# Marco Guida

# Full-Stack and Mobile App Developer

Montreal, Canada

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#### Skills

- Full-Stack Development
- Mobile Application Development
- React Native
- Node.js
- JavaScript

- Java
- AWS
- MongoDB
- UI/UX Design
- PostgreSQL
- Python
- Machine Learning
- Git
- Linux, macOS, Windows
- Sketch

# **Work Experience**

### **Angular Front-End Developer Intern**

May 2020 - Aug 2020

#### **Agility PR Solutions**

- Started my internship working on front-end development of web applications using Angular for Agility's targeting and monitoring platform, which included media briefings, search features, and graphical analysis tools (e.g. maps, charts).
- Within a month, my responsibilities expanded to development across the full tech stack, which allowed me to contribute to robust RESTful API services made with Java as well as the architecture of a MySQL database.
- Took full control of the implementation of brand new platform features, as I developed both their back-end and front-end pieces from start to finish.
- Developed tools to improve the workflow of the back-end teams, which included Jenkins scripts for automated back-end deployment that reduced deployment times of new codebase changes from 30 minutes down to 5 minutes
- Participated in an agile work environment through Atlassian's Jira project management tool.

#### Founder

Feb 2019 - Sep 2019

#### Joyleaf

- Launched Joyleaf, a strain finder app on iOS and Android, that lets users discover over 2,000 unique marijuana strains from around the world.
- Led a team of three other developers, who primarily worked on front-end development and algorithm design for our REST API
- Used Xamarin Forms, a .NET cross-platform UI framework, to deliver a smooth, native, front-end experience for both iOS and Android, with a C#-shared codebase to boost development workflow.
- Developed the back-end with Firebase in order to authenticate users, store app data, and host a REST API.
- Used Sketch and Photoshop to design all the visual components, including the app icon, splash screens, promotional media, and all the glyphs in the app.

#### React Native Front-End Developer Intern

Jul 2019 - Aug 2019

#### MG2 Media

- Led the development of the PMI Chapter Event Scanner mobile app available on the App Store and Google Play Store for Project Management Institute (PMI), a global client of MG2 Media.
- The app enables PMI event hosts to seamlessly check-in guests with a QR code scanner and spans 40 PMI locations across North America, from Montreal to Hawaii.
- Used React Native, an open-source mobile application framework, to develop the front-end for both iOS and Android. I also worked with Redux to properly manage application state, and communicated with back-end teams to facilitate communications with the server via a REST API.

#### Bombardier

- Developed the high-level logic that determines whether a Bombardier aircraft is in distress according to aircraft flight parameters.
- Led meetings with specialists to obtain expert advice on Bombardier models and aircraft systems in order to optimize the logic.
- Tested the logic to assess its accuracy, documented my findings, and presented the logic and test results to management.
- Worked with colleagues to get them acquainted with the ADT function in order to properly transition my work prior to my departure and prepare the logic for the later stages of its development/implementation.

## Education

#### **B.S. Computer Science**

2017 - Present

McGill University
3.58 GPA

# **Projects**

- Developed a convolutional neural network (CNN) that identifies up to 5 digits in an image from a modified MNIST dataset. Our model resulted in a test accuracy of 99.523% on over 14,000 images in a Kaggle competition.
- Implemented multi-class logistic regression (with softmax) from scratch, recorded its training and validation accuracy, and compared its performance to that of other common classification algorithms.
- Implemented supervised learning, via both k-nearest neighbors and regression tree models, to examine whether Google search trends for various medical symptoms are related to COVID-19 hospitalizations. Concluded that supervised learning can be used to predict COVID-19 hospitalizations.
- Developed a Pentago-Swap (variation of the Pentago board game) game playing Al that uses Monte Carlo Tree Search to statistically pick the best move for the Al to play. The Al agent is written in Java and uses a mix of strategies depending on the phase of the game (e.g. early open board). It always beats me!

