# Afshin Karimi

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## RESEARCH INTERESTS

**Deep Learning**

**Computer Vision**

**3D Vision**

**Human Perception**

## EDUCATION

### Sharif University of Technology
2020 – Present

*Master Of Science in Artificial Intellligence*
*GPA(up to now): 19.32/20 (4.0/4.0)*

- Thesis :
  - Feature extraction for financial markets' transactions using deep learning
    Supervisor : Prof. M.T. Manzuri Shalmani
- Courses :
  - Machine Learning (GPA: 19.8/20)
  - Deep Learning (GPA: 19.2/20)
  - Advanced 3D Computer Vision (GPA: 18.5/20)
  - Digital Signal Processing (GPA: 19.8/20)
  - Artificial Intelligence (GPA: 20/20)

### Tabriz Azad University
2007 – 2013

*Bachelor Of Mechanical Engineering*
*GPA: 14.46/20*

## HONORS AND AWARDS

- Ranked 9th in the national university entrance exam for an M.Sc. degree in Computer Engineering in 2020, Iran (among the top 0.1%)

## Publication

### Financial Time-series Prediction Using Purged Cross-Validation (In Progress)
2021

- In this project, we use a labeling algorithm, different models, and a new cross-validation method, which is called Purged Cross-Validation, to predict financial time-series datasets Github

## TEACHING EXPERIENCES

### Teaching Assistant, Sharif University of Technology
Fall 2021

- Machine Learning (Prof. Beigy)
- Deep Learning (Prof. Beigy)
- Artificial Intelligence (Prof. Rohban)

### Teaching Assistant, Sharif University of Technology
Spring 2021

- Signal Processing (Prof. Manzuri)

## WORK EXPERIENCES

**MAAT Full Service Marketing and Advertising Agency** Sep . 2018 – Oct . 2019
*Full Stack Developer* *Tehran*

**Rayvarz Software Engineering Company** Jun . 2018 – Sep . 2018
*Back End and Windows Application Developer* *Tehran*

**Hoodad Tech** Dec . 2015 – Jun . 2018
*Back End Developer, Database Designer* *Tehran*

## COURSE PROJECTS

**Machine Learning** Winter 2021
* Heart disease prediction using SVM Github
* Clustering on Iris dataset using XGBoost and Gradient Boost Github

**Deep Learning** Winter 2021
* Implementing a Deep Q-Network (DQN) model with Experience Replay and Target Network technics using Pytorch Github
* Implementing a generative adversarial network (GAN) that can generate hand-written images of digits (0-9) using PyTorch. Github
* Implementing a variational autoencoders (VAE) applied to the MNIST dataset. Github
* Implementing the ResNet-18 using PyTorch(CIFAR10 dataset) Github
* Implementing the U-Net using PyTorch(CT dataset) Github

**Advanced 3D Computer Vision** Fall 2020
* Keypoint Description and Matching Github
* Template Matching and point clouds aligning with ICP algorithm Github

## NON-ACADEMIC PROJECTS

**Taak/Beshno Application** Jan 2019 – May 2019
* This software is designed to enhance the reading culture and users can use available audio and electronic books.

**Hoodad VAS (Value Added Service)** Jan 2018 – Jul 2018
* This software is designed to connect with all three Iranian mobile operators (MCI, MTN Irancell, and RighTel) so that the app users can pay for their monthly subscriptions for the apps mentioned above on their mobile bills.

**Hoodad CMS Platform** Sep 2017 – Dec 2017
* This software is a CMS (Content Management System). This software is designed for those who work in the content team of the company and have no technical and programming knowledge; so that, they can publish an application themselves within the shortest possible time.

**Ham-ahang Application (Cross platform music demand)** Apr 2017 – Dec 2017
* This software is designed to play Iranian music (Music streaming). In this version, HoodadLibraries has been used.

**HoodadLibraries Library** Dec 2016 – Apr 2017

* The HoodadLibraries is a library that is visible on the Nuget Private Server, owned by the Hoodad Technology Pioneers Company and can only be accessed from within the company's IP range. In this library, we tried to integrate some of the most commonly used parts of a software (such as Register, Login, Payment, CDN, etc) as a reusable module for further use in other projects owned by the company.

## CERTIFICATES

**Getting and Cleaning Data** 2021
*Coursera Credential URL*

**Machine Learning** 2019
*Coursera Credential URL*

**Advanced Databases and SQL Querying** 2018
*Udemy Credential URL*

## SKILLS

**Languages:** Persian(Native), English(Fluent) , Turkish(Fluent)
**Programming Languages:** Python, C#, Java, MATLAB
**Web/DB Technologies:** HTML, CSS, SQL, ASP.NET, JavaScript
**Typesetting:** LATEX

## HOBBIES

Swimming, Playing Soccer, Social Activities

## REFERENCES

Upon the request