Rafit Jamil

SOFTWARE ENGINEER

CONTACT

- rafit.me
- rafit.j
- rafitj
- rafit.jamil@gmail.com

SKILLS

Languages

C | C++ | Python | Swift
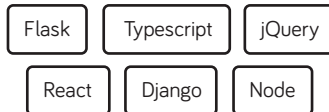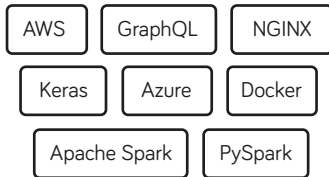SQL | HTML & CSS | Javascript

Frameworks

Flask | Typescript | jQuery
React | Django | Node

Tools

AWS | GraphQL | NGINX
Keras | Azure | Docker
Apache Spark | PySpark
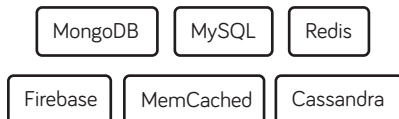
Databases

MongoDB | MySQL | Redis
Firebase | MemCached | Cassandra
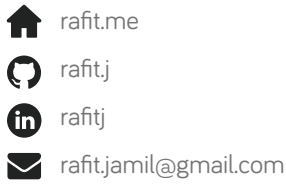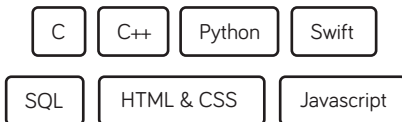
EDUCATION

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)   May 2019 - August 2019
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**, **MatPlotLib**, **SciKitLearn** and more to identify and classify line-breaking passes, dribble heat maps and other insightful analytics for coaching staff
- Developed a **Flask** backend, implementing my algorithmns with server-side events to stream and process **ADL** data in real-time and visualize it using a **D3.js** frontend server
- Built and trained a connected 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 us to use tracking data to predict and classify specific events and complex plays
- Designed **Big-Data** algorithmns and models on **Databricks** with **Apache ML** and **PySpark**

The Bliss Company   June 2019 - August 2019
Full-Stack Developer

- Developed progressive web app for herbal medicine pick-up with 300+ beta users
- Designed and tested responsive frontend with **React**, **Redux** and Material UI
- Introduced **Typescript** for backend REST calls and interactions to improve debugging and readability of code-base
- Used **MongoDB** as primary database with **Algolia API** to optimize search query
- 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   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 algorithmn 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