ALIREZA HOSSEINI

Al Developer

Website

alireza.hosseini.7711

**** 910 9694 866 Tehran, Iran

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RESEARCH INTERESTS -

Deep Learning, Computer Vision

· Saliency Map Prediction, Cognitive science

· Implicit Neural Representation

· Generative Models, OCR

SKILLS

Languages: Python, MATLAB, HTML, C/C++.

AI Tools: PyTorch, OpenCV, TensorFlow, NPM.

Others: Docker, Git, Linux, Al Model Serving, Fast-

EDUCATION

9/2022 - now Master of Science - MS, Telecommunication Systems

University of Tehran

Grade: 18.21/20. Thesis: Analyzing and improving the performance of networks for predicting human visual saliency map in images and investigating their use in the field of neuromarketing

9/2017 - 3/2022

Bachelor of Science - BS, Electrical and Electronics Engineering Iran University of Science and Technology Grade: 17.03/20. Thesis: Diagnosing and Detection and of internal combustion engine accessories belt for health monitoring and performance investigation; a Machine Vision approach

9/2013 - 9/2017

High School Diploma, Mathematics

National Organization for Development of Exceptional Talents (Sampad)

PUBLICATIONS

Arxiv 2024

Brand Visibility in Packaging: A Deep Learning Approach for Logo Detection, Saliency-Map Prediction, and Logo Placement Analysis

- · Alireza Hosseini, Kiana Hooshanfar, Pouria Omrani, Reza Toosi, Ramin Toosi, Zahra Ebrahimian, Mohammad Ali Akhaee
- Submitted to International Journal of Computer Vision(IJCV)

WACV 2024

INCODE: Implicit Neural Conditioning with Prior Knowledge Embeddings

Github

· Amirhossein Kazerouni, Reza Azad, Alireza Hosseini, Dorit Merhof, Ulas Bagci

ICWR 2023

Farsi CAPTCHA Recognition Using Attention-Based Convolutional Neural Network

· Alireza Hosseini , Matine Hajyan, Ramin Toosi, Mohammad Ali Akhaee

ASE 2022

Machine vision-based measurement approach for engine accessory belt transverse vibration based on deep learning method

- · Ashkan Moosavian, Alireza Hosseini, Seyed Mohammad Jafari, Iman Chitsaz, Shahriar Baradaran Shokouhi
- · Journal: Automotive Science and Engineering 2022

ER 2022

Development of Machine Vision System to Track Movement of an Engine Timing Belt Tensioner Based on Deep Neural Network

- · Alireza Hosseini, Moosavian Ashkan, Saeed Javan, Shahriar B Shokouhi
- Journal: The Journal of Engine Research 2022

EXPERIENCE

7/2022 - now

Artificial Intelligence Developer

Adak Vira Iranian Rahjoo (AVIR)

· Saliency-map prediction, Saccade sequence prediction, OCR, TTS, ASR, RAG, Motion Capture, Pose Estimtion, Object Detection, Data analysis, Wav2lip, Document Scanner Module, Cartoonize Image and video, Fast-API, Triton, Dockerize modules, etc

1/2023 - 11/2023 Artificial Intelligence Developer

University of Tehran

- · Project: Eye Tracking, Neuromarketing
- · Supervisor: Dr. Mohammad Ali Akhaee, Associate Professor at the University of Tehran

12/2021 - 09/2022 Artificial Intelligence Developer

University of Tehran

- Project: Persian HandWritten OCR
- Supervisor: Dr. Mohammad Ali Akhaee, Associate Professor at the University of Tehran

7/2021 - 7/2022

Computer Vision Researcher

Iran Khodro Powertrain Company (IPCO)

Detection and diagnosis of internal combustion engine accessories belt - Deep learning Aproaches

TEACHING EXPERIENCE		
Spring 2024	Machine Learning - Dr. A. Dehaqani, Dr. Tavassolipour	University of Tehran
Spring 2024	Blind Source Separation - Dr.Akhavan	University of Tehran
Fall 2023	Machine Learning - Dr. N Araabi, Dr. A. Dehaqani, Dr. Tavassolipour	University of Tehran
Spring 2022	Advance Logical Circuit - Dr. Mirzakuchaki	Iran University of Science and Technology
Fall 2021	Logical Circuit - Dr. Mirzakuchaki	Iran University of Science and Technology
TEACHING EXPERIENCE		
Spring 2024	Machine Learning - Dr. A. Dehaqani, Dr. Tavassolipour	University of Tehran
Spring 2024	Blind Source Separation - Dr.Akhavan	University of Tehran
Fall 2023	Machine Learning - Dr. N Araabi, Dr. A. Dehaqani, Dr. Tavassolipour	University of Tehran
Spring 2022	Advance Logical Circuit - Dr. Mirzakuchaki	Iran University of Science and Technology
Fall 2021	Logical Circuit - Dr. Mirzakuchaki	Iran University of Science and Technology
RELATED COURSES		
Fall 2023	Analysis and Design of Deep Neural Networks [Github] • Dr. Kalhor and Dr. N Araabi, Grade: 19.6/20	University of Tehran
Fall 2023	Deep Generative Models [Github]Dr. Tavassolipour and Dr. Sadeghi, Grade: 19.6/20	University of Tehran
Spring 2022	Machine Learning [Github] • Dr. A. Dehaqani, Dr. Tavassolipour, Grade: 20/20	University of Tehran
Fall 2022	Blind Source Separation • Dr. Akhavan, Grade: 18.6/20	University of Tehran
Fall 2022	Deep Learning Dr. Kalhor, Grade: 18.5/20	University of Tehran
Fall 2022	Information Theory and Learning • Dr. Sabbaghian, Grade: 18.9/20	University of Tehran
Spring 2021	Digital Signal Processing Dr. B Shokouhi, Grade: 20/20	Iran University of Science and Technology
CERTIFICATIONS		
10/2023	Introduction to Generative AI	Coursera
10/2021	Build Basic Generative Adversarial Networks (GANs)	Coursera
10/2021	Fundamentals of Project Planning and Management	Coursera
10/2021	Successful Negotiation: Essential Strategies and Skills	Coursera
08/2021	Deep Neural Networks with PyTorch	Coursera
08/2021	Advanced Computer Vision with TensorFlow	Coursera
06/2021	Deep Learning A-Z™: Hands-On Artificial Neural Networks	Coursera
04/2021	Complete Python Bootcamp from Zero to Hero in Python	Coursera

LANGUAGES -