

# Mackenzie Bates

itbmac.com

mackenzie.bates@itbmac.com

1.440.308.5582

 itbmac

## Carnegie Mellon University

Computer Science & Art --- May 2015

- Minor: Human Computer Interaction
- Graduated with University and Interdisciplinary Honors
- Concentration in Game Design (with over 10 courses)

## Shipped



## Credited Contributor



## Skills

- C#
- C++
- Java
- ActionScript
- C
- Python
  
- Unity 2D
- Unity 3D
- Flixel
- XNA



Software Development Engineer --- June 2015-Present

- Shipped The New Xbox One Experience to over 15 million consoles
- Using C#/XAML and C++ as App/System programmer
- Contributions to the Xbox One dashboard include:
  - Owner of Pins, a fan-favorite feature, which are shortcuts to games & apps
  - Helped make cross-device games possible (worked with Fable Legends dev team)
  - Enabled automatic downloading of games to player's home console
  - Developed offline and user signed out experiences



Software Engineering Intern --- May-July 2014

- Shipped the Halo Channel
- Used TypeScript (AngularJS, JQuery, WinJS, Xbox One ADK) as front-end engineer
- Implemented linking of app to Halo: The Master Chief Collection:
  - Allows TV shows to launch into missions/playlists related to on-screen content

AI/Gameplay Programmer (Intern) --- July-August 2014

- Worked on Halo 5 campaign engineering team during 3 week side project
- Created framework to allow AI units to use new spartan abilities using C++
- Increased perceived intelligence/swagger of AI units with modified behaviors
- Examples of new behaviors enabled and in shipped game:
  - Ally spartans in campaign "evade" grenades thrown by elites
  - Fireteam members "shoulder bash" grunts



Gameplay UI Programmer (Intern) --- May-August 2013

- Shipped The Sims 4 base game to over 2.2 million gamers
- Developed UI for gameplay interactions using ActionScript, C++ & Python
- Revamped how info about relationships between Sims is shown to player
- Successfully pitched idea and implemented in-game dinosaur toy with an entirely new set of interactions from other Sims titles
  - Used proprietary game editor to add content and interactions to game

## Independent Projects

The Documents --- January 2016-Present

- 3D FPS, single player mission (Call of Duty style)
- Focus on level design and game scripting using Unity3D and C#

Arcadia --- November 2014-Present

- 2D top-down "art-shooter" about relationships
- Focus on AI & combat design and game programming using Unity2D and C#