# HAMED HELALI

hamedhelali.github.io 8 Eglinton Ave. E, Toronto, ON. M4P 1A6 (647) 685-6936 \$\display\$ hellali.hamed@gmail.com

#### **HIGHLIGHTS**

Equipped with advanced statistical modeling methods (e.g. mixed models, longitudinal data analysis and GLMs)

With hands-on experience in programming with Python and R

Proficient in utilizing Python data science packages (e.g. Numpy, Pandas and Scipy)

Knowledgeable in Bayesian modeling and inference methods

Familiar with the research literature on model selection methods

#### **EDUCATION**

# York University, Toronto, ON

January 2020 - December 2020

M.A. in Mathematics and Statistics (GPA: 8.75/9.00)

Survey paper: Model selection methods in deep neural networks and SVM models

# Sharif University of Technology, Tehran, Iran

Sep 2012 - June 2015

Master in Business Administration (GPA: 17.26/20)

## Sharif University of Technology, Tehran, Iran

Sep 2008 - June 2012

B.Sc. in Industrial Eng. (GPA: 17.76/20)

## COURSE PROJECTS

# Development of a spelling correction algorithm using Bayesian modeling

May 2020

Implemented in: Python

A corpus-based spelling correction algorithm was developed using Bayesian inference.

# Pricing Asian options using quasi-Monte Carlo method

April 2020

Implemented in: Python

A performance comparison was done among Monte Carlo simulation and quasi-Monte Carlo simulation using Sobol and Halton sequences.

## Customer churn prediction

April 2020

Implemented in: R

A logistic regression classification model was developed and its hyper-parameters were tuned to get the desired level of sensitivity.

### COMPUTER SKILLS

General purpose languages Scientific programming languages Probabilistic programming languages

Database management languages

Reporting & presentation tools

Python (Expert), C++ (Familiar) R (Expert), MATLAB (Familiar)

Stan (Intermediate)
SQL (Intermediate)

R Markdown, Jupyter notebook, LATEX, MS Office

#### COURSE HIGHLIGHTS

**Graduate Courses** 

Applications of Mixed Models: A<sup>+</sup> Bayesian Statistics: A<sup>+</sup>

Generalized Linear Models: A<sup>+</sup>
Stochastic Processes: Fall 2020
Advanced Numerical Methods: Fall 2020
Advanced Numerical Methods: Fall 2020
Modern Optimization: Fall 2020

Time Series Analysis: Fall 2020

**Undergraduate Courses** 

Computer Programming (C++): 19/20 Probability Theory: 16.9/20 Engineering Statistics: 18/20 Regression Analysis: 16.9/20 Simulation and Statistics: 18.3/20 Linear Algebra: 17.4/20

Operations Research I: 18/20 Operations Research II: 17.2/20

Non-academic Courses

Deep learning specialization by deeplearning.ai

## ACADEMIC EXPERIENCE

# Teaching Assistant, York University

Applied Calculus II, Integral Calculus, Business Mathematics, Linear Algebra

# WORK EXPERIENCE

Growth Manager

Cafe bazaar, Tehran, Iran

Customer Behaviour Analyst May 2018 - January 2019

January 2019 - November 2019

Cafe bazaar, Tehran, Iran

Marketing Data Analyst

July 2016 - May 2018

Baran Telecom Co., Tehran, Iran

Market Research Specialist October 2015 - July 2016

Hiweb, Tehran, Iran

## **HONORS & ACHIEVEMENTS**

Ranked 7th among 80 B.Sc. graduates of industrial engineering program 2012

Ranked 307th among more than 300,000 in the nationwide University Admission

Exam 2008

# **LANGUAGES**

English: Fluent Persian: Native Azerbaijani: Native