HAMED HELALI

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

HIGHLIGHTS

Knowledgeable in different neural network architectures, their applications in NLP and programming platforms such as Keras and TensorFlow

Equipped with advanced statistical modeling methods (e.g. mixed models, Bayesian modeling and inference, 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)

Familiar with the research literature on model selection methods

EDUCATION

York University, Toronto, ON

January 2020 - present

M.A. in Mathematics and Statistics (GPA: 4.00/4.00)

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)

SELECTED PROJECTS

Implementation of NLI task on Stanford Natural Language Inference Corpus In-progress Implemented in: Python

In this project, I am using BERT architecture to classify relationships between pairs of English sentences to contradiction, entailment or neutral.

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
Python, C++
Scientific programming languages
R, MATLAB, Stan
Number Pandas, Science packages

Data science packagesNumpy, Pandas, ScipyMachine learning programming PlatformsKeras, TensorFlow

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Database management languages SQL

Reporting & presentation tools

Jupyter notebook, R Markdown, LATEX, MS Office

ACADEMIC COURSE HIGHLIGHTS

Graduate Courses

Applications of Mixed Models: A⁺ Bayesian Statistics: A⁺

Generalized Linear Models: A⁺
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

Sequence Models

deeplearning.ai

Issued Aug 2020. No Expiration Date

Structuring Machine Learning Projects

deeplearning.ai

Issued Aug 2020. No Expiration Date

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

deep learning.ai

Issued Aug 2020. No Expiration Date

Neural Networks and Deep Learning

deeplearning.ai

Issued Aug 2020. No Expiration Date

ACADEMIC EXPERIENCE

Teaching Assistant, York University

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

WORK EXPERIENCE

Growth Manager

Cafe bazaar, Tehran, Iran

January 2019 - November 2019

Customer Behaviour Analyst

Cafe bazaar, Tehran, Iran

May 2018 - January 2019

Marketing Data Analyst

Baran Telecom Co., Tehran, Iran

October 2015 - July 2016

July 2016 - May 2018

Market Research Specialist

Hiweb, Tehran, Iran

AWARDS & ACHIEVEMENTS

York Graduate Fellowship, York Graduate Scholarship and Suppl. Grad Assistance 2019

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

Ranked 307th among 300,000+ in the nationwide University Admission Exam 2008

LANGUAGES

English: Fluent

Persian: Native

Azerbaijani: Native