Aarash Feizi

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FDUCATION

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 Al Institute 2019

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

SKILLS

PROGRAMMING

Python • R • Java • Matlab • <u>ATEX</u>

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

ACADEMIC SERVICE

TEMPORAL GRAPH LEARNING (TGL) WORKSHOP

Co-organizer for the in-person TGL Workshop @ NeurIPS 2022

MILA COMPUTER VISION READING GROUP

- Initiator and organizer of Computer Vision reading groups at Mila
- Weekly meetings with external and internal speakers

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