# **Ishan Virk**

Software Engineering/Minor in Commerce

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#### **EDUCATION**

## **University of British Columbia**

Sep 2012 - April 2017

Bachelor of Applied Science - Software Engineering, Commerce Minor

## Harvard Summer School, Cambridge, MA, USA

Successfully completed courses in Micro and Macro-Economics

June 2011 - Sep 2011

#### **TECHNICAL WORK EXPERIENCE**

# Parsable June 2017 – Present

## iOS Engineer

- Parsable is a procedural workflow and collaboration enterprise platform funded by Google Ventures, Anderson Horowitz, First Ventures, Kleiner Perkins and in the process of raising a series C round.
- Worked directly with clients in the Oil & Gas and CPG industries such as Unilever, Heineken, Brenntag, Shell,
   Schlumberger to architect and develop features that led to increased customer retention and 4 new customers.
- Developed enhanced input field features on the iOS platform. Used Operation Transformation technology to power the real-time role based platform such as file uploads, signature entry, photo annotation and barcode scanning using Objective C, Swift, and Thrift API.
- Implemented inter-device artificial mesh networks so industrial users can collaborate in remote locations without access to internet while maintaining data integrity through fail safe data dump mechanism increasing user-base.
- Integrated crash reporting and user telemetry into iOS platform to provide real-time analytics decreasing engineer troubleshooting time by over 50%.

# Microsoft May 2016 – Sep 2016

# Software Engineer

- Proposed a UI design to Senior Producers and then developed and integrated Gamepass video streaming into the Windows 10 NFL app which led to an increase of over 5000 new subscribed users.
- Developed feature allowing users to view all scores and statistics of archived games directly in app decreasing user bounce rate to NFL site by 30%.
- Improved the current time-shifting tool to allow state transitioning between multiple seasons and ease testing of several time-gated user features decreasing testing time for each engineer by one hour.
- Worked with back-end team to ensure data parity between Windows 10, Xbox and Sports cloud. Created more robust streaming and user authentication telemetry by integrating with Splunk to gain insight into app usage.
- Created an automated Fiddler script to allow engineers to spoof API calls and handle various HTTP error codes.

### SAP Jan 2016 – May 2016

#### Software Engineer

- Contributed to front-end development of predictive analytics and messaging features on the cloud analytics product by using JavaScript and SAP UI5 in a test driven agile environment.
- As product owner, pitched overhaul of messaging feature by collaborating with clients and UI designers. Created UI specs and delivered a development time cycle to start overhaul which has led to a 50% increase in feature use.
- Created a feature that generates suggested data visualizations based on user data and customer KPI's which led to signing on 4 major clients.
- Re-developed the cloud for analytics home page by collaborating with a team of UI designers which was then showcased at the 2016 SAPPHIRE conference.
- Decreased regression testing time for 8 engineers by 100% by automating all tests using Jasmine 2.0.

# Avanti Commerce Software Engineer

May 2015 - Jan 2016

- Led the company's Star Wars-Subway marketing campaign integration by coordinating with marketing teams and off-shore developers to create an API which increased weekly sales by over 22,000 users.
- Designed core data model changes to internationalize the platform and its menu to support 2 new countries and over 100,000 weekly users by leading 2 other engineers to execute data model changes.
- Interacted with off-shore teams and clients to document menu related requirements and wrote SQL scripts/stored procedures to constantly update the database with new products.
- Improved the efficiency of the team by developing multiple tools in Visual Studios decreasing the time spent on menu onboarding by 75%.

### Cirius Messaging Software QA Analyst

- Worked alongside the engineering team in an agile/scrum environment to test an email encryption technology and ensure quality of code through white and black-box testing.
- Developed and maintained a test suite of over 300 automated test cases and upgraded company's previous framework to make API calls with the test-suite 25% faster.

#### **TECHNICAL PROJECTS**

# **Consulting & Contracting**

July 2013 - Present

- Provided Indian retailers with merchant gateway solutions which allow them to process online payments in North America by partnering with banks such as Desjardins and TD which has resulted in annual revenues of over \$500,000.
- Developed web solutions for local businesses and performed search engine optimization to increase their online webpresence and integrated custom tools such as online scheduling and mailing lists.
- Proposed UI deck to clients and then led 2 offshore engineers to create web-app for online pizza delivery leading to an increase in delivery sales by 12%, pick up sales by 8% and a decrease in unclaimed pizza by 100%.
- Developed entrepreneurial skills by attracting clients, creating a business plan, executing development and finally
  presenting a finished product to achieve 100% satisfaction with all current customers.

#### **Foodee Driver Route Automation**

Sep 2016 - April 2017

- Worked with Foodee, a corporate food delivery startup to automate driver-order allocation and reduce allocation time from 10 hours to a few minutes using route graphing algorithms.
- Developed a Node.js API hosted in Heroku that interfaced with Google Maps API and Google Optimization Tools to calculate routes and allocations by solving combinatorial optimization problems.
- Successfully delivered project on time by strategizing a sprint based development road-map with Foodee's CTO to translate requirements into technical use cases.
- Validated product with performance and load testing using Jasmine 2.0 framework and 60% code LOC coverage.

HelpHeart App April 2016 – July 2016

- Collaborated with a team of cardiologists, physicians, UI designers and engineers to develop a solution to heart failure due to inconsistent furosemide prescription dosages.
- Developed a POC app to track the user's heart health metrics which is then used in an algorithm that will notify healthcare professionals if the patient is in danger via text and a desktop analytics application. Powered by a MongoDB backend and Twilio messaging API.
- The product was tested with heart failure patients and resulted in 4/5 correct warning notifications over the span of 4 months potentially saving the lives of 4 people.

# Social Jukebox Android App

March 2015

- Developed an android application using Java in Android Studios to establish two-way communication with a Raspberry Pi to send music preferences over HTTP protocols.
- Developed software in python that establishes a Raspberry Pi as a web server and communicates with multiple phones to accept users' music preferences and then synchronously develops a queue of preferred songs to play. The songs are then downloaded using YouTube API's and played using a VLC open source C library.
- Created a DJ board that equalized sound using ADC converters and a Gyro Accelerometer IMU.
- Worked in a team of 2 people, managed sprint board, allocated tasks and wrote weekly unit tests to maintain quality and complete the project in a timely manner.

### **TECHNICAL SKILLS**

**Software Proficiencies:** Java, C#, C, Objective C, Swift, JavaScript, HTML/CSS, SQL, Node.js **IDE/Frameworks:** Xcode, Visual Studio, Eclipse, Github, Linux, mongoDB, SAPUI5, UWP, .NET, Appium, Invision **Knowledge:** Front-end, iOS Application Development, API design, Data Structures/Algorithms, Machine Learning

### **AWARDS**

| Hacking Health Hackathon – Top 3                  | 2016 |
|---|------|
| Best UI Design - Airtel                           | 2013 |
| District Public Speaking Award                    | 2012 |
| Canadian Volleyball Competition - 2 <sup>nd</sup> | 2011 |