

# ELIJAH CAVAN, MSC.

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## PROFESSIONAL EXPERIENCE

### Sports Data Science Intern

#### Stathletes & Canada Soccer

Oct 2021 – Ongoing    Burnaby, BC

Technologies: Python R Huroku Git

- Create application to facilitate scouting and roster management
- Build metrics and models using player tracking data
- Communicate results to various team leaders

### Data Scientist

#### SynaptIQ

March 2020 – Sept 2021    Waterloo, ON

Technologies: Python React JS Django Huroku Git

- Research and experiment with key metrics to present to clients
- Calculate and store these metrics to the Database (Django)
- Create visualizations of the key metrics and implement these visualiations on the Client side of the application
- Develop and test models to predict future test performance
- Implement and test NLP model to summarize text and create multiple choice questions

### Jr. Data Scientist

#### Backr

October 2020 – April 2021    Kingston, ON

Technologies: Python GCP SQL Data Studio Git

- Transfer data from Google Cloud Storage to Google Big Query
- Query data from Google Cloud Storage using Google Big Query
- Create and present dashboards to visualize key metrics for clients
- Create prioritization algorithms to sequence client data
- Develop and test ML/Neural Net to predict client performance

### Data Analyst

#### Loblaws Companies Limited

April 2020 – April 2021    Brampton, ON

Technologies: Python SAP SQL Microsoft Excel

- Query data from SQL database and merge relevant tables
- Automate business tasks through python scripts and test outputs
- Examples: send emails to superiors using python, merge xls. documents from shared drive, streamline xls. documents using updated data
- Present project updates to business leaders
- Ensure data quality and triage data issues to the correct department

## EDUCATION

### Bsc. Mathematical Physics

#### University of Waterloo

Sept 2013 – Mar 2017

Specialization: Astrophysics

### Msc. Mathematics

#### Wilfrid Laurier University

Sept 2017 – Jan 2019

Specialization: Dynamical Systems

### Quantum Stream

#### Creative Destructive Lab

July 2021 – Sept 2021

Specialization: Quantum Computing

### Msc. Statistics

#### Simon Fraser University

Sept 2021 –

Specialization: Sports Analytics

## TECHNICAL SKILLS

Python	●●●●●●
Maple	●●●●●●
SQL	●●●●●●
R	●●●●●●
JavaScript	●●●●●●
Spark	●●●●●●
Excel	●●●●●●
GCP	●●●●●●
Machine Learning	●●●●●●
Mathematical Modelling	●●●●●●
Data Cleaning	●●●●●●
Flask	●●●●●●
Statistical Anlaysis	●●●●●●
MongoDB	●●●●●●

## TOP PERSONAL PROJECTS

Note: The repositories for my major projects are accessible through my GitHub or my Portfolio Website.

### Big Data Bowl

#### NFL Competition

📅 Sept 2021

📍 Burnaby, BC

Technologies: Machine Learning Big Data Python R

- Normalized tracking data and added new features
- Developed ML models to predict conditional density of yards remaining
- Evaluate and compare players and teams

### NFL Logistic Regression Model

#### Kaggle Project

📅 December 2020

📍 Toronto, ON

Technologies: Python SKlearn Pymc3 PyTorch

- Developed classification model to predict first downs based on a number of features
- created multiple models: Bayesian logistic regression, PyTorch Model, LGB model, Decision tree model
- Assessed the accuracy of each model (95% accuracy for Bayesian model)

### Quantum Computing Hackathon & Cohort Projects

#### Creative Destruction Lab

📅 July 2021

📍 Toronto, ON

Technologies: Python Qiskit Julia NLP Monte Carlo

- Compared classical algorithms to the quantum counter part
- Found solutions to optimization problems (NP hard) using Deep Learning & ML; studied the quantum advantage of quantum computers
- Focused on both technical and business aspects for each project
- Finished top 3 in 3/4 Cohort projects. Finished 4th for the Hackathon

### Animal Classification Model

#### Udemy Project

📅 April 2021

📍 Brampton, ON

Technologies: Flask Keras Tensorflow Huroku HTML

- Developed deep learning classification model hosted on Huroku
- Upload an image and the model returns a percentage for each prediction

## LIFE QUOTE

*"I was born not knowing and have had only a little time to change that here and there." - Richard Feynman*

## EXTRACURRICULAR

### The Eli Cavan Project

#### Podcast

📅 June 2020

📍 Toronto, ON

#### Medium Contributor

#### Blog

📅 April 2021

📍 Toronto, ON

## RECOMMENDATIONS

"...is never daunted by new challenges and uses his creativity and resourcefulness to accomplish his tasks"

"...has stood out with his first-class creative-thinking, attention-to-detail, and productivity"

"...strong technical skills, excellent communication abilities, and overall strong work ethic"

"...He is extremely dedicated, passionate, and intelligent... Elijah's individual work has been well recognized around the world"

"...went above and beyond expectations and was an excellent addition to our team."

"He has an uncanny ability to map the world into mathematics and code, leveraging a multidisciplinary toolbox to overcome barriers"

## AWARDS

- Laurier Graduate Scholarship
- Tom Bertzi Campus Citizen Award Nominee
- Simon Fraser Graduate Scholarship
- 3 time Hackathon award winner
- Laurier Work-Study program internship
- Teaching award from Princeton Review