Soroosh Gholamizoj

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EDUCATION

University of Waterloo — Waterloo, ON, Canada
Computer Science, Master of Mathematics — 2019 - Present

Iran University of Science and Technology — Tehran, Tehran, Iran
Computer Engineering, Bachelor of Science — 2015 - 2019
GPA: 18.08/20 (3.86/4)

Allame Helli 1 — Tehran, Tehran, Iran
Diploma in Mathematics & Physics — 2011 - 2015
GPA: 19.66/20 (4/4)

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 — Fall 2019
Teaching Assistant

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

Website: `https://sauleh.github.io/nlp97/`

Foundation of Computational Intelligence   Spring 2019
Teaching Assistant

Designing projects and homeworks for undergraduate students.

Artificial Intelligence & Expert Systems   Fall 2018
Teaching Assistant

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

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

Foundation of Computer & Programming   Fall 2016
Teaching Assistant

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, LaTeX

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 Scrapper, 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)