POUYA AGHAHOSEINI

Curriculum vitae last updated on February 12, 2020

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RESEARCH INTERESTS

- **Natural Language Processing**
- **Machine Learning**
- **Computer Vision**
- **Reinforcement Learning**
- **Social Media Computing**
- **Information Retrieval**

EDUCATION

Bachelor of Science in Computer Science *2016-2020(Expected)*
Amirkabir University of Technology(Tehran Polytechnic), Tehran, Iran
CGPA: 3.6/4 (17.28/20)
Last Two Years GPA(68 Credits): 3.9/4 (18.37/20)   Selected Courses [1]

Diploma in Mathematics and Physics *2012-2016*
Allameh Helli High School, Tehran , Iran (NODET)
GPA: 18.5/20

TEST SCORES

- **TOEFL: 103 (R:28 L:27 S:27 W:21)**
- **GRE: 321 (V:158 Q:163 AWA:3.5)**

RESEARCH EXPERIENCE

Short Text Similarity: A Survey Nov 2019
Literature Review

· A Comprehensive Survey on works done in the area of Short Text Similarity from 2004 to 2019

TEACHING EXPERIENCE

TA, Design and Analysis of Algorithms Present
Instructor: Dr.MohammadReza Kazemi

· Holding Weekly Workshops
· Designing and Evaluating Assignments

Head TA, Fundamentals of Programming: C Language Sep 2019 - Jan 2020
Instructor: Dr.Farzaneh Salari

· Holding Weekly Workshops
· Holding Office Hours
· Designing and Evaluating Assignments

TA, Compilers Sep 2019 - Jan 2020
Instructor: Dr.Mohammad Hassan Shirali-Shahreza

· Exam Preperation Classes and Assignment Evaluation

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[1] *Introduction to Probability, Probability 1:A^+* ; Foundation of Matrix and Linear Algebra:*A* ; *Foundation of Numerical Analysis:A^+* ; Data Structures and Algorithms:*A^+* ; *Database:A* ; Software Design:*A* ; *Design and Analysis of Algorithm:A^+*

TA, Data Structures and Algorithms
Instructor: Dr.Mohammad Akbari

Feb 2019 - Jun 2019

· Held weekly classes and office hours.
· Designed and Evaluated assignment and projects.

Head TA, Introduction to the Theory of Computation
Instructor: Dr.Fatemeh Zare-Mirakabad

Sep 2018 - Jan 2019

· Held weekly classes
· Supervised monthly workshops
· Designed and Evaluated assignment

EXTRACURRICULAR EXPERIENCE

Winter School Organizing Committee Member
11th Winter School on Computational Geometry

Mar 2019

· The Winter School on Computational Geometry is held every year by Math and Computer Science Faculty, in collaboration with IPM Institute for Research in Fundamental Sciences.
· Notable researchers in computational geometry are invited for seminars and workshops in this program.

Student Scientific Chapter Membership
Head Of Informatics and Competitions

Mar 2018 - Mar 2019

· Organized Data Science Seminars And Workshops.
· Coordinated 5 ACM Contests.
· Arranged On-Site Visits To Leading Tech Companies In Tehran.
· Arranged Talks With Alumni Currently Studying Or Working Abroad.
· Held 2018 New Student Orientation Program.
· Organized And Instructed Exam Preparation Classes(Calculus, Programming, Differential Equations).

PROJECTS

Factory Simulation with MATLAB
Simulation Project

Sep 2018 - Jan 2019

· System modeling and simulation with MATLAB
· Simulation of a factory with different performances and various response time of each agent.

Medify: An Application for Fixing Tags And Organizing Media Files
Software Engineering Course Project

Jan 2018 - July 2018

· The application was Developed using Scrum Methodology for Agile Software Development.
· The coursework required 5 presentations throughout the semester which included a 5-minute startup pitch presentation and the presentation of the first MVP(Minimum Viable Product).

Designing and Creating A Database From YAGO Datasets
Database Course Project

Jan 2018 - July 2018

· Data Extraction using TSV files acquired from max plank institute website.
· Processing and Clustering TSV files with Python and MySQL.
· Designing and Creating A 3NF Database.

SESSET: A Space Efficient Skiplist Data Structure
Data Structures Course Project

Sep 2017 - January 2018

· SSET was implemented with skiplist data structure.
· Each node consisted a BDeque which resulted in more efficient operations.
· All operations are done in $O(logn)^E + O(\sqrt{n})$ time.

Range-Tree: A 2-D version of Range-Tree Data Structure   Sep 2017 - January 2018
Data Structures Course Project

· An Efficient Data Structure for geometrical queries.

HONORS AND AWARDS

Top 10% in Graduating Class   Present
Math and Comptuer Science Faculty

· Class of 70 students

Ranked 1st GPA at Fall-2018 and Spring-2019 Semesters   Sep 2018 - Jun 2019
Math and Comptuer Science Faculty

· Class of 70 Students

Qualified for the final round of Amirkabir ACM-ICPC Competition   Nov 2018
Computer Engineering Faculty

· The ACM-ICPC Contest is held every year at Amirkabir University of Technology. Teams from all universities across the country take part in this competition.
· Candidates for representing the university in Asia Region contest are primarily filtered here.

Ranked Within the Top 0.7% (1,169 among 162,879 students) in Iranian University Entrance Exam   Jul 2016
Tehran, Iran

· The competition is intense since it is the only means to gain admission to universities.

Accepted in NODET (National Organization for Development of Exceptional Talents) High School Entrance Exam   Jul 2012
Tehran, Iran

· NODET student selection exam is held every year nationwide for students starting high school. The organization is responsible for a number of schools across the country, which train students on a more advanced level in each field of study.

SKILLS

Programming Languages	C/C++, Python, R, MATLAB
Web Technologies	HTML, CSS, Javascript, MySQL
Libraries	numPy, Pandas
Operating Systems	Linux, Windows
Languages	Persian, English
Miscellaneous	LaTeX, Jupyter, Microsoft Office, GAMS, Database Design

REFERENCES

- **Mohammad Akbari**
  Assistant Professor at Amirkabir University of Technology   akbari.ma@aut.ac.ir

- **Fatemeh Zare-Mirakabad**
  Assistant Professor / Head of CS Group at Amirkabir University of Technology   f.zare@aut.ac.ir

- **Amin Gheibi**
  Assistant Professor at Amirkabir University of Technology   amin.gheibi@aut.ac.ir