Yasaman Mirmohammad

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RESEARCH INTERESTS

- Machine Learning
- Cognitive Science
- Pattern Recognition
- Deep Learning And Neural Network
- Neuroscience
- 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

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 — 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

•**Others**:

•LaTeX

•MATLAB

•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

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.

•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