# TARANVEER VIRK SOFTWARE ENGINEER

## **ABOUT ME**

Software Engineer with a passion for solving challenging problems through innovative solutions



## McMaster University B. Eng. Mgmt, Software

📋 Apr 2017

Five-year program combining engineering with business



# Udacity Deep Learning Nanodegree

iii June 2018
Neural Networks and Al



#### **PROGRAMMING**

Node.js TypeScript
Java Python
HTML5 / CSS3 / JS (Angular)
SQL & NoSQL Databases

### DevOps

Kubernetes Travis LogDNA Sysdig NGINX New Relic

### PERSONAL PROJECTS

#### DROIDSMS.COM

- Pioneered a solution to send SMS from an Android App via Web Interface / REST API
- Saved over \$300 per month for MacSMS compared to Twilio

#### MACSMS.ME

- Created an innovative solution to provide real-time transit and weather information for City of Hamilton via SMS
- Used by 1500+ users daily

#### CONTACT ME

taranveer@virk.cc1-289-937-2969

virk.cc virkt25

#### **WORK EXPERIENCE**

### **IBM Cognitive Solutions**

Markham, ON

Staff Software Engineer
Oct 2018 – Present

- Architected multiple cloud native applications from the ground up using a microservice architecture delivering over 99.99% uptime
- Optimized database, backend and UI performance to improve response time 5x
- Designed a CI/CD pipeline to manage security, testing and automated deploys
- Managed a multi-tenant Kubernetes cluster and shared services for logging, monitoring, automated SSL certificate renewal, self-healing tools, etc.
- Delivered features and solutions end-to-end spanning the entire stack using the latest technology stack

#### **IBM Cloud**

# Open Source Software Engineer June 2017 – Sep 2018 iii

Markham, ON

Developed and maintained LoopBack — A highly extensible Node.js and TypeScript framework for building REST APIs and microservices

- Engaged and collaborated with community users and maintainers by answering questions, reviewing code, writing documentation, blog posts, and tutorials
- Involved in all aspects of a rewrite and GA of LoopBack 4 core, CLI, database connectors, extensibility, OpenAPI integration, developer experience, etc.
- Assessed and remedied security vulnerabilities as the project security focal
- Incorporated IBM Watson Discovery to power the documentation search site

#### **IBM Security**

# Application Security Engineer (Student on call) Sep 2016 – May 2017

Markham, ON

Built a reusable UI component library for IBM Security Cloud products

#### IBM Security (Extreme Blue)

# Application Software Engineer May 2016 – Aug 2016

• Markham, ON

IBM Extreme Blue is an elite internship program that combines world-class talent, technology and business innovation

- Designed, architected and developed an innovative prototype for Application Security Industry to automate processes
- Developed a cognitive platform to assess application risk and provide personalized advice using IBM Watson, Bluemix, Cloudant, and Apache SPARK
- Delivered IBM Executives a business plan to commercialize the prototype into a solution targeting a \$2 billion market opportunity

#### **IBM Commerce**

# Full-Stack Web Application Developer (Student on call) Sep 2015 – Apr 2016

Markham, ON

- Architected and developed a tag based, searchable icon repository to allow for easy creation, management and consumption of icons at IBM
- Implemented a responsive UI along with a scalable Node backend for IBM Drink
   an AI system that recommended & ordered drinks based on personality
- Developed an animated analytics board to display live metrics and engage clients

#### **IBM Analytics**

# Web Application Developer

May 2014 - Aug 2015 iii

Markham, ON

- Built WCAG 2.0 AA accessible, pixel perfect front-end user interfaces for IBM dashDB and IBM Data Server Manager
- Improved UX in both products by introducing responsive web elements
- Optimized site performance to reduce load time by over 2 seconds