

Soroosh Gholamizoj

sor8sh.github.io ◇ sorooshg@uwaterloo.ca

EDUCATION

University of Waterloo

Computer Science, Master of Mathematics

Waterloo, ON, Canada

2019 - Present

Iran University of Science and Technology

Computer Engineering, Bachelor of Science

GPA: 18.08/20 (3.86/4)

Tehran, Tehran, Iran

2015 - 2019

Allame Helli 1

Diploma in Mathematics & Physics

GPA: 19.66/20 (4/4)

Tehran, Tehran, Iran

2011 - 2015

INTERESTS

- **Machine Learning**, Neural Networks, Deep Learning
- **Bioinformatics**, Computational Biology
- **Computer Vision**
- **Natural Language Processing**

HONORS & AWARDS

- Awarded the **International Master's Award of Excellence (IMAE)** based on strong academic record - University of Waterloo
- **Ranked 1st** top student in B.Sc. in the Department of Computer Engineering - Iran University of Science & Technology
- **Permitted to apply for M.Sc. program** without taking the "National Entrance Exam for Graduate Schools" as an award for exceptional talented students, introduced by the Exceptional Talents Office - Sharif University of Technology, Iran University of Science & Technology
- Ranked in **top 0.5%** in both "National Universities Entrance Exam" and "National Graduate Schools Entrance Exam" - Iran
- Member of **National Organization for Development of Exceptional Talents (NODET)** for 9 years - Iran
- **Winner** of Intra-University ACM Competition - Iran University of Science & Technology
- **Best Student of the Year** for 3 years in Computer Engineering Department - Iran University of Science & Technology

ACADEMIC EXPERIENCE

Introduction to Computer Science 1

Teaching Assistant

Fall 2019

Marking assignments, midterm and final exam.

Bioinformatics Lab

Fall 2019 - Present

Researcher - Supervisor: Prof. Bin Ma

Working on applications of Machine Learning in Bioinformatics problems.

Foundation of Natural Language Processing

Spring 2019

*Teaching Assistant - Instructor: Dr. Sauleh Etemadi*Website: <https://sauleh.github.io/nlp97/>**Foundation of Computational Intelligence**

Spring 2019

Teaching Assistant - Instructor: Dr. Nasser Mozayani

Designing projects and homeworks for undergraduate students.

Artificial Intelligence & Expert Systems

Fall 2018

*Teaching Assistant - Instructor: Dr. Mohammad Taher Pilehvar*Website: <https://iust-courses.github.io/ai97/>**Machine Learning Lab**

Summer 2018

Researcher - Supervisor: Dr. Nasser Mozayani

Working as a researcher during summer internship.

Theory of Languages & Automata

Fall 2018

Teaching Assistant - Instructor: Dr. Hossein Rahmani

Holding classes weekly, grading quizzes, and designing homework for undergraduate students.

Foundation of Computer & Programming

Fall 2016

Teaching Assistant - Instructor: Dr. Adel Rahmani

Designing projects for undergraduate students.

SELECTED ACADEMIC COURSES

All of the scores bellow are A⁺ in U.S. grade scale.

Computational Intelligence:	19.5	Artificial Intelligence:	20
Fundamentals of Compiler Design:	20	Theory of Languages & Automata:	19.5
Fundamentals of Database Design:	19	Signals & Systems:	19.5
Algorithm Analysis & Design:	20	Discrete Mathematics:	19.3
General Physics II:	19.5	Software Engineering:	19.4
Electrical Circuits:	20	Engineering Mathematics:	18.5
Operating Systems:	18	Computer Architecture:	18.3
Natural Language Processing:	20	Fundamentals of Robotics:	18.6

TECHNICAL STRENGTHS

Programming Languages

Proficient at: Python

Familiar with: C++, C, JavaScript, HTML, CSS, Verilog, VHDL, SQL

Frameworks & Tools

Keras, TensorFlow, NumPy, Scikit Learn, OpenCV, Matplotlib

LogiSim, Xilinx ISE, Bootstrap, Semantic UI

MS Office, Pages, Numbers, Keynote, L^AT_EX

Operating Systems
MacOS, Linux, Windows

LANGUAGE SKILLS

Persian: Native

English: Fluent

- TOEFL iBT: 102 (Reading 27, Listening 27, Speaking 21, Writing 27)
- GRE: Verbal 149 (42%), Quantitative 168 (94%), Analytical Writing 4.0 (59%)

PROJECTS

B.Sc. Final Project

Spring 2019

Advisor: Dr. Sauleh Etemadi

- Image Captioning using Attention Mechanism trained on MSCOCO dataset. (TensorFlow)

Foundation of Computer Vision

Fall 2018

- Course final project: Room Segmentation (OpenCV)
- Noise Reduction, Line Detection, Morphology, Image Classification, Template Matching
- Face Detection with Kalman Filter, Corner Detection, CamScanner (OpenCV)

Machine Learning Lab

Summer 2018

- Using transfer learning in Deep Reinforcement Learning to speed up the training phase of an agent learning how to play ATARI 2600 games.

Computational Intelligence

Spring 2018

- Image classification with an MLP Neural Network using MNIST dataset (Keras)
- Function approximation with an RBF Neural Network (Python)
- Designing a Fuzzy controller for Inverted Pendulum problem (FCL)
- Solving 8-Queen problem using Genetic Algorithm (Python)

Natural Language Processing

Spring 2018

- Anagram: Finding all Anagrams for a Persian word (Python)
- Machine Translation: Translating from Persian to Quran-style Arabic (OpenNMT)
- Sentiment Analysis for a Twitter accounts tweets with unsupervised learning (Python)
- WordCloud: Classifying textual data using Naive Bayes (Vopal Wabbit, Mallet)

Artificial Intelligence

Fall 2017

- Sentiment Analysis for IMDB reviews using Naive Bayes & Decision Tree classifiers (NLTK)

Computer Architecture

Spring 2017

- Designing a CPU that could find a specific number in an array of numbers (Xilinx ISE)

Advanced Computer Programming

Spring 2016

- Web Scraper, Social Network, Search Engine, File Manager (Python)

CERTIFICATES

- Deep Learning with TensorFlow, Sharif University of Technology (Fall 2018)
- Deep Learning Summer School, Tehran University (Summer 2018)

- IPM Advanced Data Science Summer School, Institute for Research in Fundamental Sciences (Summer 2018)