

Andrew Ash

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A passionate problem solver who seeks to mentor others and
build apps that help people live a more meaningful life.

Professional Activities

Senior iOS Engineer	Feb 2023 – Nov 2025
Photobooth Supply Co.	Santa Ana, CA (Remote)
▪ Invented an algorithm for detecting motion changes in a camera rotating around a fixed point (in <i>CoreMotion</i>) ▪ Architected and wrote a 50% faster <i>AVFoundation</i> engine for real-time 4K video capture from iPhone, iPad, & DSLR, with audio/video muxing, and concurrent effect processing at 120 fps using <i>TaskGroup</i> and <i>VideoToolbox</i>. ▪ Architected <i>Bluetooth</i> stack for 3 products using Swift Structured Concurrency (ex. <i>AsyncStream</i>, <i>async let</i>, etc.) ▪ Standardized <i>React Native</i> “native module” services for bridging between <i>Swift</i> and <i>JavaScript</i> code	
Senior iOS Engineer	Apr 2022 – Dec 2022
Route.com	Lehi, UT (Remote)
▪ Led a full redesign of the app’s Order History tab in <i>SwiftUI</i> with an <i>MVVM-C</i> architecture	
iOS Developer	Nov 2020 – Mar 2022
Paceline.fit	San Francisco (Remote)
▪ Led a startup’s iOS development of a greenfield credit card product that was built in only 8 months ▪ Paceline’s app reached #1 on the Apple App Store for Health and Fitness, and #41 for all free apps in 2021 ▪ Built a polling service and a <i>UIKit</i> library for FinTech application forms, and managed partner relationships	
Founder, iOS Developer	Jul 2014 – Nov 2020
Emotive Apps Inc.	Los Angeles, CA
▪ Launched three iPad and iPhone apps in the Apple App Store with 10,000+ downloads (see portfolio) ▪ Collaborated with UX designers, graphic designers, videographers, sound editors, and teachers to build each app	
Hebrew in Harmony: EdTech games to teach the meaning of prayer through music ▪ In-App purchases with <i>StoreKit</i>, and validates receipts to detect cancelled subscriptions ▪ Wrote a video queue player using <i>AVFoundation</i>, a kid-friendly audio recorder, and 2 games ▪ <i>Core Data</i> with multithreaded contexts: downloads 1GB of assets without blocking main thread	
Flavors of Gratefulness: Mindfulness app ▪ Reminds people to practice with <i>UserNotifications</i> ▪ Audio visualizations written in <i>Core Animation</i> and <i>Core Graphics</i>	
Program Manager II	Oct 2006 – Sep 2007
Microsoft Windows SharePoint Services 2010	Redmond, WA
▪ Led a feature area with six teams, 14 developers & testers for Office 2010’s team collaboration features.	

Professional Activities

Director of Technology Projects	Sep 2003 – Jan 2004
Ministers' Recruiting Secretariat, Office of the Premier of Ontario	Toronto, ON
- Completed a .NET web app through which the new government's top 350 senior political staff were recruited. - Projects delivered on time, with 99.7% uptime, and the endorsement of the Office of the Premier of Ontario	
Program Manager, SharePoint Integration	Aug 2004 – Oct 2006
Microsoft Outlook 2007	Redmond, WA
Led the design and implementation of Microsoft Outlook's sync with <i>SharePoint</i> web services. This enabled offline access to team calendars, discussions, and documents – a top customer request	

Education

Jewish Studies	
Hebrew College	Sept 2008 – Jun 2011
Honours B.A., University of Toronto	
Computer Science, Major	Graduated April 2004
Politics and English, Minors	

Awards

TripleByte **2020**
 Scored in the top 20% of developers on their platform (80th – 100th percentile, Mobile iOS)

Patents

Patent # US7966426-B2, granted Jun 21, 2011 to Microsoft, Andrew Ash and co-inventors, for "Offline synchronization capability for client application."

Patent # US 20090192845A1, granted Jun 30, 2009

Languages

English Fluent
 Hebrew Conversational, Advanced Intermediate
 French Beginner

Skills & Experience

Software Development	
Swift	9 years
JavaScript, ES6+, HTML, CSS	6 years
React, Meteor, MongoDB	5 years
SQL	6 years
AWS	3 years
React Native	2 years
Objective-C	1 year

Community Activities

RemoteShiva.org	2020
Built MVP to help mourn COVID-19 victims	
Shoresh, Jewish Environmental Ed., Toronto	2013-15
Teaching kids to grow veggies; Graphic design	
Kavod House, Food Justice Campaign	2010
Videography and editing a PSA in Final Cut Pro	
YTP (Youth Tutoring Program), Seattle	2007-8
Tutoring children of refugees; 3hrs/wk	
Hillel, University of Washington	2006-7
Sat twice on their Hiring Committee	
Students' Administrative Council, UofT	2002-3
Won discount student transit, 1 st in 20 yrs	

Interests

Gardening, Cooking, Hiking, Photography, Canoeing, and Winter Camping