

Austin Chen

austin.zm@gmail.com
BASc in Computer Engineering
cell: +1 647-523-5397

My objective is to improve mobile software systems through development of battle-tested techniques as well as application of engineering principles. I enjoy leading by example and getting my hands dirty.

Summary of Qualifications

- Solid hands-on coding skill
- Solid understanding of enterprise development and production procedures
- Thorough understanding of MVC, MVVM, multithreading, and various programming model
- Excellent communication skills & documentation skills
- Strong sense of code ownership
- Care about software craftsmanship and understand its limit in a rapid development environment
- Excellent independent worker; having a strong sense of product delivery and willingness to take project from start to finish
- Understanding of repeatable automated processes for building the application, testing it, documenting it, and deploying it at scale

Reflections

- **Craftsman**, Write high quality code, the rest will follow.
- **Culture of delivery**, The code written is hardly any use if it does not make its way to its users.
- **Code Hygenist**, Write clean code, in Uncle Bob's way.
- **Complexity manager**, A team lead's primary job is managing complexity.
- **Life Hacker**, Speaking in i-Statements rather than you-statement goes a long way.
- **Dog food eater**, Being both the provider and consumer of my own products.
- **Pragmatic Coder**, Believes in the points above, but not dogmatic about them.

Proficiency	
Mobile Dev	Swift, Objective-C/C/C++, Android/Kotlin, React Native, TypeScript/JS, HTTP/REST, Git/SVN
Framework/library	UIKit, CoreData, CoreAnimation, Foundation, LibDispatch, MLKit, ARKit
Tools	XCode/AppCode, VSCode, WireShark, Charles, IntelliJ, Visual Studio, Eclipse, Vim
Server Programming	Server-Side Swift, AWS (Lambda, API Gateway, DynamoDB, AppAync, MobileHub), GraphQL
Currently Acquiring	Python Stack, MachineLearning

Work Experiences

Senior Engineer

McAfee/TunnelBear (June 2018 to present)

- Core responsibilities include
 - security hazard analysis
 - security design & enforcement
 - macOS/iOS application system design,
 - component interface design & creation,
 - co-design web API, data synchronization strategy
 - designed and created persistence strategy
 - end-to-end design verification and troubleshooting.
- co-design and co-ordinate with 3rd parties
- mobile & desktop client development
- App store engagement

Works:

- RememBear password manager

ACCodeworks Inc.

Solution Architect/Freelance (Founded July 2016 - present)

Founded ACCodeworks Inc to engage closely with market demands, to create bespoke software for various clients

- Core responsibilities include
 - turn client requirements to a working solution
 - system design,
 - component interface design & creation,
 - co-design web API, data synchronization strategy
 - designed and created persistence strategy
 - end-to-end design verification and troubleshooting.
- co-design and co-ordinate with 3rd parties
- mobile application development
 - iOS
 - macOS
 - Android
- App store engagement
- Platform development:
 - nodejs
 - Server-Side Swift
- infrastructure development:
 - AWS EC2, Docker.

Works:

- MBNA Mobile Banking (via Ugo)
- SnackableTV (via Stagwell)
- My Tyria
- SpursGo

Senior Contractor

ProdigyLab Inc (December 2017 to June 2018)

When I joined ProdigyLabs at its client site, Ugo Inc; It was in the early stage of creating MBNA mobile banking app. The team was slowly being assembled, and has little prior knowledge about creating such solution. My primary contribution were:

- Core responsibilities include
 - mobile system design resolving hybrid webview approach
 - integrate client's existing web portal into a workable mobile solution
 - component interface design & creation,
 - co-design web API, data synchronization strategy
 - designed and created persistence strategy
 - manage project complexity
 - end-to-end design verification and troubleshooting.
- Onboard new team members

Works:

- MBNA Mobile Banking (in development)

Stagwell Technologies (August 2016 to Jan 2018)

Mobile Solution Architect

In this time period, my team has shipped a number of mobile apps of major releases. Some of my contributions include:

- Core responsibilities
 - include mobile system design,
 - component interface design & creation,
 - co-design web API, data synchronization strategy
 - designed and created persistence strategy
 - cross-team engagement, 3rd party support,
 - technical and functional requirement creation,
 - end-to-end design verification and troubleshooting.
- Drafted and established coding guidelines and coding patterns
- Develop an mobile proxy using NetworkExtension framework to help client track usage
- Modularized applications' user interface and played key role facelifting UI/UX
- Recruiting and onboarding new teammates

Works:

- L1BRE Taxi Hailing App
- HarrisX Telemetry App (internally published under Apple Enterprise Certificate)

Kinetic Cafe Inc (June 2014 to June 2016)

Senior Developer / iOS Team Lead

- Authoring E-Commerce iOS mobile platform for ALDO, v1 available on App Store with 100,000+ users worldwide.
- Team lead for Aldo iPhone app, co-author for Aldo In-Store iPad app
- Coordinated with project managers to carry out scrum rituals, monitor and tune team performance
- Projects foresights and forencics to keep pipeline free of congestion.
- Full stack, battle tested experience in UI and Core Data
- Working with iBeacon and geofence technology using multitasking to deliver fine tuned location based service.
- Solid experience integrating with payment gateway, PayPal, ApplePay (one of the first in Canada adopting it)
- Solid experience integrating and upgrading social framework eg, Facebook, Instagram.
- Experience with production support, crash resolution, data analysis
- Build and releases apps using TestFlight, Fabric.

Works:

- Aldo App (Live on App Store)
- Aldo In-Store shopping assistance app (Deployed to selected stores)
- Aldo In-Store gallery mac app (Deployed to selected stores)

UXP Systems Inc (April 2011 to April 2014)

Mobile Software Developer/Team Lead 2015 UXP hackthon winner

UXP Systems' MINT User Lifecycle Management (ULM) platform is powering today's operators as they transition to a user-centric, digital world of entertainment, communications, and connected life services. MINT ULM is transforming service experiences for operators like TELUS, Rogers, Cable & Wireless and Cable Bahamas, to simplify user journeys while unifying and personalizing access to digital services for every household user across traditional and cloud services. With its groundbreaking ULM capabilities, MINT innovates above existing legacy systems to transform the user experience, enabling frictionless user registration and device on-boarding, new user acquisition models, delegated user access, and individual user profiles across all screens and services. For more information, please visit: www.uxpsystems.com.

Mobile Engineering:

- Created a mobile library, used on both iOS and Android, in C/C++ with C interface (with both sync/async calls, Async APIs follow wait/notify programming pattern). (3 successful years of delivery since 2011, which generates 5 million in revenue)
- Created a Cordova front-end APP that calls to the APIs to the aforementioned shareable library.
- Owned an iOS project with features such as call logs, voicemail playback and TV guide. Also help create parity features on Android (Delivery to Cable Bahamas and successfully deployed to production in 2011)
- Owned a single page app project from Backbone/Marionette/jQuery with RESTful APIs to the backend
- Created a single page web app to display or purchase movie assets. (Modeled after Netflix web)
- Created an IPTV App that runs on Zentrio setup box to authenticate user, display TV guide. (Modeled after Netflix on TV) (As a component of 90 days of Prove-of-Concept project, which successfully bid 10 million dollars deal)

Platform Engineering:

- Created a Zentrio Ekioh browser (Webkit engine) plugin, which is used in pair with aforementioned IPTV app, using FireBreath framework. The reason to browser plugin is privileged access such as out-of-domain access, read/write from local file system, and most importantly the freedom to spawn a separate worker process can be used to relieve UI process from blocking. (As a component of 90 days of Prove-of-Concept project, which successfully bid 10 million dollars deal)
- Optimize data transfer for above app by using Squashfs to reduce the payload during download, while preserving meta-data, as well as reducing decompression speed. (As a component of 90 days of Prove-of-Concept project, which successfully bid 10 million dollars deal)

SOA Developer (Co-op)

CGI Group Inc (Sept 2010 to Dec 2010)

- Java development of electronic settlement system for TD
- Developing under Spring framework, iBatis, and Oracle Database, with SOAP protocol
- Design and implement web services to be hosted under TIBCO
- Re-Design and administration of internal web site and database

Application & Database Developer (Co-op)

CIBC (Sept 2009 to Dec 2009)

- Data warehousing using Unix Korn shell
- Web site scripting with ECMA style scripts
- Sybase database development using SQL and store procedure
- Code migration from proprietary report program (Powerbuilder) to scripts.

Developer & Database Manager (Co-op)

BMO Capital Market (Jan 2009 to May 2009)

- Code and database data migration from MS Access to SQL server
- Coding in VBA for Excel using SQL API
- Server side .Net programming
- Generating Database Report using Crystal Report
- Scripting and scheduling
- Interface designing to Vista Aero like looking

Software Engineer (Co-op)

Hydro One Inc (May 2008 to September 2008)

- Developed Monte Carlo Simulator for structures' failure probability
- Weather data automatic Searcher-an-Downloader using C#
- Thorough understanding of probability and statistical distribution
- Solid programming skill using Microsoft InterOperability features
- Solid knowledge of programming with various Microsoft APIs
- Work with minimum supervision and assistance; excellent research skills

Software developer (Co-op)

AMD (September 2007 to December 2007)

- Graphic card capability implementation of video driver and Catalyst Control Center using C/C++
- Run time detective kernel debugging using Win-debug
- Peer debug, review, present codes in software staging level
- Configuration and administration of Wiki server as department wide knowledge base
- Good exposure to Unix operating system and capability with Unix commands and configuration procedures

Technology support (Co-op)

Middlefield Group (January 2007 to April)

- Greatly reduced printer and workstation failure occurrences by regularly auditing them
- Successfully installed various network equipments such as router, modem and extender in relatively short time
- Discovered several unnoticed features of digital surveillance system thus saved my employer precious time
- Coordinated with co-workers developing web pages and ensured their performance through updating and troubleshooting
- Extensively exercised my ability of troubleshooting and problem solving of various office programs and equipments

Education

BASc in Computer Engineering, Software Option

University of Waterloo
(September 2006 – 2011)

Educational Achievement

- Certificate of distinction for Euclid Mathematics Contest 2005 (Top 25%)
- Recipient of Queen Elizabeth Aiming for the Top Scholarship
- Recipient of University of Waterloo President's Scholarship
- Recipient of Toronto Kiwanis Club scholarship

Personal Interests

- Really digs works by Andrew S Tanenbaum, and Edsger W. Dijkstra
- Playing with SpritKit, SceneKit
- Setting up Alexa/HomeKit smart home
- Volunteer as skating rink coordinator