Aarash Feizi

aarash.feizi@mail.mcgill.ca - aarash.feizi@mila.quebec
(+1) 438.530.4649

EDUCATION

MCGILL UNIVERSITY
PH.D. IN COMPUTER SCIENCE
2019 - present | Montréal, Canada
GPA: 4/4

SHARIF UNIVERSITY OF TECH.
B.SC. IN SOFTWARE ENGINEERING
2014 - 2019 | Tehran, Iran
GPA: 18.87/20

HONORS

Received the **Fonds de recherche du Québec – Nature et technologies (FRQNT)** doctoral scholarship 2022

Ranked 3rd in **DataJam Against Exploitation Canada** competition 2021

Received **School of Computer Science Scholarship** from Mila, Quebec AI Institute 2019

Ranked 100th out of over 220,000 students in the National University Entrance Exam 2014

SKILLS

PROGRAMMING
Python • R • Java • Matlab • LaTeX

FRAMEWORKS
PyTorch • TensorFlow • Keras • NetworkX

COURSEWORK

GRADUATE
Applied Machine Learning
Data Science
Natural Language Processing
Network Science
Graph Representation Learning

WORK EXPERIENCE

UNIVERSITY OF TORONTO | RESEARCH ASSISTANT
Summer 2018 | Toronto, Canada
- Worked in a group under the supervision of Professor Plataniotis
- Project goal was to improve the robustness of convolutional neural networks (CNNs) against adversarial attacks
- Implemented in Python 3

MOJ SECURE E-COMMERCE CO. | SOFTWARE ENGINEERING INTERN
Fall 2018 | Tehran, Iran
- Interned in the AI team under the supervision of the CTO and co-founder of Moj Company.
- Project goal was to parse an arbitrary image of any valid bank card and detect the digits in the 16-digit client card number
- Used a Single Shot Detector for object detection and a CNN for digit recognition
- Implemented in Python 3 using **TensorFlow** and **Keras**

PROJECTS AND PAPERS

REVISITING HOTELS-50K AND HOTEL-ID
Spring 2022
- Revisited two image datasets, Hotels-50K and Hotel-ID, and proposed new training and evaluation splits with different levels of difficulty
- Proposed evaluation splits based on the images' class and super-class information to imitate real-world scenarios
- **Accepted** paper for the **ICML 2022 DataPerf** workshop

STRUCTURE-AWARE NEGATIVE SAMPLING IN KNOWLEDGE GRAPHS
Spring 2020
- Design and implementation of a novel efficient negative sampling method with low computational cost for knowledge graphs
- Method based on considering the local neighborhood of each node when selecting the negative samples
- **Accepted** paper for the **EMNLP 2020** conference
- Implemented in Python 3 using **PyTorch**

SCIENTIFIC PAPER ACCEPTANCE PREDICTION
Fall 2019
- Design and implementation of neural network model which predicts acceptance of scientific papers with **84%** accuracy, based on their abstracts and introductions
- Implemented in Python 3 using **Keras** and **TensorFlow**

SALARY TREND ANALYSIS
Fall 2019
- Gathered and aggregated employee data from different occupation sectors from years 1996 to 2018 from Ontario, Canada
- Studied salary trends and found similar trend patterns exclusive to a few occupation sectors
- Used the Jensen–Shannon divergence between salary trends to construct a salary-similarity-network across employees in different sectors
- Built a multipartite graph from the employers and found meaningful employer embeddings