Jeremy Brown

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Technical Skills

- Recently-used Languages: Objective-C, C, Python
- Less-recently-used Languages: Java, C++, Perl, PHP, C#
- Databases: SQLite (more recent), Oracle, Postgres, MySQL (less recent)
- ~8 years of first party iOS app development
- ~8 years iOS systems development (Mach Ports and MIG, launchd, XPC and NSXPCConnection, XPC services, XPC events, grand central dispatch, lldb, Darwin virtual memory subsystem, entitlements, priority boosting, CoreFoundation, ARC)
- Recent hobbyist experience with Java-based Android development
- Many years of UNIX systems design (pthreads, traditional UNIX IPC, process and privilege isolation)
- Co-inventor on 5 patents, all while at Apple

Work Experience

September 2015 - April 2017: iMessage Software Engineer

- Helped design and implement many features of iOS 10 Messages including stickers, Messages apps, handwriting, full screen effects, and a general visual redesign.

September 2013 - September 2015: Apple Watch Software Engineer

- Designed the syncing infrastructure, data storage format, and app/daemon architecture for the Passbook (now Wallet) application and subsystem on Apple Watch. Implemented the app and daemon from scratch.
- Worked with Human Interface team to design and build a Passbook and Apple Pay experience that is fast and easy to use.
- Coordinated with the iOS Wallet team to share code and minimize redundancy.

October 2009 - September 2013: iOS Software Engineer

- Lead maintainer of the Phone app and Visual Voicemail subsystem, and co-maintainer of Facetime and iMessage.
- Helped design and implement the first versions of FaceTime and iMessage, as well as many other smaller features like "Decline and Reply" and "Do not Disturb."
- Worked with carrier EPMs to diagnose Visual Voicemail issues. Built additional tools carriers could use to diagnose common issues themselves.

May 2006 - October 2009: iTunes Software Engineering

- Along with two others, built a distributed video processing system written in Java and Objective-C. The system was responsible for ingesting content from 3rd party content creators and farming it out to multiple machines that could process and encode the content, parallelizing tasks where possible.
- Authored a QuickTime file metadata parser to validate files before being submitted to Apple (incorporated in a tool that was given to content creators).

September 2003 - April 2006: Software Engineer at Cadre5

- Wrote and helped maintain software for a variety of companies, mostly server software in Java and C++.

Education

University of Tennessee, Knoxville (Fall 1999 - Spring 2003)
BS in Computer Science

References

Available upon request.