# Alec Di Vito

## Skills

- o Proficient: Java, Typescript, Angular, Rust, Golang, React, HTML, Node.js, SCSS, SQL
- o Familiar: C++, C#, C, Swift, Python, Kotlin, IOS, Android, PHP
- Tools & Libraries: Azure, AWS, GCP, Kubernetes, Docker, Jenkins, Bash, Linux, MacOS, GitHub, Git, Postgres, Redis, .Net Core, Redux, RxJS, JIRA, Confluence, Adobe XD, Figma, Web Assembly (WASM)

# Work Experience

# FullStack Developer at Royal Bank of Canada (RBC) full-time May 2021 - Present

- o Implementing frontend features: progress banner for payments and HTTP polling for payment status
- o Developing proof-of-concept search for finding business payees from multiple payee databases
- o Effectively debugging, identifying, and fixing bugs on the frontend: loading issues, correcting content, styling bugs
- o Creating proof-of-concept application which automates pull requests into Github repositories when content designers create translation changes. Application would attempt to find translation files inside of repository
- o Overall team goal: build RBC next generation business payment portal utilizing Angular and Backbase
- o Leveraged knowledge in Angular 8, RxJS, Typescript, Java, Kotlin, Spring Boot, Vue 3

# Cloud Developer at Royal Bank of Canada (RBC) full-time Jan-Aug 2020

- o Designed, architected, built and deployed Kubernetes cronjob that shuts down development machines during non-workday hours, which saved the team \$5,000+ a month in Azure cloud on-demand compute costs
- Added functionality to RBC Kubernetes operator onboarding and deployment CRDs for RBC specific workloads.
   Specifically added support for Kubernetes Job, CronJob, and Horizontal Pod Scaling CRD
- Designed, architected, built and deployed React frontend to allow engineers quick access to the current state of deployed RBC applications on different AKS clusters which helped teammates reduce team debugging time
- o Built multiple deployment and test pipelines with Jenkins for frontend, backend and cronjob applications
- o **Overall team goal**: build RBC's application deployment pipeline giving bank developers access to Azure cloud services such as Azure Cache and Azure SQL through AKS (Azure Kubernetes Service)
- o Leveraged knowledge in Azure, Docker, Kubernetes, Jenkins, Bash, Golang, Java, React, Typescript, Python

# Software Developer at Center for Mobile Innovation part-time Jan-Apr & Sep-Dec 2019

- o Researched fall detection for elderly care with PointClickCare; developed emotional recognition model for Encore
- o Developed solution with 80% accuracy to estimate fall detection utilizing human poses and machine learning
- o Created real-time Facial Expression Classifier Emotion detection model with accuracy of 75%
- o Communicated with stakeholders and presented final project to PointClickCare and Sheridan during at showcase
- o Leveraged knowledge in Python, TensorFlow 2, Matlab, Node.js, C++ and Typescript

## Digital Innovation IS Developer at Maple Leaf Foods full-time Apr-Aug 2018

- Developed IOS mobile application that was deployed to 175 FSQA managers, supervisors and technicians which allowed them to spend significantly more time (~25%) on production floor
- o Developed backend application in .Net MVC 5 to support IOS mobile app, deployed on Azure
- o Reduced query times by optimizing Entity Framework queries, enabling faster searches over multiple table joins
- o Leveraged knowledge in Swift, IOS, .Net MVC 5, TypeScript, VSTS, and Azure

## **Education**

#### **Honours Bachelor of Computer Science**

Sheridan College, Oakville, ON (2019-2021) - Anticipated Graduation Date: December 2021

#### **Advanced Diploma in Software Development and Network Engineering**

Sheridan College, Oakville, ON (2015-2018)

# **Major Software Projects**

Wasm Compute (Personal Project) - read more

- o Web platform that runs custom web assembly functions in the cloud
- o Developed everything from backend lambda logic, end user framework and cli that compiles project and uploads the project to the Wasm Compute platform
- o Used AWS and terraform to deploy infrastructure, software onto EC2 instance and binaries inside S3 bucket
- o Leveraging knowledge in Rust, WASM, Golang, React, Typescript, AWS, Terraform, Postgres, Github, Nginx

## **Budgetise, a Budgeting application for Franchise Owners** (Capstone Project) Jan-Dec 2017 – <u>read more</u>

- o Collaborated with a team of four to produce a solution to a franchise owner's problem
- o Designed and developed a budgeting application with features like live updating and change history
- o Leveraged knowledge in Angular 2+, Typescript + Node.js, Express, Postgres, Digital Ocean, Nginx, Auth

## **Hackathons**

RBC AmpHack Igloo Connect - Jan 10-12th 2020 - github

- o Placed 3<sup>rd</sup> overall competing against 14 teams with idea *Igloo Connect* which helps immigrants come to Canada
- o Helped by leading team in brainstorming and creating React tech demo to be used inside of presentation
- o **Leveraged knowledge** in React, Typescript, Presentations

RU Hacks Work Spaces - May 15-17th 2020 - devpost

- Built in the browser, users could connect to each other over WebRTC and talk to each other over the internet. I
  worked on developing the game canvas as well as the WebRTC connection between the server the clients
- o Leveraged knowledge in Typescript, Nodejs, Phaser, Socket.io (Web Sockets), Express, WebRTC, GCP

Starter Hacks StreamON - Jan 10th-12<sup>th</sup> 2020 - devpost

- Built a google chrome extension that would connect to a NodeJs server using web sockets. Once connected to the server, users can trigger an Alexa voice action to move a stream from their phone to their computer
- o Leveraged knowledge in JavaScript, Chrome extension, Nodejs, Socket.io (Web Sockets), Express, AWS

# Minor Software Projects

Personal Website - github / website / read more

- o Developed in Gatsby, using markdown to generate content using BEM styling methodology for CSS
- o Leveraged knowledge in GatsbylS, GraphQL, Javascript, Git, Markdown, Adobe XD

# Bomb Finder (Minesweeper Clone) - github / website / read more

- o A minesweeper clone with added features to save games, save statistics as well as customize look and feel of game
- o Leveraged knowledge in Typescript, React, IndexDB, Canvas2D, Git

# **Volunteering and Extracurriculars**

Hackademics Vice President, Fall 2020-April 2021

- o Secured \$12 000 support from RBC, Sheridan Sustainable Department, Sheridan Student Union for Hackville 2021
- Lead team of 4 in developing <u>hackville.io</u> and <u>hackademics.club</u>. Leading team to develop backend applications to be deployed on digital ocean to support club functions
- o Determining the direction of club engagement, development and virtual participation. Introduced 75+ people to hackathon culture.

# **RBC Student Leader, Summer 2020**

o Planned games and encouraged community involvement between students at RBC

#### Hackademics, September 2019-April 2020

o Secured \$1,000 in funding from RBC and deploy and maintain hackathon site for Hackville 2020