# Nafiseh Izadyar

#### Education

2021– **Ph.D. in Computer Science**, *University of Victoria*, British Columbia, Present Canada.

Supervisor: Dr. Teseo Schneider

2016–2019 M.Sc. of Artificial Intelligence, Amirkabir University of Technology, Tehran, Iran.

Thesis: Visual Question Answering(VQA) (Deep Learning/Computer Vision/NLP/Reinforcement Learning)

Advisor: Prof. Ahmad Nickabadi

Grade: 19.5/20

GPA: 3.4

2011–2015 B.Sc. of Computer Software Engineering, Shariaty Technical and Vocational University, Tehran, Iran.

Thesis: Fingerprint Recognition (Image Processing/Pattern Recognition)

Advisor: Prof. Mohsen Moshki

Grade: 20/20 GPA: 3.82

#### Research Interests

- Machine Learning
- Deep Learning
- Computer Vision

### Teaching Experience

#### Teaching Assistant

Fall 2021 "Introduction to Artificial Intelligence", Instructor, Prof. George Tzanetakis, University of Victoria

Teaching Assistant

Fall 2018 "Machine Learning", Instructor, Prof. Ehsan Nazerfard, Amirkabir University of Technology

#### Honors and Awards

2016 Ranked Top 0.5% among all applicants of The Nationwide M.Sc. Admission Exam.

More than 17,000 applicants, Computer Engineering

- 2015 Best Final Project Award in Shariaty Technical and Vocational University.
- 2012-2015 Ranked 2nd Among all CE students of Shariaty Technical and Vocational University Class 2015.
  - 2012 Ranked Top 1% among all applicants of The Nationwide B.Sc. Admission Exam.

More than 350,000 applicants, Mathematics

2008 Ranked 3rd in Iranian "Physics Olympiad" Karaj, Iran.

#### Publication

Nafiseh Izadyar and Ahmad Nickabadi. An improved method for visual question answering using gated recurrent units and local search. Computer Society of Iran Computer Conference (CSICC), 2019

## Selected Courseworks and Projects

Selected Evolutionary Computing, Machine Learning, Statistical Machine learning, Pat-Courseworks tern Recognition, Computer Vision, Image Processing, Neural Networks, Probabilistic Graphical Models, Big Data Analytics

Projects Deep photometric stereo for 3D surface reconstruction, 2020.

Visual Question Answering, The goal in this task was finding a correct answer for given image and corresponding question, 2019.

A Genetic Algorithm for planning tourism access roads, The goal in this task was finding the most optimized road to build in a forest (Submitted Paper in Tourism Management Perspectives Journal (Elsevier) as a co-author), 2018.

CUR matrix decomposition for improved data analysis, 2018.

Implementing DBSCAN algorithm with Map-Reduce, 2017.

Implementing KNN algorithm with LSH approach, 2017.

A matching method for UAV images with satellite images, The goal in this task was providing an approach to find the location of an image taken by a quadratop in an existing satellite image, 2017.

Fingerprint Recognition, 2015.

# Languages and Tests

English Fluent, Toefl:107

Reading: 28 Listening: 29 Speaking: 26 Writing: 24

GRE: 316

Q: 166, V: 160, W: 3.5

Farsi Native

# Computer and Technical Skills

 $\label{eq:condition} {\it Programming} \ \ {\it C/C++}({\it OpenCV}), \ \ {\it Python}({\it NumPy}, \ {\it SciPy}, \ {\it scikit-learn}, \ \ {\it Keras}, \ \ {\it TensorFlow},$ 

Languages Pytorch), MATLAB, C#, LATEX.

Also Familiar With: HTML, CSS, Javascript.

Data Base SQL

Backend MySQL, Hadoop

Technologies

Operating Linux, MacOS, Windows

 ${\bf Systems}$