet Bats, only the IncognitOwl can infiltrate the bat base and retrieve the intelligence needed to win the war.
  + Using HTML5 canvas and Javascript, implemented collision detection, character movement, and level creation.
  + The game is playable in a browser and saves progress as you complete levels.
  + Play the game [here](http://brandonjarvinen.com/IncognitOwl/IncognitOwl.html) or check out our [Git.](https://github.com/moschwar/CMPS20/tree/master/IncognitOwl/)

**Experience**

* Instructor - *Stanford University* ID Programming Academy  
  Programming Instructor for C++ and Unity/C#. (06/2015 - 08/2015)
  + Taught groups of 8 to 16 students in C++ and Unity/C# on 2D game development and practices.
  + Developed lesson plans for a wide range of skill sets and debugged multiple projects written in different languages.
* VEX Robotics 3rd Place Winner in World Championship - (09/2008 - 04/2011)
  + Attended the VEX World Championships three times, placing 3rd in 2011 as well as 5th in 2010.
  + Awarded three *Programming Division Champion* awards for my autonomous routines in C.

**Education**

**Bachelor of Science, Computer Science: Computer Game Design**

University of California, Santa Cruz