

Faraz Ahmadi

M.Sc. · COMPUTATIONAL SCIENCE AND ENGINEERING

Ontario, Canada

✉ faraz.ahmadi96@gmail.com | 🏠 farazahmadi.github.io | 📄 farazahmadi | 🌐 github.com/farazahmadi

Education

McMaster University

Hamilton, ON

M.Sc. COMPUTATIONAL SCIENCE AND ENGINEERING - CSE IN BUSINESS

Sep. 2019 - Sept. 2021

- Relevant Courses: Marketing Analytics, Data Science
- Supervisor: Manaf Zargoush, Degroote School of Business

Sharif University of Technology

Tehran, Iran

B.ENG. ELECTRICAL ENGINEERING - BIO-ELECTRIC

Sep. 2014 - Jun. 2019

- Relevant Courses: Pattern Recognition, A.I. and Biological Computation, Data Structures and Algorithms

Work Experience

Degroote School of Business, McMaster University

Hamilton, ON

RESEARCH ASSISTANT

Sep. 2019 - Present

- Data Analytics and Machine Learning on Electronic Health Records (EHR) such as the National Ambulatory Care Reporting System (NACRS), Discharge Abstract Database (DAD) from the Canadian Institute of Health Information (CIHI), and Canadian Longitudinal Study on Aging (CLSA) survey-based data sets
- Data wrangling, Data Visualization and Predictive Modeling in R/Python
- Preparing Markdown reports and presenting to the interdisciplinary research team

McMaster University

Hamilton, ON

TEACHER ASSISTANT

Sep. 2019 - April 2021

- Courses: Business Data Analytics, Applied Statistics for Business, Calculus, Probability and Linear Algebra
- Tutoring students in Data Analytics, Python and Java Programming

Skills

Programming Languages R, Python, SQL, Java, SAS, Matlab, C/C++, Shell Script

Data Wrangling Tidyverse, Pandas, Numpy

Machine learning tools H2O, Scikit-learn, Caret, Keras, Tensorflow

Data visualizations ggplot2, R shiny, Plotly, FlexDashboard, Seaborn

Document Preperation R Markdown, Jupyter Notebook, LATEX, Word, Excel, Powerpoint

Languages English (fluent), Farsi (native)

Operating Systems Linux, Windows

Projects

Machine Learning Predictions of Alternate Level of Care (ALC) in Canada: From Emergency Department to the in-Hospital Stage

MASTER'S THESIS

Jan. 2021 - Sept. 2021

- Preparing massive EHR data with more than 35 million observations in SQL/SAS
- Data Cleaning, Feature Extraction/Engineering, Imbalanced classification, Re-sampling techniques, Selecting performance measures, Generalized Linear Models, Random forest, Gradient boosted models, Feature importance, Providing analytical insights

Customer Segmentation on the Ontario population for RBC Insurance

COURSE: MARKETING ANALYTICS (MBA)

Dec. 2020

- Used data from CAMH and Environics Analytics to identify the segments who are facing a decline in mental health during COVID-19
- Practiced teamwork in a full-scale data science project and presented results as a team of 4 members to RBCI executives
- Used a wide range of analytical methods to produce knowledge from both data set

Early Mobility Limitations and its Characteristics in Older Adults in Canada

GRADUATE RESEARCH

Jul. 2020 - Present

- Preparing, transforming and cleaning a large survey-based data set with over 3000 variables
- Using R Markdown to produce insightful reports
- Meeting regularly with domain experts in the cleaning process

For complete list of projects visit <https://farazahmadi.github.io>

Volunteer Activities

Corporate Relations Coordinator

McMASTER ARTIFICIAL INTELLIGENCE SOCIETY

Hamilton, ON

July 2020 - Apr 2021

- Building new relationships with corporations and maintaining current external network

Wellness Peer Educator

STUDENT WELLNESS CENTER, McMASTER UNIVERSITY

Hamilton, ON

Aug. 2020 - Aug. 2021

- Promoting health among students by organizing events and workshops

Volunteer Host

TEDxTEHRAN 2019

Tehran, Iran

Jun. 2019

- Part of a team organizing the most renowned TEDx event in Iran with +2000 attendees
- Practiced Team Work and Effective Communication with an extremely professional team

Event Co-Organizer

BOX STARTUP FACTORY, SHARIF UNIVERSITY OF TECHNOLOGY

Tehran, Iran

Mar. 2019 - May 2019

- Organizing multiple Events with a Business Theme and Preparing Panel Discussions
- Public Relations and Marketing Coordinator

Honors & Awards

2019 **M.Sc. Fellowship and Full-Scholarship**, McMaster University

Hamilton, ON

2014 **Ranked 88**, out of more than 200,000 participants, National University Entrance Exam

Tehran, Iran

2014 **Member**, National Elite Foundation

Tehran, Iran