

Kiarash Aghakasiri

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PERSONAL DETAILS

<i>Birth</i>	July 16, 1997
<i>Phone</i>	(+1) 780-6554741
<i>Mail</i>	kasirikiarash@gmail.com kasirikiarash@ualberta.ca
<i>Office</i>	CSC 3-23

INTEREST

- Reinforcement Learning / Artificial Intelligence
- Machine Learning

EDUCATION

University of Alberta

Edmonton, Alberta, Canada

MSc. Computing Science

September 2019 - Expected July 2021

Being in the top 100 universities in the world

Iran University of Science and Technology

Tehran, Tehran, Iran

BSc. Computer Engineering concentration on AI

September 2015 - July 2019

Rank 3rd among Iran universities by QS Ranking

(GPA = 3.87)

Allameh-Helli (NODET)

Tehran, Tehran, Iran

MidSchool, HighSchool, PreUniversity

September 2008 - June 2015

National Organization for Development of Exceptional Talent

(Diploma GPA = 4)

PERSONAL ACHIEVEMENTS

- Succeeded to rank second top student in B.S. with GPA $17.78/20 = 3.87/4$
- Winning an award for being the top student of the year 2016 and 3rd top student of the year 2017
- Being in the first 0.1% in national graduate school entrance examination
- Gain an opportunity for going to MSc without taking the national entrance examination from two of Iran best universities (Sharif University of Technology and Iran University of Science and Technology)
- Participate in university booth in the "18th Exhibition of Research, Technology Achievements and Techmart" and Succeeded to Achieve one of the 12th best booths in the exhibition

- Win a second place in intra-university ACM tournament
- Being a member of National Organization for Development of Exceptional Talent for ten years
- Admission at the first stage of Mathematics and Computer Olympiads in high school

ACADEMIC EXPERIENCE

University of Alberta

Edmonton, Alberta, Canada

Intro to Foundations of Computing TA

January 2020 - April 2020

Instructors: Dr. Geoff Hollis, Dr. Sadaf Ahmed, Dr. Joerg Sander

Basics of Machine Learning TA

September 2019 - December 2019

Instructor: Dr. Martha White

Iran University of Science and Technology

Tehran, Tehran, Iran

Machine Learning Researcher

June 2018 - July 2019

Transfer Learning for RL Agents / Image Captioning for Persian Language

Supervisor : Dr. Nasser Mozayani

Data Mining Researcher

January 2016 - July 2019

Fraud Detection / Persian Word Association Norms / Dataset for Hashtag Recommendation

Supervisor: Dr. Hossein Rahmani

Computational Intelligence Tutor

January 2019 - June 2019

Teaching Neural Networks basics to undergraduate students and assigning small projects in Keras (Python)

Instructor: Dr. Nasser Mozayani

Natural Language Processing Tutor

January 2019 - June 2019

designing small projects for undergraduate student in regard to Persian language

Instructor: Dr. Sauleh Eetemadi

website : <https://sauleh.github.io/nlp97/>

Artificial Intelligence and Expert Systems Tutor

September 2018 - January 2019

Teaching undergraduate students, assigning weekly assignments and give them projects in python

Instructor: Dr. Mohammad Taher Pilehvar

website : <https://iust-courses.github.io/ai97/>

Theory of Languages & Automata Tutor

September 2017 - January 2018

Teaching undergraduate students theoretical aspects of Automata, giving them homework, and checking the answers

Instructor: Dr. Hossein Rahmani

Foundations of Computer & Programming Tutor

September 2016 - January 2017

Teaching undergraduate students python programming and giving them small projects

Instructor: Dr. Adel Torkaman Rahmani

PUBLICATIONS

- Arezoo ZARE, Hossein RAHMANI, Fateme KARIMKHANI, Raana SAHEBNASSAGH, Kiarash AGHAKASIRI. Tarvajah: Free-association norms for Persian words (Submitted)

TECHNICAL SKILLS

Programming and Scripting Languages

Proficient at: PYTHON, C++, C, PASCAL

Familiar with: ASSEMBLY 8086, MATLAB

Operating System

MAC OSX, WINDOWS, LINUX

Tools and Frameworks

Learning Tools: PYTORCH, TENSORFLOW, NUMPY, KERAS, OPENCV, SCIKIT-LEARN

NLP Tools: VOWPAL WABBIT, OPENNMT

Web Application Tools: BEAUTIFULSOUP, SELENIUM, SCRAPY, TWINT

System Tools: PTHREADS, NACHOS

Data Mining Tools: SPSS MODELER(CLEMENTINE)

Hardware Tools: XILINX ISE, AVR STUDIO, CODE VISION AVR, LOGISIM

Presentation Tools: MS OFFICE, MAC PRESENTATION TOOLS, L^AT_EX, ADOBE PHOTOSHOP

ACADEMIC PROJECTS

M.Sc Projects:

- Reinforcement Learning II **Instructor: Dr. Richard Sutton**
-Investigating Sensitivity of Step Size and Performance in True online TD(λ) for Different Values of λ
- Intro to Machine Learning **Instructor: Dr. Martha White**
-Applying Variance Reduction Methods to Policy Evaluation for Off-Policy Setting
- Deep Learning for NLP **Instructor: Dr. Lili Mou**
-Named Entity Recognition performance on Out of Vocabulary words

B.Sc Projects:

- B.Sc Thesis **Supervisors: Dr. Nasser Mozayani & Dr. Sauleh Eetemadi**
-Image Captioning using Attention mechanism on translated MSCoCo Dataset, using Tensorflow on Google Colaboratory (working with another B.Sc student)

- Machine Learning Lab **Supervisor : Dr. Nasser Mozayani**
 - Reducing the convergence time for Deep Q-Learning algorithms with Transfer Learning for ATARI games, using Autoencoder and Variational Autoencoder as State Representation (working in a group of 4 people)
- Data Mining Lab **Supervisor : Dr. Hossein Rahmani**
 - Working with a M.S student, crawling twitter using Twint and Python, to gather a dataset for hashtag recommendation
 - Gathering Dataset for Persian language Word Association Norms and analyzing it and publishing the Dataset (working in a group of 4 people)
 - Fraud Detection for German Bank Dataset using SPSS MODELER
- Computational Intelligence Course **Instructor : Dr. Nasser Mozayani**
 - Solving Inverted Pendulum problem with Fuzzy Logic and Reinforcement Learning (Q-Learning)
 - Image Recognition with Multi Layer Perceptron for MNIST database using NUMPY,KERAS
 - Function approximation with MLP (Multi Layer Perceptron) and RBF (Radial Basis Function)
 - Genetic Algorithm for N-Queen problem
- Natural Language Processing Course **Instructor : Dr. Sauleh Eetemadi**
 - Machine Translation for Poetry to Prose and vice versa using OPENNMT
 - Sentiment Analysis (for tweets that have #worldcup) using AFINN
 - Naive Bayes and Maximum Entropy classifiers for speeches of two famous persian politicians
- Artificial Intelligence & Expert Systems Course **Instructor : Dr. Behrouz Minaei-Bidgoli**
 - Face Recognition for LFW (Labeled Face in the Wild) dataset using OPENCV
- Advanced Computer Programming Course **Instructor : Dr. Adel Torkaman Rahmani**
 - Prototype of Social Network Website with comment, like, and post abilities
 - Web Scraper and Search Engine using SCRAPY
 - File Manager with python

CERTIFICATES & ONLINE COURSE

- Reinforcement Learning Course Summer 2016
 - Introducing and working with Reinforcement Learning models and taking projects (Learning ATARI games) at Iran University of Science & Technology
- Deep Learning Course Fall 2018
 - Doing Three projects (Multi Layer Perceptron, Convolutional Networks, RNN) with TensorFlow and working on multi-GPU servers at Sharif University of Technology
- Sequence Models Spring 2018
 - Instructed by Andrew Ng (deeplearning.ai) on coursera

SELECTED ACADEMIC COURSES

Natural Language Processing	A ⁺	Computational Intelligence	A
Artificial Intelligence and Expert Systems	A ⁺	Discrete Mathematics	A
Analysis and Design of Algorithms	A	Signals & Systems	A
Operating Systems	A ⁺	Theory of Languages and Automata	A
Data Structure	A	Advanced Computer Programming	A

LANGUAGE SKILLS

<i>Persian</i>	mother tongue
<i>English</i>	Toefl Overall Score: 106
	GRE Quantitative: 168

REFERENCES

Available upon request.