

# Samantha Demi

## Contact

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## Technical Skills

- Writing
  - Documentation
    - [Migrating Code Signing Configurations to Xcode 8](#)
    - [Building Python modules on CircleCI OS X instances](#)
    - [Xcode Build Locations](#)
    - [Managing Build Settings and Avoiding pbxproj Conflicts](#)
    - [Introduction to iOS Development](#)
    - [Linking Objective-C Code](#)
    - [Converting Static Libraries to Dynamic Libraries for iOS](#)
    - [The Xcode Build System](#)
    - [PBXProj Identifiers](#)
    - [OS X, Python, and the readline module](#)
    - [Using Xcode Targets](#)
    - [Codesigning Introspection Commands](#)
    - [Xcode SDKs](#)
    - [Unofficial Guide to xcconfig files](#)
    - [Xcode Build Settings Reference](#)
    - [Xcode DerivedData Hashes](#)
    - [Managing Xcode](#)
    - [Static and Dynamic Libraries](#)
    - [Embedding Content with Swift in Objective-C](#)
    - [Reverse Engineering Fitbit BLE Protocol](#)
    - [Blocking Code Injection on iOS and OS X](#)
- Speaking (on hiatus since 2016)
  - AltConference ([2014](#), [2015](#))
  - #R Conference ([2014](#))
  - MacTech Conference ([2013](#), [2014](#))
  - Cocoaheads Boston ([2013](#), [2014](#), [2015](#), [2016](#))
- Programming Languages (ranked by proficiency)
  - Objective-C
  - C

- Python
- Nim
- Go
- AppleScript
- Ruby
- Groovy
- Swift
- x86 Assembly
- Javascript
- C++
  
- Frameworks
  - Cocoa (Interfacing with Objective-C, Swift, AppleScript, Python, and Nim)
  - CocoaTouch (Interfacing with Objective-C and Swift)
  - CUDA (Interfacing with C)
  - OpenGL (Interfacing with Objective-C, C, and C++)
  
- Projects
  - [pbPlist](#), an all-purpose plist library written in Python that allows reading and writing of ASCII/NeXTStep Property Lists.
  - [bsl-validator](#), a interpreter for Bungie Scripting Language (written in C)
  - [nslocalizer](#), a tool for finding missing and unused NSLocalizedStrings (written in Python)
  - [pyconfig](#), a DSL for building and managing xcconfig files easily (written in Python using pyparsing)
  - [xcparse](#), an implementation of the Xcode build system (written in Python)
  - [aosd](#), a tool for downloading packages available from [opensource.apple.com](#) (written in Python)
  - [SDMMobileDevice](#), Reverse Engineered from Apple's private framework for iOS device management and low level communication
  - [x86engima](#), World War 2 German Enigma Encryption Machine (written in x86 Assembly)
  - iOS 5.x and 6.x [tethered jailbreak](#) (based on p0sixspwn)
  
- Build Systems
  - Xcode (iOS and OS X)
  - Gradle (Android)
  - CMake (Multiple architecture and platform configurations)
  - Make (Multiple architecture and platform configurations)
  - Autotools (Multiple architecture and platform configurations)

## Work Experience

- Ruby Engineer, BAMTech Media, February 2017 to Present
  - Build & Release Engineering, Supporting Mobile App Development
    - Maintained CI instances (Jenkins) and developed new interfaces to control build jobs
    - Migration from Jenkins Job DSL to use Jenkins Blue Ocean and Pipelines
- Mac Developer, Feral Interactive, May 2011 to Present
  - Oni ([Homepage](#))
    - Updated deprecated code from PPC to run on Intel platform
    - Implemented new engine features with collision detection
    - Updated existing graphic engine to take advantage of modern hardware
- Build Engineer, iRobot Corporation, August 2016 to December 2016
  - iRobot Home App ([App Store](#))
    - Maintained CI instances (Jenkins) for the Software Applications team
    - Integrated C++, Android, and iOS unit tests with internal CI service (Jenkins)
    - Automated release procedures for iOS and Android applications
- iOS Developer, iRobot Corporation, April 2015 to August 2016
  - Ava 500 Control App ([App Store](#))
    - Implemented new UI and features for an app to control a telepresence robot
    - Maintained a build server for doing daily builds for internal SQA testing
  - iRobot Home App ([App Store](#))
    - Managed build system tooling for the mobile development team
    - Created on-boarding UI for setup of Braava-Jet
- Build System Engineer, CocoaPods Project, September 2014 to Present
  - CocoaPods ([ruby gem](#))
    - Assisted with changes to the integration process with Xcode
    - Debugging issues with third party developers

- Mac Developer, Flexibits, May 2014 to July 2014
  - Fantastical 2 for OS X ([Homepage](#))
    - Extensive work with date/time programming
    - Implemented communications with iCloud CalDAV service
    - Prototyped implementation of geo-fencing for reminders
- iOS Developer, Chaotic Moon Studios/Marvel Studios, September 2013 to April 2014
  - Marvel Unlimited ([App Store](#))
    - Rapid prototyping of client designs
    - Integration of third party frameworks (audio and video media integration)
- iOS Developer, American City Business Journals, August 2012 to December 2012 (internship)
  - American City Business Journals ([App Store](#))
    - Extensive UX design on ACBJ mobile app for iOS
    - Creation of mobile app for iPad
    - Refactor of existing mobile app code to improve performance
- iOS Developer, Survey.com, January 2012 to May of 2012 (internship)
  - Survery.com ([App Store](#))
    - Refactored the UI of the iPhone application
    - Implement new controls for taking surveys in the app