UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO   ID CODE ___5968___

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Informatica Giovanni Degli Antoni.**

Scientist- in – charge: Prof. Pierangela Samarati

Milad Parvan

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Parvan
Name	Milad

PRESENT OCCUPATION

Appointment	Structure
Research Assistant	University of Tabriz, Iran

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree			
Specialization			
PhD			
Master	MSc. Electrical Engineering	University of Tabriz, Iran	2019
Degree of medical specialization			
Degree of European specialization			
Other	BSc. Electrical Engineering	Amirkabir University of Technology	2016

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
2017-2018	Vice President of IEEE student branch of University of Tabriz	Tabriz, Iran
2020-2023	Member of the Iran's National Elite Foundation	Tabriz, Iran

FOREIGN LANGUAGES

Languages	level of knowledge
English	IELTS overall: 7
Turkish	Native
Persian	Native

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2019	Ranked 3rd out of students of Control Engineering in M.Sc degree
2011	Ranked among top 0.1% in the nationwide university entrance exam in Mathematics and Physics field for B.Sc. degree
2010	First ranked team and gold medal holder of National Mathematical Olympiad

TRAINING OR RESEARCH ACTIVITY

description of activity
Research Assistant: 1- Research Laboratory of Autonomous and Tele-Operation Systems, and 2- Research Laboratory of Robotics. University of Tabriz, (2016-current), under supervision of Prof. Amir Rikhtehgar Ghiasi Tasks: 1- Conducting under graduated students on their thesis. 2- Providing Linear Control Lab Handbook.
Teaching Experience: 1- Teacher Assistant: "optimal Control", Under Supervision of Prof.Hamed Kharrati, University of Tabriz, 2020. 2- Teacher: "Linear Control Lab", Under Supervision of Prof.Amir Rikhtehgar Ghiasi, University of Tabriz, 2018. 3- Teacher Assistant: "Linear Control Systems", Under Supervision of Prof.Amir Rikhtehgar Ghiasi, University of Tabriz, 2017.

PROJECT ACTIVITY

Year	Project
2020-2023	Project Title: Detecting the Speed and Longitudinal Distance of Vehicles by Analyzing Video using Deep Learning Road Traffic Injury Research Center, Under the supervision of Tabriz University of Medical Sciences

2016-current	Motor Imagery EEG Classification | python, MATLAB
	▷ Deep learning methods: DNN, CNN, LSTM, GRU, RNN, Attention, Transformers.
	▷ Machine learning methods: ELM, SVM, Contrastive Learning, Semi-Supervised Learning.
	▷ Feature extraction: CSP, FBCSP, Wavelet, FFT.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.
2017	EEG Data Augmentation | python, MATLAB
	▷ GAN, Autoencoders, Noise augmentation, Amplitude perturbation.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.
2020	User Identification | python
	▷ Using EEG Signals.
	▷ Deep Learning methods: CNN, LSTM, CNN-LSTM.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.
2020-2023	Object Detection | python
	▷ Deep learning methods: Different version of YOLO networks.
	▷ Evaluate on our own vehicle detection and tracking dataset.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.
2022	Anomaly Detection | python
	▷ Deep learning methods: Autoencoders, GANomaly, AnoGAN.
	▷ Evaluate on MVTec dataset and our own dataset.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.
2021	Audio scene classification | python
	▷ Deep learning methods: CNN, GRU, CNN-GRU.
	▷ Evaluate on LITIS Rouen dataset.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.
2018	Intrusion detection | python
	▷ Machine learning methods: PCA, KNN-Kmeans, neural networks.
	▷ Evaluate on KDDcup dataset.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.
	Datasets | python, MATLAB
	▷ Working on different public signal, image and audio datasets.
	BCI comp IV 2a, BCI comp IV 2b, BCI comp IV dataset 3,
	BCI comp III dataset 2, Physionet MIEEG dataset (mmidb),
	KDDcup, MVTEC, mnist, COCO, Rouen audio dataset, BRATS.
	Research Laboratory of Autonomous and Tele-Operation Systems, University of Tabriz.

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
2019	27th Iranian Conference on Electrical Engineering (ICEE)	Yazd, Iran

PUBLICATIONS

Books
Translation of: "An introduction to neural network methods for differential equations", 2020, (In Persian)
"Biosignal Processing in Applications of Rehabilitation", 2020, (In Persian)

Articles in reviews
"Estimating of Vehicle Speed and Longitudinal Distance Using YOLO and Strong SORT algorithms", 2023
"Effect of Speed Cameras on Road Safety: A Systematic Review", 2023
"ALAD: A Comprehensive Assembly Line Anomaly Detection Dataset", 2023

Congress proceedings
1- Parvan, M., Ghiasi, A. R., Rezaii, T. Y., Farzamnia, A.
Transfer Learning based Motor Imagery Classification Using Convolutional Neural Networks.
In 27th Iranian Conference on Electrical Engineering (ICEE), 2019.

OTHER INFORMATION

My research experience/interests include deep learning and machine learning and the application of these algorithms in (bio)-signal processing, medical image analysis, and computer vision. My MSc thesis title is "Classification of Motor Imagery EEG Signals using Deep Learning Methods". Currently, I have one published paper titled "Transfer Learning based Motor Imagery Classification using Convolutional Neural Networks". My total citation is 31. As a motivated student, I have worked in areas other than my thesis. In detail, I have experience working (or am familiar) with different types of data including EEG Signals, Image, Video, and Audio, and different types of learning including Supervised, Unsupervised, Self-Supervised, Contrastive, active, and reinforcement learning, and different types of problems including (Signal, Image, Audio) Classification, Object Detection and Tracking, Image Segmentation, and Anomaly Detection, and different machine/deep learning methods including but not limited to DNN, CNN, RNN-LSTM-GRU, Attention Mechanisms, Transformers, Autoencoders, U-Net, and GANs, and with different frameworks of deep learning in Python including Pytorch and Keras-Tensorflow.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: ___Tabriz, Iran____, ___15/11/2023___