

Sina Emami

Tehran Province, Iran

☎ +98 939 205 0052 ✉ emami.sina99@gmail.com 🌐 sina-emami.github.io/ 📄 [/sina-emami](https://sina-emami.github.io/) 🔄 [/Sina-Emami](https://Sina-Emami.github.io/)

Education

B.S. in Computer Engineering

Sep 2017 – Sep 2021

Azad University, Central Tehran Branch(IAUCTB) 🔍

Tehran, Iran

▶ 150 credits program with GPA of **17.74/20 (3.6/4.00)**. GPA of the last two years is **(3.7/4.00)**

▶ **Selected courses:** Operating Systems (18.5/20) - Data Structures (16/20) - System Analysis and Design (19.5/20) - Databases (20/20) - Computer Networks (19.5/20) - Artificial Intelligence and Expert Systems (18/20)

Diploma of Mathematics and Physics

Sep 2013 – Sep 2017

National Organization for Development of Exceptional Talents (NODET), GPA 19/20

Tehran, Iran

Honors and Awards

Top student of graduating class

2021

*Ranked within the **top 5%** among the graduating class*

Tehran, Iran

National Entrance Exam

2017

*Ranked within the **top 5%** of the Iranian University Entrance Exam for Bachelor degree(Konkur)*

Tehran, Iran

I participated in Math and Physics exam

Research Interests

- Deep Learning
- Machine Learning and Data Mining
- Computer vision
- Software Engineering
- AI in HealthCare
- Systems Programming

Experience

Nurafarin Company(NAICO) 🔍

Feb 2021 – Present

Software Engineer - Full-time

Tehran, Iran

🔗 Developed a bot to automatically copy the trade of a trader for all its followers in their accounts with API in Binance exchange 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 have a better analysis of the cryptocurrency market using **Node.js, GraphQL, and MongoDB**.

🔗 Wrote a code that displays the status of 4 technical analysis method in real-time with **Python**.

🔗 Worked as **Test Lead** and checked all the projects tests for two month.

🔗 Developing a backtesting bot to find a pattern for a signal in historical candles at the current time.

AIMedic 🔍

Nov 2020 – May 2021

Deep Learning and Computer Vision Researcher - Intern

Tehran, Iran

👁️ Worked on developing the script to segment and specify the infected part of a lung CT-Scan in Covid-19 cases. The Overall Patient-Level Test reached **90% for the F1-Score**

👁️ Made up a script to classify Covid and non-Covid cases from lung CT-Scan. The Overall Patient-Level Test reached **94% for the Accuracy**. Also helped in labeling data.

Azad University, Central Tehran Branch(IAUCTB)

Jan 2019 – Jun 2019

Teacher Assistant

Tehran, Iran

🎓 TA of **System Analysis and Design** course, Under Supervision of **Dr. Ali Harounabadi** 📧

Responsibilities: Head Teaching Assistant, Teacher in Problem-Solving classes

Remis 🔍

Aug 2018 – May 2019


Help Desk Technician & Storage and Server Administrator - Part-time

Tehran, Iran

🖨️ Installed and fixed different software and hardware for the first two months as help desk technician.


🔧 Installed and configure server and storage physically.


Selected Projects

Covid-19 lung CT-Scan segmentation  | *TensorFlow, Keras, OpenCV, Google colab*

OCT 2020

This model is trained to segment those parts which are infected by Covid-19 in CT-Scan.

- Trained with COVID-19 CT scans Kaggle data set. For the loss function, the combination of **weighted dice loss and surface loss** was used and model trained with **U-Net**
- Used **Histogram Equalization** to make infection parts more visible and used augmentation to create more data for model.
- Sensitivity in test data set reached 0.934817 and AUC reached 0.933751
- Tested with CT-MD Dicom  data set and gets the perfect result as output.

Binance platform simulator  | *Django, CSS, HTML, SQLite*

Aug 2021

This Web application can be used when you want someone to trade with your money but you do not want that person to be able to deposit or withdraw from your account.

- With API key and API Secret which you can create in your Binance account, you will be able to set order in spot part and cross margin part of the Binance exchange.
- It is possible to transfer your assets between spot and cross margin.
- You can get The report of your spot and cross margin account in CSV format.

Collecting Historical and real-time candles from Binance exchange  | *Python*

Feb 2021

This project has consisted of two-part:

- the close prices of BTC in every minute candles from 24 hours ago needed to be gathered.
- the aforementioned part must be done for the next 24 hours in real-time.

Skills

Deep Learning: Recurrent Neural Networks, Convolutional Neural Networks, LSTM, Transformers

Machine Learning: Logistic Regression, Clustering, SVM, Decision Tree, and Random Forests

Languages: Python, JavaScript, HTML/CSS, GraphQL, Familiar with: C++, SQL

AI Packages: Scikit-learn, Tensorflow, Keras, Numpy, Pandas, Matplotlib, Jupyter notebooks

Back-end Technologies/Frameworks: Django, Node.js

Network knowledge/Tools: Network+, CCNA, Linux, Packet Tracer

Other Skills: Design Patterns, UML, Git, Redis, Familiar with: LATEX

Online Courses

Deep Learning Specialization 

Aug 2020

Andrew Ng, DeepLearning.ai by Coursera

In this Specialization, I have learned to build and train neural network architectures such as Convolutional Neural Networks, Recurrent Neural Networks, LSTMs, Transformers, and learned how to make them better with strategies such as Dropout, BatchNorm, Xavier/He initialization, and more.

AI for Medical Diagnosis 

Dec 2020

Pranav Rajpurkar, DeepLearning.ai by Coursera

Through this course, I have learned, how to create convolutional neural network image classification and segmentation models to make diagnoses of lung and brain disorders.

Machine Learning 

Dec 2019

Andrew Ng, Stanford online by Coursera

This course provides a broad introduction to machine learning, datamining, and statistical pattern recognition.

Introduction to Git and GitHub 

Oct 2020

Google Career by Coursera

In this course, I learned how to keep track of the different versions of my code and configuration files using Git.

CS230 Deep Learning 

Aug 2020

Stanford Online on YouTube

Languages

Persian: Native proficiency

English: Full professional proficiency

IELTS Score: To be taken soon

References

Dr. Ali Harounabadi: Head of Computer Engineering Department of IAUCTB

📖 Course: System Analysis and Design & My Supervisor in Information Technology Project

✉ a.harounabadi@gmail.com

Dr. Parvaneh Asghari: Assistant professor Department of Computer Engineering of IAUCTB

📖 Course: Operating systems

✉ p.asghari@iauctb.ac.ir

Dr. Yasaman Najmabadi: Assistant professor Department of Computer Engineering of IAUCTB

📖 Course: Computer Aided Digital System Design & Logic Circuits and Computer Structure Laboratory

✉ ya.na13701990@gmail.com

Dr. Mahdi Motevali: Assistant professor Department of Computer Engineering of IAUCTB

📖 Course: Information Technology Project Management & Engineering Economics

✉ mmotevali@iauctb.ac.ir

Behrouz Kheyrandish: CTO of Nurafarin (NAICO)

✉ b.kheyrandish@gmail.com