

B. Fraser Walker

Hedge Fund Analyst, Data Scientist

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Data scientist with an interest in NLP and machine learning. MSc. in Mathematics obtained from McMaster University in summer 2018. Related academic and work experience include data visualization, R Shiny app development, web page development, unsupervised and supervised ML algorithm training and deployment. Well versed in R, Python, T-SQL languages.

Relevant Work Experience

- Sept 2018 - **Data Scientist**, *Polar Asset Management Partners Inc.*, Toronto, Ontario.
Present Focused in the risk arbitrage strategy on a predictive analytics project. Designed and administered a proprietary SQL Server database of merger and acquisition data. Created and maintained proprietary datasets about M&A transactions using Bloomberg, CapIQ, and ArbJournal data providers. Developed statistical models in R and Python to predict and analyze the probability of M&A deals closing and deal duration using basic (logistic regression, generalized linear models) and more advanced (random forest, naive Bayes, support vector machines) machine learning techniques.
- Jan 2017 - **Junior Researcher**, *Employment and Social Development Canada*, Ottawa, Ontario.
May 2017 Data scientist position in Service Research. Projects involved researching machine learning techniques as they apply to Natural Language Processing (NLP) and text mining. Clients and data sources included My Service Canada Account and Job Bank. Programming done mainly in R and Python. Other projects include data analysis for OAS and GIS uptake and identifying client demographics taken from Statistics Canada tax filer data.

Education

- Sept 2017- **MSc. Mathematics**, *McMaster University*.
August 2018
 - GPA: 3.87 out of 4
 - Major research project, "Investigating the Keen model with exogenous shocks" with supervisor Dr. Matheus Grasselli. [Here](#)
 - MATH 6FM3 Financial Markets and Derivatives: A+
 - STATS 780 Data Science: A+
 - MATH 701 Algebra I: A
 - ECE 710 Engineering Optimization: A-
- Sept 2013 - **Honours BSc with specialization in Mathematics**, *University of Ottawa*.
Dec 2016
 - Graduated Magna Cum Laude
 - Completed courses in a variety of fields within the math department, including statistics, data science, and applied math as well as pure math
 - MAT 4378 Categorical Data Analysis in Bio-Statistics: A+
 - MAT 3375 Regression Analysis: A+
 - MAT 3120 Real Analysis: A+
 - MAT 3341 Applied Linear Algebra: A

Academic Awards and Scholarships

2017 **The Milos Novotny Fellowship Scholarship - McMaster University**
Award intended primarily to encourage promising graduate students in Analysis

2015 - 2017 **Dean's Honour List, Faculty of Science - University of Ottawa**
Awarded to students maintaining an annual grade point average above 8.0

Academic and Community Service

2017-2018 **Teaching Assistant**
First year calculus, as well as upper year math courses at McMaster University. Duties included grading assignments and tests, invigilation, and assisting large groups of students in the math help center

2014 **Student Mentor**
University of Ottawa. Led weekly sessions for international students designed to help acclimate them to a new environment