ELHAM SADEGHNEZHAD

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EDUCATION

M.S. in Artificial Intelligence
K.N.Toosi University of Technology
📅 Sept 2017 – Nov 2020
- GPA: 3.0/4.0

B.S. in Computer Science
K.N.Toosi University of Technology
📅 Sept 2010 – Sept 2014
- GPA: 2.66/4.0

RESEARCH INTERESTS

- Machine Learning | Deep Learning
- Computer Vision
- Natural language processing
- Reinforcement Learning

SELECTED ACADEMIC PROJECTS

Master Thesis: Resting-State fMRI Data Classification through Algorithmic Design and Implementation

- Created and implemented a state-of-the-art deep convolutional neural network to effectively decode, classify, and gain insights into brain activity utilizing 4-D fMRI Data from the Humanconnectom dataset
- Employed the PyTorch framework and leveraged the SimpleITK library in order to accomplish the objectives of this project successfully

Analysis of the performance of the Swin Transformer architecture on the NIH Chest X-rays 14

- The study encompasses two experiments: training the Swin Transformer from scratch on the dataset and fine-tuning a pre-trained Swin Transformer on ImageNet for the same dataset.
- Employed the PyTorch framework to accomplish the objectives of this project successfully
- ⦿ project swin transformer on chestxray14 on Github

Implementation of GAN on MNIST

- Employed the PyTorch framework to accomplish the objectives of this project successfully
- ⦿ project GAN transformer on MNIST on Github

PUBLICATIONS

- Title: InceptionCapsule: Inception-Resnet and CapsuleNet with self-attention for medical image Classification.
  Journal: Submitted for publication in IEEE Transactions on Human-Machine Systems.
  Authors: Elham Sadeghnezhad, Sajjad Salem.
  Date: 2023

ONLINE COURSES

- Mathematical Tools for Data Science
- Yann LeCun's Deep Learning Course at CDS

WORK EXPERIENCES

Senior Developer
Faradis Alborz
📅 July 2019 -June 2022   ⦿ Tehran, Iran

- Developed and maintained banking payment systems
- Experienced in the following languages and technology: .Net | C-Sharp | MS SQL Server | JavaScript | CSS

Developer

Gam Electronic

📅 March 2016 - March 2018 📍 Tehran, Iran

- Analysis and development of the Sajat project (Comprehensive system for determining the competence of the factors of the technical and executive system of the country)
- Experienced in the following languages and technology: C-Sharp | Asp.net | MVC | MS SQL Server | Java Script | ExtJS | Jquery | Ajax | CSS | HTML |JavaScript| CSS

HONORS AND AWARDS

- Ranked among the top 1% within more than 12000 participants in the nationwide graduate university entrance exam for giving a Master's degree in Artificial Intelligence engineering (September 2017)
- Ranked among the top 1% within more than 320000 participants in the nationwide entrance examination in the field of physics and mathematics for entering the Iranian public universities (September 2010)

LANGUAGE SKILLS

- Persian: Native
- English: TOEFL iBT (Overall: 103 - Reading: 29, Listening: 30, Writing: 26, Speaking: 18)

TECHNICAL SKILLS

- Deep-learning Frameworks and Libraries

PyTorch | Keras | Scikit-learn | Pandas | Matplotlib

- Programming

C-sharp | Python | C++ | JavaScript

STRENGTHS

Creative Hard-working

Team-working

Professional in Self-Studying

REFERENCES

Prof. Mohammad Teshnehlab

Professor, K.N.Toosi University of Technology

📅 Email: teshnehlab@kntu.ac.ir 📍 Tehran, Tehran, Iran

- Website: https://wp.kntu.ac.ir/teshnehlab/
- Relation: Prof. Mohammad Teshnehlab was my master's thesis advisor. I took 2 courses during my master's with him

Prof. Ali Ahmadi

Associate Professor, K.N.Toosi University of Technology

📅 Email: ahmadi@kntu.ac.ir 📍 Tehran, Tehran, Iran

- Website: https://wp.kntu.ac.ir/ahmadi/
- Relation: Dr. Ali Ahmadi was my undergraduate thesis advisor. I took a master's course (Machine Learning) and 2 undergraduate courses with him

Dr. Amin Nikanjam

Research Associate, Polytechnique Montréal

📅 Email: amin.nikanjam@polymtl.ca

- Relation: I took Some courses like Artificial Intelligence and Operating Systems during my undergraduate and 2 courses (Multi-Agent systems and Evolutionary Computing) during my master's with him