



MICHAEL CHUNG

Senior iOS / Machine Learning Engineer

Toronto, Ontario

I am a Software Developer that is interested and Artificial Intelligence. I spend my free time reading about new developments in Deep Learning and iOS development. I spend most of career as a contractor, working as a professional iOS Developer. I have around 6-7 Years professional software development experience as a whole, but 5 years iOS software development experience. More recently I have been honing my machine learning development skills.

WORK EXPERIENCE

CLEARBRIDGE MOBILE (CONTRACTOR)

Senior iOS Engineer | Feb, 2018 – May, 2019

I was a subcontractor at Clearbridge Mobile and worked At Bell Media. I spent time delivering the CraveTV 2 iOS app. This app had with roughly 2.3 million subscribers, and 400 thousand daily active users. I delivered the download feature, analytics, and various other high visibility components like accessibility. As a subcontractor I also worked on Participation a Canadian sponsored health fitness app iOS app shipped out to 40000 users.

EBLOCK (CONTRACTOR)

Senior iOS Engineer | Oct, 2018 – Feb, 2018

I help develop the Live Auction Application, worked with GraphQL API's to build a user interface. Built UI's programmatically by laying out frames, the old school way of coding UI in iOS.

NURALOGIX (CONTRACTOR)

Senior iOS AI Engineer | Feb, 2017 – Oct, 2018

I developed and implemented a working prototype of the Nura Application. The Nura application can read the blood flow under your face and make predictions about your heart rate and blood pressure. I worked on the product and core functionality of the application, created rendering pipeline and multithreaded environment to maximize frame throughput. I also worked on the feature extraction pipeline to find the relevant features from the video frames. I utilized AirBnb's Lotte animation libraries to make the design more lively. I utilized a MVVM architecture to allow a loosely coupled front end. This allowed the design to change more rapidly. I ported the machine learning model to mobile, where it could be run without a web service. I utilized Fastlane and a continuous integration pipeline to have debug builds ship to stakeholders devices. I was involved in sprint planning and feature development. I implemented Software Development Life Cycle and workflow for newly on-boarded iOS Developers, which is still used today.

INFUSION (CONTRACTOR)

Senior Consultant / Senior iOS Engineer | Mar, 2016 – Feb, 2017

I served as a consultant on TD Canada Trust's Research and Development team. I developed TD's internal chat bot application. This was done through a joint venture with Massively.ai. I saw through the full product development life cycle with Massitvely.ai and TD stakeholders. During this time I utilized a MVVM architecture to allow for quickly changing UI components, and utilized AsynchronousDisplayKit to make the user experience of the application fluid. I developed many proof of concept Apps for TD Canada Trust. I was involved in sprint planning and feature development along side stakeholders.

KIWI WEARABLES (ACQUIRED) (CONTRACTOR)

iOS AI Developer | May, 2015 – Mar, 2016

I developed a motion classification framework for iOS, that utilized the gyroscope accelerometer and hardware devices to make predictions about specific motions being performed. I assisted in developing an AI as a service platform, that allowed the business to focus efforts on b2c development. I also coordinated and developed three iOS Apps used by conference attendees of Sports Summit and Wearables Summit 2015, and a Squat Off App. I was exposed to Deep Learning and Machine Learning during this time. I helped develop classification models using basic machine learning principles.

THRIVE GAMES (CONTRACTOR)

Senior Software Developer | May, 2014 – May, 2015

I developed the chat system using sockets, and programmed the UI, in Java using the cross platform library libgdx. I ported and developed certain aspects of the iOS port of the game. I developed alongside with the founder on tools that would allow the process of getting art assets into the game quicker.

METACLOUD

NodeJS and iOS Developer | Sep, 2013 – May, 2014

I developed iOS Applications and assisted in the development of Android Applications. I quickly prototyped and developed many proof of concepts. I helped founders apply for grants and RFP's and cross communicate between technical and business. I implemented a SDLC for development of Apps and implemented agile process.

BLACKBERRY

Software Developer Advanced Rendering, Research and Development |
Sep, 2012 – Sep, 2013

I was responsible for building software demos used to present along side Blackberry 10 OS. I developed a computer vision based hand tracking API using flock of features, SIFT and Open CV. This was used for various projects internally. I assisted in the optimization of a scroll view UI element in the Cascades Framework. Software development was primarily done using C++. I assisted in creating a game pad app for the BB10 tablet.



MCMASTER UNIVERSITY

Teaching Asistant CS 1MD3: Introduction to Programming | Sep, 2009 – May, 2012
Throughout my undergraduate career, I created lesson plans and explained programming concepts to undergraduate students.

EDUCATION

MCMASTER UNIVERSITY

B.a.sc - Computer Science and Mathematics | Sep, 2008 – May, 2012
I studied computer science and mathematics and had an obsession about, how it could change the world. To be honest I would have never guessed how it did change the world back in 2008.

PROJECTS

U WALLET (DEFUNCT)

Product Owner and iOS Developer
U Wallet was an iOS app that integrated into the meal plan system at McMaster University, and helped students track meals and spending. Spectrum held a startup competition and It won peoples choice award a student startup competition. The resulting prize was \$5000.

DATABITES (DEFUNCT)

Founder | Mar, 2016 – May, 2019
Databites is a non for profit, that teaches basics of Data Science and Machine Learning to people from various background and skill sets. The mission is to make these magical processes more relatable and understandable to the average person. Also lead the Toronto Data Science using Python Group (Defunct) consisted of 1200 members.

ANIME OVER 9000 (DEFUNCT)

Product Owner and Software Developer
A mobile friendly video site built using Node.js and AngularJS. This service was scalable through load balancing and the use of nginx. Responsible for developing Node.js backend for video streaming as well as the database written with mongo db.

SKILLS

iOS Software Development	XCode	GraphQL	Rest
Socket Protocols / Protocol Buffers	Git - Bitbucket and Github	Cocoapods	
Swift 3	Swift 4	Objective - C	Javascript ES 6



Object Oriented Programming

Python

Java

C++

Docker

Deep Learning

Linux

OSX

API Development

3D Programming

Linux

CONTACT INFORMATION

Email: michael.chung@databites.ca
Telephone: (226) 988-2801
Website: <https://arenc.github.io/>