# Aymen Rumi

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## **Legal Status**

Dual Citizen (United States / Canada)

## **Work Experience**

# CAE Inc. – Al Data Analyst

# Montreal, Canada | May 2021 – Current

- Key member of CAE Rise (CAE's data driven training system) on several projects in collaboration with UX/UI designers, developers, subject matter experts (SMEs) and product managers. Helping transform analytical insights into actionable solutions.
- Involved in statistical consulting with clients for semiannual reports, reconstruction of RISE analytics web portal with Python (Plotly Dash), ReactJS, Cosmos DB, and Rise related Azure Cloud infrastructure.
- Authored internal Python package to simulate simulator mock data for different aircraft engines according to management and sales requirement. Simulation performed via sampling with combinatorial constraints identified via Monte Carlo Optimization.
- Created proof of concept Plotly Dash applications for Singapore Airlines Biometric Analysis and Hard Landing Causal Analysis.

# 7Square (Acquired by Repliers) – Machine Learning Engineer (Part Time)

## Montreal, Canada | May 2020 – January 2021

- Built platform to provide real estate analytics for professionals across the Toronto real estate market through REST APIs with Python (Flask) and SwaggerHub.
- Set up ETL pipelines to get new daily listings which included analyzing, cleaning, formatting, model preprocessing datasets.
- Implemented machine learning models for automated valuation and rent estimation of properties.

## <u>CAE Inc.</u> – Software Developer Intern

# Montreal, Canada | May – August 2018

• Implemented automated system testing features to CAE's Simfinity virtual simulator with C# in an AGILE development team using Git version control.

#### Education

# Concordia / University of Montreal

Montreal, Canada | 2021 – Current

Independent Graduate Student

• Taking graduate courses part time (Sports Analytics, NeuroImage Computing, Computer Vision, Data Science, Deep Learning)

### McGill University

Montreal, Canada | 2015 – 2020

Bachelor of Science (BSc): • Major - Computer Science • Minor - Statistics

#### Relevant Skill & Graduate Coursework

#### Skills

## **Programming:**

<u>Proficient:</u> • Python • R • MATLAB • Java • SQL • Linux | <u>Intermediate</u>: • HTML • CSS • JavaScript

<u>Libraries / Tools:</u> • Pandas • Scikit-Learn • Keras • TensorFlow • PyTorch • Plotly Dash • ReactJS • Flask • AWS • Azure

<u>Languages</u>: • English • French • Bengali

# **Graduate Courses**

Computer Science: • Applied Machine Learning • Brain-Inspired Artificial Intelligence • Neuroimage Computing • Computer Vision

Statistics: • Honors Regression and Analysis of Variance • Intro to Time Series Analysis • Design of Experiments • Sports Analytics

**Highlighted Projects** – for more please visit my Portfolio at: <u>aymenrumi.github.io</u>

## **ML Medical Application**

- Built CRUD web application using HTML, CSS, JavaScript, Python (Flask), AWS (DynamoDB, RDS) deployed on AWS EC2 with Docker
- Application allows users to predict medical failures, predict diagnosis, & view medical analytic dashboards made with Plotly.
- Machine learning models trained & tested using Python-Scikit-Learn & TensorFlow (random forest & convolutional neural network)

#### **Insider Trading Live Analytics**

- Built a real-time streaming ETL pipeline, using Apache Kakfa with automated scheduling using Airflow for insider trading activity.
- Data is extracted real-time through web scraping with Selenium, loaded into AWS Redshift and updated on a Tableau dashboard.