

Mathew Mason

Specialties: Swift, Python, and 3D Application Programming

Experience

March 2017

- Present

Apple, Senior Software Engineer

Technology Development Group

Swift, Objective-C, iOS, macOS

RealityComposer, macOS Big Sur+

- Developed plugins for editing USD files
- Integrated internal frameworks with plugin system

ARKit and RealityKit, iOS 13+

- Developed API for AR coaching for tracking initialization, adapted from bespoke Measure implementation
- Developed API for translation + rotation + scale gestures for ARView
- Developed API for ARKit body tracking with RealityKit

Measure, iOS 12+

- Integrated OpenCV and CMAKE into build process
- Iterated corner and line detection algorithms for measure reticle

February 2015

- March 2017

Zynga, Senior Software Engineer

New IP Group

Unity 3D, C#, Python, Git

- Gameplay programmer on new IP prototypes
- Developed creature AI, client/server architectures, and build scripts

November

2013 - Feb-

ruary 2015

Backflip Studios, Engineer

DragonVale

iOS, Android, C++, Objective-C, Java, Python, Ruby, Bash, Node, App Engine, Mercurial

- Gameplay and tools programmer on established project using in-house engine
- Developed Amazon Fire Phone launch version of game, featuring head tracking
- Converted build system to be incremental
- Wrote designer and engineer facing tools for data editing and event scheduling
- Worked closely with designers on frequent feature and content releases
- Improved development iteration time, helped to optimize user login and server requests

October 2009
- October 2013

Stardock Entertainment, Game Developer

Dead Man's Draw, Cancelled Mobile Project

iOS, C++, Objective-C, Python, Cocos2d-x, Subversion, Git

- Worked as gameplay programmer on new team using open source engine
- Developed UI on top of engine UI for buttons, scrolling views, and message boxes
- Implemented in app purchase API and in game storefront for consumable game items
- Developed asset pipeline

Sins of a Solar Empire: Diplomacy, Sins of a Solar Empire: Rebellion

Win32, C++, C#, Python, NAnt, MS SQL, Perforce, Mercurial

- Developed expansion packs from start to release for existing property using proprietary game engine for external partner (Ironclad Games)
- Established automated build process, maintained client and server releases
- Enhanced administrative tools for MS SQL backend
- Integrated Steam account system into existing multiplayer account infrastructure

Elemental: War of Magic, Fallen Enchantress, The Political Machine 2012

Win32, C++, C#, CVS, Subversion

- Worked on various release stages of products using in-house engine
- Integrated Facebook authorization and screenshot sharing into engine using in game UI, steamworks, ASP.net, and libCurl

In addition, I pushed for reform on standards, version control, and hiring practices

Education

May, 2009

B.S., Computer Science Michigan State University

B.A., Telecommunication, Information Studies and Media Michigan State University

Specialization in Game Design and Development

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