EUROPEAN
CURRICULUM VITAE
FORMAT

PERSONAL INFORMATION

Name	**MOMENZADEH Alireza**
Address	
Telephone	
E-mail	
Nationality	
Date of birth	

WORK EXPERIENCE

• Date	From 1994 to 2011
• Name and address of employer	Badr - Private college of basic science - Shiraz (Iran)
• Type of business and sector	Education
• Occupation or position held	Teacher
• Main activities and responsibilities	General mathematics - Calculus - Analysis of steel structures - structural analysis software
• Date	From 2006 to 2008
• Name and address of employer	Fajr Shiraz co-operative company – Shiraz (Iran)
• Type of business and sector Type of business and sector	Civil engineering company
• Occupation or position held	Technical office expert
• Main activities and responsibilities	Analysis and design of industrial sheds

EDUCATION

• Date	April 2018 - March 2020
• Name and type of organisation providing education and training	Sapienza University of Rome - Department of Information Engineering, Electronics and Telecommunications
• Principal subjects/occupational skills covered	Fog-supported networks
• *Title of qualification awarded*	Research grant holder
• Date	2016 - 2017
• Name and type of organisation providing education and training	Sapienza University of Rome - Department of Basic and Applied Sciences for Engineering
• Principal subjects/occupational skills covered	Optimal control theory - Numerical approaches to fractional differential equations
• *Title of qualification awarded*	Research assistant

• Date	2012 - 2015
• Name and type of organisation providing education and training	University Technology Malaysia - Department of Structure and Material
• Principal subjects/occupational skills covered	Civil - Structural engineering
• *Title of qualification awarded*	Master of Engineering
• Date	2001 - 2007
• Name and type of organisation providing education and training	Azad University of Estahban - Department of Civil Engineering
• Principal subjects/occupational skills covered	Civil engineering
• *Title of qualification awarded*	Bachelor of engineering
• Date	1988 - 1992
• Name and type of organisation providing education and training	Privileged Andisheh High School - Shiraz (Iran)
• Principal subjects/occupational skills covered	Mathematics and Physics
• *Title of qualification awarded*	Diploma in Mathematics and Physics

SKILLS

LANGUAGE

MOTHER TONGUE	**PERSIAN**
OTHER LANGUAGES	
	ENGLISH
• Reading skills	GOOD
• Writing skills	GOOD
• Verbal skills	GOOD

COMPUTER Good knowledge of MATLAB programming environment

MATHS

1) Minimization.
2) Optimal control theory.
3) Dynamical analysis of structures.
4) Finite element
5) Matrix analysis

OTHERS

1) Basic knowledge of Machine Learning.
2) Limited acquaintance with Fog computing.

PUBLICATIONS

1.

A novel unsupervised approach based on the hidden features of deep denoising autoencoders for COVID-19 disease detection

Expert Systems with Applications 2022 | Journal article

DOI: 10.1016/j.eswa.2021.116366

CONTRIBUTORS: Scarpiniti, M.; Sarv Ahrabi, S.; Baccarelli, E.; Piazzo, L.; Momenzadeh, A.

2.

Exploiting probability density function of deep convolutional autoencoders' latent space for reliable COVID-19 detection on CT scans

Journal of Supercomputing 2022 | Journal article

DOI: 10.1007/s11227-022-04349-y

CONTRIBUTORS: Sarv Ahrabi, S.; Piazzo, L.; Momenzadeh, A.; Scarpiniti, M.; Baccarelli, E.

3.

A histogram-based low-complexity approach for the effective detection of COVID-19 disease from CT and X-ray images

Applied Sciences 2021 | Journal article

DOI: 10.3390/app11198867

CONTRIBUTORS: Scarpiniti, M.; Sarv Ahrabi, S.; Baccarelli, E.; Piazzo, L.; Momenzadeh, A.

4.

An accuracy vs. complexity comparison of deep learning architectures for the detection of COVID-19 disease

Computation 2021 | Journal article

DOI: 10.3390/computation9010003

CONTRIBUTORS: Sarv Ahrabi, S.; Scarpiniti, M.; Baccarelli, E.; Momenzadeh, A.

5.

DeepFogSim: A toolbox for execution and performance evaluation of the inference phase of conditional deep neural networks with early exits atop distributed fog platforms

Applied Sciences 2021 | Journal article

DOI: 10.3390/app11010377

CONTRIBUTORS: Scarpiniti, M.; Baccarelli, E.; Momenzadeh, A.; Sarv Ahrabi, S.

6.

Learning-in-the-Fog (LiFo): deep learning meets Fog Computing for the minimum-energy distributed early-exit of Inference in delay-critical IoT realms

IEEE Access 2021 | Journal article

DOI: 10.1109/ACCESS.2021.3058021

CONTRIBUTORS: Baccarelli, E.; Scarpiniti, M.; Momenzadeh, A.; Sarv Ahrabi, S.

7.

Metaheuristics and Pontryagin's minimum principle for optimal therapeutic protocols in cancer immunotherapy: a case study and methods comparison

Journal of Mathematical Biology 2020 | Journal article

DOI: 10.1007/s00285-020-01525-7

CONTRIBUTORS: Sarv Ahrabi, S.; Momenzadeh, A.

8.

Optimized training and scalable implementation of conditional deep neural networks with early exits for Fog-supported IoT applications

Information Sciences 2020 | Journal article

DOI: 10.1016/j.ins.2020.02.041

CONTRIBUTORS: Baccarelli, E.; Scardapane, S.; Scarpiniti, M.; Momenzadeh, A.; Uncini, A.

9.

EcoMobiFog - design and dynamic optimization of a 5G Mobile-Fog-Cloud multi-tier ecosystem for the real-time distributed execution of stream applications

IEEE Access 2019 | Journal article

DOI: 10.1109/ACCESS.2019.2913564

CONTRIBUTORS: Baccarelli, E.; Scarpiniti, M.; Momenzadeh, A.

10.

SmartFog: training the Fog for the energy-saving analytics of smart-meter data

Applied Sciences 2019 | Journal article

DOI: 10.3390/app9194193

CONTRIBUTORS: Scarpiniti, M.; Baccarelli, E.; Momenzadeh, A.; Uncini, A.

11.

VirtFogSim: a parallel toolbox for dynamic energy-delay performance testing and optimization of 5g Mobile-Fog-Cloud virtualized platforms

Applied Sciences 2019 | Journal article

DOI: 10.3390/app9061160

CONTRIBUTORS: Scarpiniti, M.; Baccarelli, E.; Momenzadeh, A.

12.

Determination of order in linear fractional differential equations

Fractional Calculus and Applied Analysis 2018 | Journal article

DOI: 10.1515/fca-2018-0051

CONTRIBUTORS: D'Ovidio, M.; Loreti, P.; Momenzadeh, A.; Sarv Ahrabi, S.

13.

Fog-supported delay-constrained energy-saving live migration of VMs over multipath TCP/IP 5G connections

IEEE Access 2018 | Journal article

DOI: 10.1109/ACCESS.2018.2860249

CONTRIBUTORS: Baccarelli, E.; Scarpiniti, M.; Momenzadeh, A.

14.

On failed methods of fractional differential equations: the case of multi-step generalized differential transform method

Mediterranean Journal of Mathematics 2018 | Journal article

DOI: 10.1007/s00009-018-1193-x

CONTRIBUTORS: Sarv Ahrabi, S.; Momenzadeh, A.

15.

Failure strength of thin-walled cylindrical GFRP composite shell against static internal and external pressure for various volumetric fiber fraction

International Journal of Applied Physics and Mathematics 2012 | Journal article

DOI: 10.7763/ijapm.2012.v2.65

CONTRIBUTORS: Gohari, S.; Golshan, A.; Mostakhdemin, M.; Mozafari, F.; Momenzadeh, A.