Ali Mortazavi

CONTACT
INFORMATION

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EDUCATION

Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran

B.Sc. Computer Software Engineering,   2013 – 2017
CGPA: Overall   **18.47 / 20 (3.78/4)** [Ranked **3rd**]
        Selected Course   **19.33 / 20 (4/4)**

RESEACH
INTERESTS

- Statistical Machine Learning
- Optimization
- Sequential Prediction
- Mechanism Design in Game Theory

RESEARCH
EXPERIENCE

***Implementation and Evaluation of "Genetic" and "Simulated Annealing"
Algorithms for Extended Travelling Salesman Problem***, B.Sc. Thesis, [code]
[report]
Under the supervision of Dr. Razazi at Amirkabir University of Technology

In this project, we tested the performance of two different heuristic approaches to solve an NP-
Complete Problem. This problem is an extended version of the Travelling Salesman Problem. Since
our approach is heuristic, there is no guaranty to find a global optimum answer. Therefore, we needed
some other exact approach for computing the global optimum. For this purpose, we reduced our
problem to an Integer Linear Programming Instance. So in small graph samples, we could compare
our results with the optimum solution and for the large graph samples, we just compared our two
different methods with each other.

HONORS AND
AWARDS

- **Ranked 3rd** (out of 100) in term of CGP among student of computer engineering
  of 2013 Entrance   2017
- Awarded as Outstanding Student in Amirkabir University   2015, 2016, 2017
- Awarded admission to M.Sc. program in **Artifcial Intelligence** at *Amirkabir Uni-
  versity of Technology* as talented undergraduate student   2017
- **Ranked 19th** in the Final Stage in **National Scientific Olympiad** of Computer
  Engineering   2016
- Qualified in the Selection Exam of **National Scientific Olympiad** of Computer
  Engineering   2016
  Qualified as 9th among the students in all the Universities in the Tehran Region
- **Best Score in Mathematics** Team Selection Exam   2015
- **Ranked Top 0.8%** In The Country-wide University Entrance Exam   2013

ACADEMIC
PROJECTS

Image Denoising and Segmentation Using Markov Random Field [code][report]
Optimizing Energy Function using Simulated Annealing, Comparing different Color
Spaces results.
Text Summarization [code][report]
Extracting important sentence as a summary using page rank algorithm and word2vec.
Text Classification [code][report]
Using different metrics (mutual information, information gain, etc.) for extracting
important words for document classification task.

TEACHING EXPERIENCE	**Probability and Statistics**, Teaching Assistant	spring 2018
	Special Class for Olympiad Preparation, Instructor	spring 2017 and 2018
	Algorithm Design, Teaching Assistant	spring 2017
	Algorithm Design, Teaching Assistant	spring 2016

ATTENDED CONFERENCES AND SEMINARS

- **Deep Learning Summer School at University of Tehran** August 2018
  An introduction to Deep Learning and different research Areas.
- **Block Chain and Cryptocurrency** February 2018
  An introduction to Block Chain Mechanism and different Cryptocurrency systems. By Dr. Hatami and Dr. Salavati
- **Workshop on Game Theory** February 2017
  An introduction by Dr. Salavati to Game Theory Concepts (Nash Equilibrium, Expected Pay off, Repeated Games, Auctions, etc.)

TALKS

- **A brief summary to The Theory of Computation** May 2018
- **What is Natural Language Processing** May 2017
- **Can computers have feelings?** June 2016

SKILLS

- **Theoretical Skills**
  Mathematics, Probability and Statistics, Algorithms
- **Technical Skills**
  Python (NumPy, Scikit, NLTK), Java, C/C++

LANGUAGES

- **Persian** : Native
- **English** : TOEFL Score: 99 (Reading: 23, Listening: 28, Speaking: 23, Writing:25)
  GRE General: 317 (Quantitative: 167, Verbal: 150)

OTHER ACTIVITIES

- **Piano** 2018
  Recently I have started to learn piano.
- **Amirkabir Programming League Staff** 2016
  I was member of problem setting team.
- **Basketball** 2015
  Member of Basketball team in Computer Engineering Department.