



## curriculum vitae

### PERSONAL INFORMATION

Surname	<b>JAFARZAD ESLAMI</b>
Name	<b>BABAK</b>

### Education and training

• Date (from – to)	2012-2016
• Name and type of organisation providing education and training	University of Pavia
Duration of the program of study	3 years
• Principal subjects/occupational skills covered	Phd
• Title of qualification awarded	Civil and Architectural Engineering
Final mark obtained	
• Date (from – to)	2015-2016
• Name and type of organisation providing education and training	Polytechnic University of Catalonia
Duration of the program of study	6 months
• Principal subjects/occupational skills covered	The thesis activities in modeling and identification magneto rheological fluid damper
• Title of qualification awarded	ERASMUS

• Date (from – to)	2008-2012
• Name and type of organisation providing education and training	University of Genova
Duration of the program of study	5 years
• Principal subjects/occupational skills covered	Master
• Title of qualification awarded	Civil and Construction Engineering
Final mark obtained	92/110

### graduation thesis

Title	The retrofit monumental buildings through seismic dampers (in Phd)
Language	Italian
Supervisor	Prof. Andrea Del Grosso
Thesis Summary	The project was defined to apply seismic vulnerability of heritage masonry walls is assessed in this work by conducting extensive numerical studies on both unreinforced (fixed-base) and reinforced (Base Isolation System) masonry walls. In this manner, finite element modelling and

	<p>analysis (using ABAQUS) are performed as a comparative study between a fixed-base masonry wall and similar base-isolated wall retrofitted with laminated rubber bearings. [Nonlinear time history analysis (using the actual Bam earthquake) have been recognized as a useful tool for the description of the behaviour of masonry structures. Actually, they enable one to describe the pre-peak and post-peak behaviour of the masonry walls.</p> <p>Finally, comparison of the failure modes between unreinforced and reinforced masonry walls shows a great efficiency of using the rubber bearing isolation (passive control vibration devices) for a reduction in acceleration and an increase in the structural resistance to earthquake excitations.</p>
Title	Soltanieh Dome (in Master)
Language	Italian
Supervisor	Prof. Andrea Del Grosso
Thesis Summary	<p>The project was defined to apply seismic vulnerability analysis on a particular historic masonry structure, "Soltanieh dome" constructed as a tomb about 700 years ago in Iran based on "Vasseghi et al, JSEE, 8 (2007) 221-227". To simplify the model, the main building was disregarded and the shell elements were used with both bending and membrane capabilities to model the dome with fixed base. Firstly, finite element analysis in ANSYS considering linear material behaviour was applied to the model for gravity load and 3 different levels of seismic hazard, events with 75, 475 and 2500 years return periods, so that the stress results were verified by those presented in the paper mentioned above. Afterwards the stress results were compared with failure envelope of masonry material used in the dome to identify the locations of crushes. finally nonlinear static analysis was employed to reach an approximate assessment about seismic resistance of the dome for 3 mentioned levels of seismic hazard.</p>

## publications and articles

Author(s) and title	Babak Jafar zad Eslami, Hossein Darban & Andrea Del Grosso Effect of mortar-brick cohesive interface on seismic response of masonry walls (to be submitted)
Language	English
Publication place	17th IBMAC 2020, Krakow, Poland
Date of publication	2020
Author(s) and title	Babak Jafar zad Eslami & Andrea Del Grosso, Retrofit of masonry buildings through seismic dampers
Language	English
Publication place	Conference on MECHANICS OF MASONRY STRUCTURES strengthened with composite materials: Modeling, testing, design, monitoring, control (murico6),Bologna, Italia
Date of publication	2019
Author(s) and title	Babak Jafar zad Eslami, The retrofit of masonry buildings
Language	Italian
Publication place	Conference on Computational Mechanics-Ferrara
Date of publication	2018

Author(s) and title	Ali Deghan & Babak jafar zad Eslami, Estimation of velocity profile in trapezoidal open channels using ANNS
Language	Persian
Publication place	Conference on Civil engineering, Architecture of Islamic country, Tabriz-Iran
Date of publication	2018

Author(s) and title	Ali Ronood & Babak jafar zad Eslami Industrial waste water treatment of petrochemical units by designing hydrological cycle
Language	Persian
Publication place	International Conference on Civil engineering, Architecture and Urban Development management in Iran
Date of publication	2018

<b>Certifications</b>
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Certifications of language knowledge	CEFR-B1
Other certification	Examination state of Iranian civil engineering society

<b>Work experience, stages, studies abroad</b>
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• Date (from – to)	2017-2019
• Name and address of firm/university	University of Ghiasedin ( in Iran)
• Type of business or sector	Department of Civil Engineering and Architecture
• Type of employment	Full time
• Main activities and responsibilities	Assistant Professor & Head of Department of Civil Engineering and Architecture
• Date (from – to)	2009-2010
• Name and address of firm/university	<b>Ansaldo</b> s.p.a.
• Type of business or sector	Technical and security office of metro construction
• Type of employment	Apprenticeship, part time
• Main activities and responsibilities	Collaboration in preparing security plan of the construction, project control
• Date (from – to)	2004-2007
• Name and address of firm/university	Payandan s.r.l
• Type of business or sector	Technical office of gas pipeline construction
• Type of employment	Full time engineer
• Main activities and responsibilities	Project control, supervision, as-built plots, preparation of economical proceedings and statements

<b>Teaching and academic experience</b>
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• Teaching	Undergraduate courses: Strength of material, Seismic engineering, Consolidation of structure Postgraduate course (in Structural Engineering): Finite element method, Seismic rehabilitation
• Supervisor	9 Postgraduate Theses
• Member examination committees	Over 30 Postgraduate candidates in Civil Engineering Dept

<b>Personal skills and competences</b>
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Mother tongue	Persian
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Other language(s)
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	Italian
• reading	excellent

• writing	excellent
• speaking	excellent

	English
• reading	good
• writing	good
• speaking	good

	Arabic
• reading	good
• writing	good
• speaking	elementary

<b>Organisational skills and competences</b>	Managing staff Responsibility for Teaching and Students Responsibility for Research Financial Management
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<b>Technical skills and competences</b>	ETABS, SAP, SAFE, ABAQUS, ANSYS, SEISMOSIGNAL, AUTOCAD, GIS, MATLAB, MS. PROJECT, Maple  Analyse, design and retrofit of reinforced concrete and steel structures based on ACI, AISC, UBC and FEMA356  Retrofit of masonry buildings based on FEMA356
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