

Sina Emami

Tehran Province, Iran

+98 939 205 0052 | emami.sina99@gmail.com | sina-emami.github.io | Sina-Emami | sina-emami

Education

B.S. in Computer Engineering

Tehran, Iran

AZAD UNIVERSITY, CENTRAL TEHRAN BRANCH(IAUCTB)

Sep. 2017 - Jul. 2021

- **World ranking:** 160 in Computer Science
- 150 credits program with GPA of 17.74/20.0 (3.73/4.0). GPA of the last two years is (3.88/4.0)

High School Diploma of Mathematics and Physics

Tehran, Iran

NATIONAL ORGANIZATION FOR DEVELOPMENT OF EXCEPTIONAL TALENTS (NODET)

Sep. 2013 - Jul. 2017

- GPA: 19.0/20.0

Honors & Awards

- 2021 **Top student of graduating class**, GPA ranked within the **top 3%** among the graduating
- 2017 **National Entrance Exam**, Ranked within the **top 5%** of the Iranian University Entrance Exam for Bachelor degree

Research Interests

- Deep Learning
- Machine Learning
- Medical image processing
- AI in HealthCare
- Bioinformatics
- Natural Language Processing

Teaching Experience

Nurafarin Company(NAICO)

Tehran, Iran

TEACHER

Apr. 2022 - Present

- Teaching some advance concepts of python which are essential for algorithmic trading. Some of my lectures can be found on my [GitHub](#).
- Taught the basic and fundamental concepts of python. Some of my lectures can be found on my [GitHub](#).

Azad University, Central Tehran Branch(IAUCTB)

Tehran, Iran

TEACHER ASSISTANT

Jan. 2019 - Jun. 2019

- TA of **System Analysis and Design** course, Under Supervision of **Dr. Ali Harounabadi**
- Responsibilities: Head Teaching Assistant, Teacher in Problem-Solving classes.

Working Experience

Nurafarin Company(NAICO)

Tehran, Iran

DATA SCIENTIST & BACKEND DEVELOPER(NODE.JS & DJANGO)

Feb. 2021 - Present

- Working on services to predict Cryptocurrency prices and produce signals by using deep learning and machine learning algorithms such as RNN, CNN, GAN, etc.
- Developed a bot to automatically copy traders' trade for all their followers in their accounts with API in [Binance exchange](#) in less than a second using **Python, Flask, and SQLite**. Wrote unit-test for it with **89% code coverage**.
- Developed the back-end side of a service that receives signals and tracks them to fetch specific features in each signal duration to analyze the cryptocurrency market better using **Node.js, GraphQL, and MongoDB**.
- Developed the back-end side of a service that fetch and store all the candles related to [Binance exchange](#) using **Node.js and GraphQL**.

AIMedic

Tehran, Iran

MEDICAL IMAGE PROCESSING AND ANALYSIS

Nov. 2020 - May. 2021

- Trained a machine to segment and specify the infected part of a lung from the CT-Scan in Covid-19 cases. The Overall Patient-Level Test reached **92% for the F1-Score**.
- Built a machine to classify Covid-19 and non-Covid cases from lung CT-Scan. The Overall Patient-Level Test reached **94% for the F1-Score**. Also helped in labeling data.

Amerandish Hooshmand

Tehran, Iran

INTERNSHIP

Aug. 2020 - Nov. 2020

- Contributed to developing the web application of an artificial intelligence video and photo analyzer named Binayar.

Remis

Tehran, Iran

HELP DESK TECHNICIAN & STORAGE AND SERVER ADMINISTRATOR

Aug. 2018 - May. 2019

- Installed and configured Cisco routers and switches.
- Installed and configured HP servers.

Selected Projects

Covid-19 lung CT Scan segmentation

THIS MODEL IS TRAINED TO SEGMENT THOSE PARTS WHICH ARE INFECTED BY COVID-19 IN CT SCAN

- The dataset from [Kaggle page](#) is used.
- **Histogram Equalization** is used to make infection parts more visible and augmentation is used to create more data for train better.
- The machine has been trained with **UNet** model.
- The loss function is the combination of **weighted dice loss and surface loss**
- The testset got the **93% for AUC, 0.93% sensitivity, and 0.99% specificity**.

Stock Candle prediction using CNN

PREDICT STOCK CANDLE(WHETHER IT IS A GREEN OR RED CANDLE) USING 2D AND 3D CNN

- It is my implementation of the idea of [an article](#). The GitHub page for this article is [available here](#).
- CNN is used to classify whether the candle will be green or red using a diverse set of variables.

ISIC-2019 Melanoma Classification

CLASSIFY DERMOSCOPIC IMAGES AMONG NINE DIFFERENT DIAGNOSTIC CATEGORIES

- The goal for ISIC 2019 is classify dermoscopic images among nine different diagnostic categories
- I had tried different regularization techniques to overcome the overfitting problem

Skills

Programming Languages	Python, JavaScript, Matlab, Latex, CSS
ML/AI Knowledge	Recurrent Neural Networks, Convolutional Neural Networks, Generative Adversarial Networks, Transformers
ML/AI Packages	Tensorflow, Keras, Scikit-learn, Numpy, Pandas, Matplotlib
Back-end	Node.js, Django, FastAPI, REST API, GraphQL
Database	MongoDB, MySQL, Redis, SQLite
Other Technologies	Git, Linux
Interpersonal Skills	Teamworking, Teaching, Self-Learning, Problem-Solving, Critical Thinking

Courses & Certifications

Online Courses

Smart Contracts: [University at Buffalo by Coursera](#) ●
AI for Medical Diagnosis: [Deeplearning.ai by Coursera](#) ●
Machine Learning: [Stanford University online by Coursera](#) ●
Deep Learning Specialization: [Deeplearning.ai by Coursera](#) ●
AWS Cloud Technical Essentials: [Amazon Web Services by Coursera](#) ●

University selected courses

Databases: **20/20**
Algorithm Design: **20/20**
Operating Systems : **18.5/20**
System Analysis and Design: **19.5/20**
Artificial Intelligence and Expert Systems : **18/20**

language

English: Full professional proficiency

Persian: Native proficiency

IELTS Score - Overall: 7 (L: 7.5 | R: 7 | S: 7 | W: 6)

References

Dr. Ali Harounabadi: Head of Computer Engineering Department of IAUCTB	a.harounabadi@gmail.com ✉
Dr. Parvaneh Asghari: Assistant professor Department of Computer Engineering of IAUCTB	p_asghari@iauctb.ac.ir ✉
Dr. Yasaman Najmabadi: Assistant professor Department of Computer Engineering of IAUCTB	ya.na13701990@gmail.com ✉
Dr. Mahdi Motevali: Assistant professor Department of Computer Engineering of IAUCTB	mmotevali@iauctb.ac.ir ✉
Behrouz Kheyrandish: CTO of Nurafarin (NAICO)	b.kheyrandish@gmail.com ✉