### **PERSONAL INFORMATION**





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Sex Male | Date of birth 14/07/1986 | Nationality Ecuadorian

Majid Khorami is an esteemed Associate Professor in the Faculty of Architecture and Urbanism at UTE University in Ecuador, where he has been shaping minds and advancing the field of construction for over ten years. With a rich background spanning more than fourteen years in academia and research, he specializes in Ultra-High Performance Fibre Reinforced Concrete (UHPFRC), harnessing the power of artificial intelligence to pioneer innovations in concrete technology and sustainable construction.

Dr. Khorami earned his Ph.D. from the prestigious Polytechnic University of Valencia, Spain, focusing his research on the intricacies of UHPFRC. His scholarly contributions have earned him a place among the top 2 percent of the most cited scientists globally as reported by Elsevier in 2021, highlighting his significant impact on the scientific community.

In addition to his teaching and research duties, Dr. Khorami serves as the Editorin-Chief of the Eidos Journal and has guest-edited a special issue for the Materials Journal. His leadership in these editorial roles further underscores his commitment to advancing construction science and disseminating knowledge. His career is marked by a dedication to excellence in education, innovation in construction materials, and a commitment to sustainability, making him a leading figure in his field and an inspiring educator and researcher.

#### **WORK EXPERIENCE**

From Sep 2015 to present

### **Assistant Professor**

Universidad Tecnológica Equinoccial (UTE) - Ecuador

Architect and Urbanism Faculty, Bourgeois N34-102 and Rumipamba. Tel.: (593) 299 08 00 Ext. 2119 http://www.ute.edu.ec/

• Full-time professor in the subjects of Structures Design, Construction Technology, Materials, etc. Education Sector

From May 2021 to 2023

## Part-time Professor

Escuela Superior Politécnica del Litoral (ESPOL)-Ecuador

Faculty of Mechanical Engineering and Production Sciences https://www.espol.edu.ec/

• Part-time professor in the subjects of Structures Design, and Materials.

**Education Sector** 

From March 2022 to present

Part-time Professor

Universidad Politécnica Salesiana (UPS)-Ecuador

Architect and Urbanism Faculty

https://www.ups.edu.ec/en/

• Part-time professor in the subjects of Structures Design, and Materials.

**Education Sector** 

### From June 2024

# Visiting Professor

Università degli studi "G. d'Annunzio" CHIETI-PESCARA, Italy

epartment of Engineering and Geology, Ufficio di Chieti: Campus Universitario – Via dei Vestini – 66100 Chieti – Tel. +39 0871 35566625/6630, Italy

https://www.https://www.unich.it/

Researcher
Education Sector

#### From Sep 2015 to Sep 2017

## Visiting Professor

Polytechnic University of Ecuador- Ecuador

<u>Faculty of Civil and Environmental Engineering</u>, Ladrón de Guevara E11-253 and Andalucía. Tel.: (593) 297 63 00 Ext. 1261, Quito, Ecuador.

https://www.epn.edu.ec/

• Part-time professor in the subjects of Reinforced Concrete Structure Design.

**Education Sector** 

### From Jan 2014 to present

## Structure Designer

Absidis Construction Company

Ave. 10 de agosto N14-43, Edf, UCICA, Office, 308, Quito, Ecuador, Tel.: (593) 254 14 89

Head of Structure Area

Architecture and Construction Sector

### From Sep 2012 to Sep 2014

## Visiting Professor

Azad University, Equilid-Fars, Iran

Civil Engineering Faculty, Blvd. Pasdaran, Universidad Azad Eghlid, Eghlid, Fars, Iran. Tel.: (98) 752 425 22 12

http://www.iaueghlid.ac.ir

 Part-time professor in the subjects of The technology of metallic buildings, Static of the building, Reinforced Concrete Structure Design, Steel structure Design, Topography of the buildings and roads, Construction technology of roads, Material Laboratory, Preliminary analysis of structures, Metallic structures workshop, Principles of earthquake engineering

**Education Sector** 

### From Aug 2012 to Sep 2013

### Project Manager

Nili Omran Parse Company and KAYSON INC. 2000 units housing project, Parand, Tehran, Irán

• Foam concrete performance manager

Construction and Material Sector

### From Feb 2011 to Feb 2012

### Visiting Professor

Payame Noor University Varamin and Qom

Civil Engineering Faculty and Project Management Engineering, Central Ministry of Payame Noor University, Ave. Nakhl, Blvd. Artesh, Mini city, Tehran, Iran Tel.: (98) 21 23320000. http://www.pnu.ec.ir

 Part-time professor in the subjects of General drawing, Loading calculation, Restoration and reinforcement of structures, Project management engineering training, Surveying 1 and operations

**Education Sector** 

### **EDUCATION AND TRAINING**

## From Sep 2016 to March 2023 Ph.D. in Construction engineering

9.71/10

Polytechnic University of Valencia - Spain (UPV)- Qs ranking: #400

Construction material, [ Ultra-High Performance Fibre Reinforced Concrete (UHPFRC) ]

From 2008 to 2011

# M.Sc., Structural Engineering

EQF=7 Score 17.96/20

University Tehran Azad -Iran

Design of steel and reinforced concrete structures, Bridges, Tall buildings, etc.

From 2005 to 2008

## B.Sc., Civil Engineering

EQF=6 Score 18.02/20

University Tehran Azad -Iran

All the knowledge relating to civil engineering

#### From 2003 to 2005

# Associate degree in construction-General Works of Construction

EQF=5 Score 18.27/20

Shiraz (Shahid Bahonar) Technical Collage No.1

All the knowledge about construction and materials

# **KEY SKILLS**

Mother tongue(s)

Persian

Other	language	(s)	)
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UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2
C2	C2	C2	C2	C2

Professional Skills

English Spanish

**Advanced Analytical Proficiency**: Possess exceptional analytical and problem-solving capabilities, adept at devising innovative solutions to intricate engineering challenges.

**Simulation Software Expertise**: Proficient in using industry-standard simulation tools, including Diana and Abaqus, enhancing accuracy and efficiency in engineering analyses.

**Material Science Expertise**: Comprehensive understanding of material science principles, with a proven ability to apply this knowledge innovatively in the design and testing of new materials.

**nterdisciplinary Collaboration**: Strong interpersonal skills, capable of leading and working effectively within interdisciplinary teams to drive project success.

**Research Excellence**: Established track record in conducting rigorous independent research, evidenced by peer-reviewed publications and presentations at international conferences.

**Project Management Skills**: Highly skilled in managing and prioritizing multiple projects and tasks, ensuring timely and successful completion of objectives.

**Professional Integrity**: Maintains a strong work ethic and is committed to producing exceptional research outcomes.

**Code Compliance Knowledge**: Well-versed in American and Ecuadorian structural design codes, ensuring compliance and safety in all projects.

**CAD Proficiency**: Highly proficient in AutoCAD and Revit for advanced structural design and drafting.

**Innovative Thinking**: Known for innovative thinking and the ability to make practical, effective decisions that drive project advancements.

**Cultural Competence**: Excellent communication and collaboration skills, with a capacity to effectively engage with diverse cultural and professional backgrounds in a global setting. **Resilience under Pressure**: Demonstrates the ability to maintain high-quality standards in work output under pressure and in challenging environments.

## **ACHIEVEMENTS:**

September 2022

Golden medal at 7th International Invention Innovation Competition in Canada, iCAN 2022!

July 2022

Golden medal at innovation and invention expo 2022, INNOVERSE 2022 USA

July 2022

Gold Medal at The 11th World Invention Creativity Olympic, WICO 2022, Kora

August 2003

First place in the associate's degree entrance exam in Iran Top student in bachelor's and master's degree

## **PATENTS**

(1). Wind Tunnel: PCT/IB2022/051719

(2). Fluid Injector Aerial Vehicle: PCT/IB2023/061980

(3). Aerial Vehicle Flying Station: PCT/IB2023/061984

## **PUBLICATIONS**

## **Under review:**

- (1) Evaluación experimental de la resistencia sísmica de muros de concreto armado de espesor reducido en viviendas de baja altura.
- (2) Shrinkage influence on the behaviour of reinforced uhpfrc elements.
- (3) Assessing the Impact of Hydrophobic Nano-Silica to Concrete.
- (4) Nano-silica in Holcim GU Cement Mortars A Comparative Study with Traditional and Prefabricated Mortars in Global Sustainable Construction.
- (5) Investigating the Shrinkage Effects of High-Performance Concrete (HPC) with Nano-silica.
- (6) The influence of sugarcane bagasse fibers in a natural state in concrete with a resistance f'c of 300 kg/cm2.
- (7) Patent 1: Wind tunnel for the analysis of cracks in concrete under different environmental parameters.
- (8) Patent 2: An unmanned aerial vehicle flying station.
- (9) Patent 3: A fluid injector unmanned aerial.

### **Published:**

(1) Kamyab H, Chelliapan S, Hayder G, Yusuf M, Taheri MM, Rezania S, et al. Exploring the potential of metal and metal oxide nanomaterials for sustainable water and wastewater treatment: A review of their antimicrobial properties. Chemosphere 2023;335.

- (2) Xiang J, Lai Y, Moradi Z, Khorami M. Wave propagation phenomenon of functionally graded graphene oxide powder-strengthened nanocomposite curved beam. Solid State Commun 2023;369.
- (3) Amaguaña M, Guamán L, Gómez NBY, Khorami M, Calvo M, Albuja-Sánchez J. Test Method for Studying the Shrinkage Effect under Controlled Environmental Conditions for Concrete Reinforced with Coconut Fibres. Mater 2023;16(8).
- (4) Wang H, Habibi M, Marzouki R, Majdi A, Shariati M, Denic N, et al. Improving the Self-Healing of Cementitious Materials with a Hydrogel System. Gels 2022;8(5).
- (5) Alarifi IM, Khorami M, EL-Bagory TMAA, Asmatulu R. Dynamic Mechanical Analysis of Epoxy/Synthetic Fiber Composites. Handbook of Epoxy/Fiber Composites; 2022. p. 119-146.
- (6) Mezquida-Alcaraz EJ, Navarro-Gregori J, Khorami M, Serna P. Finite Element Modelling of UHPFRC Tensile Bars. RILEM Bookseries 2022;36:965-975.
- (7) Khorami M, Navarro-Gregori J, Serna P. Serviceability behaviour of reinforced UHPFRC tensile elements: Assessment of the ratio between maximum and average crack widths. Constr Build Mater 2021;303.
- (8) Cao Y, Khorami M, Baharom S, Assilzadeh H, Hassan Dindarloo M. The effects of multi-directional functionally graded materials on the natural frequency of the doubly-curved nanoshells. Compos Struct 2021;258.
- (9) Khorami M, Navarro-Gregori J, Serna P. Tensile behaviour of reinforced UHPFRC elements under serviceability conditions. Mater Struct 2021;54(1).
- (10) Chen C, Shi L, Shariati M, Toghroli A, Mohamad ET, Bui DT, et al. Behavior of steel storage pallet racking connection A review. Steel Compos Struct 2021;30(5):457-469.
- (11) Khorami M, Navarro-Gregori J, Serna P. The Effect of Fiber Content on the Post-cracking Tensile Stiffness Capacity of R-UHPFRC. RILEM Bookseries 2021;30:1112-1123.
- (12) Al-Furjan MSH, Dehini R, Khorami M, Habibi M, won Jung D. On the dynamics of the ultra-fast rotating cantilever orthotropic piezoelectric nanodisk based on nonlocal strain gradient theory. Compos Struct 2021;255.
- (13) Mehrez S, Karati SA, DolatAbadi PT, Shah SNR, Azam S, Khorami M, et al. Nonlocal dynamic modeling of mass sensors consisting of graphene sheets based on strain gradient theory. Adv Nano Res 2020;9(4):221-235.
- (14) Gao J, Koopialipoor M, Armaghani DJ, Ghabussi A, Baharom S, Morasaei A, et al. Evaluating the bond strength of FRP in concrete samples using machine learning methods. Smart Struct Syst 2020;26(4):403-418.
- (15) Khorami M, Navarro-Gregori J, Serna P. Experimental methodology on the serviceability behaviour of reinforced ultra-high performance fibre reinforced concrete tensile elements. Strain 2020;56(5).
- (16) Katebi J, Shoaei-parchin M, Shariati M, Trung NT, Khorami M. Developed comparative analysis of metaheuristic optimization algorithms for optimal active control of structures. Eng Comput 2020;36(4):1539-1558.
- (17) Jahed Armaghani D, Hasanipanah M, Bakhshandeh Amnieh H, Tien Bui D, Mehrabi P, Khorami M. Development of a novel hybrid intelligent model for solving engineering problems using GS-GMDH algorithm. Eng Comput 2020;36(4):1379-1391.
- (18) Sari PA, Suhatril M, Osman N, Mu'azu MA, Katebi J, Abavisani A, et al. Developing a hybrid adoptive neuro-fuzzy inference system in predicting safety of factors of slopes subjected to surface eco-protection techniques. Eng Comput 2020;36(4):1347-1354.
- (19) Toghroli A, Nasirianfar MS, Shariati A, Khorami M, Paknahad M, Ahmadi M, et al. Analysis of extended end plate connection equipped with SMA bolts using component method. Steel Compos Struct 2020;36(2):213-228.

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- (22) Milovančević M, Marinović JS, Nikolić J, Kitić A, Shariati M, Trung NT, et al. UML diagrams for dynamical monitoring of rail vehicles. Phys A Stat Mech Appl 2019;531.
- (23) Sari PA, Suhatril M, Osman N, Mu'azu MA, Dehghani H, Sedghi Y, et al. An intelligent based-model role to simulate the factor of safe slope by support vector regression. Eng Comput 2019;35(4):1521-1531.
- (24) Jiang W, Arslan CA, Soltani Tehrani M, Khorami M, Hasanipanah M. Simulating the peak particle velocity in rock blasting projects using a neuro-fuzzy inference system. Eng Comput 2019;35(4):1203-1211.
- (25) A testing method for studying the serviceability behavior of reinforced UHPFRC tensile ties. IOP Conference Series: Materials Science and Engineering; 2019.
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- (34) Chen C, Shi L, Shariati M, Toghroli A, Mohamad ET, Bui DT, et al. Behavior of steel storage pallet racking connection A review. Steel Compos Struct 2019;30(5):457-469.
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- (46) Paknahad M, Shariati M, Sedghi Y, Bazzaz M, Khorami M. Shear capacity equation for channel shear connectors in steel-concrete composite beams. Steel Compos Struct 2018;28(4):483-494.
- (47) Nasrollahi S, Maleki S, Shariati M, Marto A, Khorami M. Investigation of pipe shear connectors using push out test. Steel Compos Struct 2018;27(5):537-543.
- (48) Wei X, Shariati M, Zandi Y, Pei S, Jin Z, Gharachurlu S, et al. Distribution of shear force in perforated shear connectors. Steel Compos Struct 2018;27(3):389-399.
- (49) Shariati M, Tahir MM, Wee TC, Shah SNR, Jalali A, Abdullahi MM, et al. Experimental investigations on monotonic and cyclic behavior of steel pallet rack connections. Eng Fail Anal 2018;85:149-166.
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- (51) Keyvanfar A, Shafaghat A, Mohamad S, Abdullahi MM, Ahmad H, Derus NHM, et al. A sustainable historicwaterfront revitalization decision support tool for attracting tourists. Sustainability 2018;10(2).
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### **REFERENCES**

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