Yasaman Mirmohammad

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RESEARCH INTERESTS
- Machine Learning
- Computational Neuroscience
- Cognitive Science
- Pattern Recognition
- Deep Learning and Neural Network
- Image Processing
- Computer Vision
- Big data Analysis

EDUCATION

Amirkabir University of Technology, Tehran, Iran
- B.S. in Computer Engineering, GPA: 14.37 / 20, ,Total Passed Credits: 81 — Sep 2015 – Sep 2019

Sama School(2008-2014) , Sadra School(2014-2015), Tehran, Iran
- Diploma in Mathematics and Physics Discipline, GPA: 19.78/20 — 2010– 2015

RESEARCH EXPERIENCE

Lab Of Robotics and Cognitive science
(Amirkabir University of Technology, Iran,Tehran) — Aug 2017 – Dec 2017
- Project: Datamining and Cognitive science concepts

Bio Inspired System Design LAb
(Amirkabir University of Technology, Iran,Tehran) — Mar 2018 – Now
- Project: Implementing Reinforcement Learning for Walking on NAO

Reproductive Biomedicine and Stem Cells Lab
(Royan Institute,Iran,Tehran) — Mar 2018 – Now
- Summer Internship under Supervision of Dr.M.Khaligh Razavi

HONORS & AWARDS
- Ranked top 0.4 % among more than 180,000 students participated in the nationwide entrance examination of undergraduate studies in Iranian universities — 2014 – 2015
- accepted for 2nd level of computer Olympiad — 2013
- Member of National Organization for Bilingual Schools — 2007 2014

TEACHING EXPERIENCE

Research and Technical Presentation,Amirkabir University of Technology — Fall 2018
Principles of Programming,Amirkabir University of Technology — Fall 2018
Discrete Mathematics,Amirkabir University of Technology — Spring 2017
- Instructor: Dr.m.s.Fallah

Discrete Mathematics,Algebra and Geometry,Sadra School — Fall 2016
- Instructor: Dr.m.Rashedi

Fundamentals of Physics,Sadra School — Fall 2016
- Instructor: A.Jamshidi

LANGUAGE SKILLS
- **Persian**: Native language.
- **English**: Fluent (speaking, reading, writing).
- **French**: Basic (reading); basic (speaking, writing).

TECHNICAL SKILLS

•**Programming and Development**
- –Python(2,3)
- –C,C++
- –Java
- –MATLAB
- –HTML+CSS
- –JavaScript(Familiar)

• **Software libraries and distributions**:

- –Scikit-Learn
- –Pandas
- –Numpy
- –OpenCV
- –Conda
- –Tensorflow
- –Keras

•DataBase Design
- –MySQL
- –NoSQL(MongoDB)

•Others:

•LaTeX

•Microsoft Word,Excel,PowerPoint

PROJECTS

•Data Structure :
- –search engine using inverted index algorithm(C++)
- –Finite-State Automata (Java)

•Advanced Computer Programming:
- –Implementation of a graphical game (BattleShip-Online) (Java)
- –Implementation of a simple image editor (Java)
- –Implementation of a simple Encryption and encoding System (Java)

•Principles of Computer and Programming :
- –living cell simulation (C)

•Logic Design :
- –Designing a Traffic Light System (Verilog)

•Computer Architecture and design :
- –Basic Computer,Compiler,Cache,Pipeline(VHDL)

•Operating Systems:
- ,Multithreading in Windows and Linux(C)

•Design Automation:
- –Phase1:Implementation of a car parking system(VHDL).
- –Phase2:Implementation of a co-software,hardware design using Microblaze(VHDL).
- –Phase3:Implementation of a Plant-Watering System with a moisturizing detection system(VHDL)

•Advanced Mathematics:
- –Phase1:Analyzing Distribution categories of a two class problem And PCA(Python,MATLAB)
- –Phase2: Facial Recognition with Singular Value Decomposition(Python) based on paper

•Artificial Intelligence:
- –Implementation of Classical and Non-Classical searches(BFS,DFS,Simulated annealing,Hill Climbing,Genetic) - (Python,Java,C++)

•Principles of Data Mining:
- –Basic Methods and Algorithms of Supervised and Unsupervised Learning, all available here(Python)

CHALLENGES AND SELF STUDIES

•Amirkabir First Data mining Challenge(Fall 2017)
- –Analyzing the bank customer's information
- –Predicting the result

•Deca Dataminig challenge, Sharif University of Technology(Winter2018)

       –Analyzing the Notification of an App and the effect of different kind of notifs on the satisfaction of the users.

- **Fanavard Dataminig challenge**,(Spring 2018)

       –Analyzing and predicting of gold cost considering the cost in previous months

       –Ranked top 7 teams for the final level(Summer 2018)

- I have been working on Data mining and data analysis concepts on "Fundamentals Of Data mining Concepts" (Fall 2017)

- I have been working on "Reinforcement Learning in Robotics" as my Representation and Research Course project(Fall 2017)

- "Lynda Introduction to Data Analysis with Python course"(Fall 2017)

- "Kaggle Titanic Competition" (Fall 2017)

- "Kaggle House Prices Competition" (Fall 2017)

- "Coursera Machine learning course" By Andrew NG,University of Stanford(Fall 2017)

- "Code Academy Online Courses": Python, Java HTML+CSS , Javascript (2015-2017)

- **Sharif Machine Learning Workshop**(Winter 2018):

       –Python Libraries for machine learning,Deep learning:Keras, Tensorflow

- " Digit Recognizer Competition" (Kaggle,Winter 2018)

- "Kaggle Machine Learning Course"(Winter 2018)

- "Kaggle Deep Learning Course"(Winter 2018)

- "Dog Breed Identification Challenge " (Kaggle,Winter 2018)

- "Coursera Deep Learning and Neural Network course",University of Toronto(Winter 2018 - Now)

- "Coursera Computational Neuroscience course",University of Washington(Spring 2018 - Now)

- "Coursera Visual Perception and the Brain course",Duke University(Spring 2018 - Now)

- I have been working on Fundamentals of Deep Learning on "Nature Deep Review" as a Review Paper(Spring 2018)

- "TensorFlow Speech Recognition Challenge " (Kaggle,Spring 2018)

INTERESTS   Philosophy, Painting , Badminton , Music , Language and communication , History, Swimming

REFERENCES

- Further information, and Proofs are available upon Request.
- All Available in:
  Github