# Rafit Jamil

SOFTWARE ENGINEER

### CONTACT

Website rafit.me

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### SKILLS

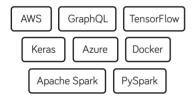
Languages

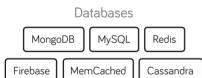


### Frameworks



#### Tools





## **EDUCATION**

University of Waterloo 2018 - Present

### Software Engineering, B. SE.

Colonel Hugh Heasley Engineering Scholarship (\$10 000)

President's Scholarship of Distinction (\$5 000)

### WORK EXPERIENCE

Maple Leaf Sports & Entertainment (MLSE)

# Data Scientist

- Engineered millions of frames of player, scouting and event data for Toronto FC and the Toronto Raptors by creating **Python** scripts for **MySQL** and **Azure Data Lake** interactions
- Created algorithms with Python, SciKitLearn and more to identify and classify line-breaking passes, dribble heat maps and other insightful analytics for coaching staff
- Worked on the **Flask** backend, solving **ADL** data-streaming latency issues with server-side events to perform algorithmns in real-time and visualize results on a **D3.js** frontend server
- Built and trained a dual deep-learning model, an Auto-Encoding model that feeds into an RNN/LSTM model, using Keras, to create first-ever match state predictor in MLS, allowing tracking data to predict and classify specific event sequences and complex plays
- Trained Big-Data ML models on Databricks with Apache ML, TensorFlow and PySpark

The Bliss Company

June 2019 - August 2019

May 2019 - August 2019

# Full-Stack Developer

- Created progressive web app for herbal medicine pick-up with 300+ beta users
- Designed and tested responsive frontend with React, Redux and Material UI
- Developed in TypeScript and introduced RxJS for backend REST calls and interactions to improve debugging and readability of code-base
- Used MongoDB as database, Firebase for OAuth and Algolia API as search-engine API
- Built Flask micro-server for server-side data collection and analytics

Action CIND July 2016 - August 2018

### Lead Web Developer and Graphic Designer

- Led 8 designers/developers to create and maintain charity website using **Sketch**, **HTML/CSS**, **Bootstrap** and **Javascript**
- Used PayPal and Mail Chimp API with MongoDB and Node for donations and mailing-lists

Festive Currents

July 2017 - August 2018

### Multi-Media Developer

- Rebuilt website (18 000 visits/yr) with HTML/CSS, JavaScript, Bootstrap and jQuery
- Built interactive, multi-player games such as Simon-Says, Bingo, Connect Four and more with Socket.IO with Node and OpenCV with Flask for 300+ children at opening festival

### **PROJECTS**

Density 💭

May 2019

### **Population Density Wifi-Tracking -** RU Hacks Winner

- Programmed Arduinos to collect wifi-packets and triangulate people positions with C++
- Built a Node.js and React app to show real-time population density heatmaps and analytics

FrameAR (70

June 2019

### **3D AR Version Control System -** ENG Hacks Winner

- Created a custom version-control backend with MongoDB, SpringBoot, JS and Slack API
- Developed a Swift app with AR-Kit to visualize models, commit differences and comments

Gaze 🔼

August 2019

# Real Time Gaze Tracking and Analytics

- Designed a gaze tracking algorithm through ML and pupil tracking in Python and OpenCV
- Analyzed user-gaze on online adverts using a Flask server with Cassandra and Keras
- Others: Pseudo, Fashionably, Hlp, FlipBook, Edges, Tread, Echo, Pyden