Curriculum Vitae

- 1. Name Surname: Iman Faridmehr
- 2. Date of Birth:
- 3. Title: Dr.
- 4. Education:

Degree	Field	University	Year
Bachelor	Civil Engineering	Islamic Azad University,	2006
		Iran	
Master	Civil structural	Islamic Azad University,	2009
	Engineering	Iran	
Doctorate	Civil Engineering	Universiti Teknologi	2015
		Malaysia, Malaysia	

5. Academic Titles

6. Graduate Theses Supervised

Title	Department	University	Year/Period
Assistant	Civil Engineering	Girne	2018 to present
Professor		American	
		University	
Associate			
Professor			
Professor			

6.1 Master Theses

Seismic Retrofitting of Steel Structures with Eccentric Braced System according to the Building Seismic Rehabilitation Prestandard

6.2 Doctorate Theses

Seismic and Progressive Collapse Assessment of New Proposed Steel Connection

7. Publications

7.1. Articles published in peer reviewed international journals (SCI, SSCI Arts and Humanisties)

Enhancing Strength and Corrosion Resistance of Steel-Reinforced Concrete: Performance

Evaluation of ICRETE Mineral Additive in Sustainable Concrete Mixes with PFA and GGBS

Published in Infrastructures

DOI: 10.3390/INFRASTRUCTURES9120228

Development sustainable concrete with high-volume wastes tile ceramic: Role of silica nanoparticles amalgamation

Published in Case Studies in Construction Materials

DOI: 10.1016/J.CSCM.2024.E03733

Effective microorganism solution-imbued sustainable self-curing concrete: Evaluation of sorptivity, drying shrinkage and expansion

Published in Case Studies in Construction Materials

DOI: 10.1016/J.CSCM.2024.E03255

Hybrid Intelligence Framework for Optimizing Shear Capacity of Lightweight FRP-Reinforced

Reinforced

Concrete Beams

Published in International Journal of Lightweight Materials and Manufacture DOI: 10.1016/J.IJLMM.2024.07.003

An innovative multi-objective optimization approach for compact concrete-filled steel tubular

(CFST) column design utilizing lightweight high-strength concrete

Published in International Journal of Lightweight Materials and Manufacture DOI: 10.1016/J.IJLMM.2024.01.004

Advanced method for estimating the volumetric intensity along tunnels using ANN Published in International Journal of Geotechnical Engineering

DOI: 10.1080/19386362.2024.2377450

Performance of partially grouted reinforced masonry walls with bed-joint reinforcement: parametric and optimization investigation

Published in Archives of Civil and Mechanical Engineering

DOI: 10.1007/S43452-023-00810-8

Investigating the fresh and mechanical properties of wood sawdust-modified lightweight geopolymer concrete

Published in Advances in Structural Engineering

DOI: 10.1177/13694332231161103

Optimization of Fly Ash-Slag One-Part Geopolymers with Improved Properties

Published in Materials

DOI: 10.3390/MA16062348

Mountaineering Team-Based Optimization: A Novel Human-Based Metaheuristic Algorithm

Published in Mathematics

DOI: 10.3390/MATH11051273

Predicting Crack Width in CFRP-Strengthened RC One-Way Slabs Using Hybrid Grey Wolf

Optimizer Neural Network Model

Published in Buildings

DOI: 10.3390/BUILDINGS12111870

Structure, morphology and compressive strength of Alkali-activated mortars containing waste

bottle glass nanoparticles

Published in Construction and Building Materials

DOI: 10.1016/J.CONBUILDMAT.2022.128005

Novel hybrid informational model for predicting the creep and shrinkage deflection of reinforced

concrete beams containing GGBFS

Published in Neural Computing and Applications

DOI: 10.1007/S00521-022-07150-3

Systematic Experimental Assessment of POFA Concrete Incorporating Waste Tire Rubber

Aggregate

Published in Polymers

DOI: 10.3390/POLYM14112294

Predicting axial load capacity of CFST columns using machine learning

Published in Structural Concrete

DOI: 10.1002/SUCO.202100641

Seismic Analysis of Baffle-Reinforced Elevated Storage Tank Using Finite Element Method

Published in Buildings

DOI: 10.3390/BUILDINGS12050549

Flexural Behavior of Reinforced Concrete Beams under Instantaneous Loading: Effects of

Recycled Ceramic as Cement and Aggregates Replacement

Published in Buildings

DOI: 10.3390/BUILDINGS12040439

Novel informational bat-ANN model for predicting punching shear of RC flat slabs without shear

reinforcement

Published in Engineering Structures

DOI: 10.1016/J.ENGSTRUCT.2022.114030

Smart Bio-Agents-Activated Sustainable Self-Healing Cementitious Materials: An All-Inclusive

Overview on Progress, Benefits and Challenges

Published in Sustainability

DOI: 10.3390/SU14041980

A Review on the Use of Self-Curing Agents and Its Mechanism in High-Performance Cementitious Materials Published in Buildings DOI: 10.3390/BUILDINGS12020152 MECHANICAL PROPERTIES PREDICTION OF HEAVYWEIGHT CONCRETE USING GENERALIZED **REGRESSION NEURAL NETWORK (GRNN)** Published in Revista Romana de Materiale/ Romanian Journal of Materials Gum Arabic Nanoparticles as Green Corrosion Inhibitor for Reinforced Concrete Exposed to Carbon Dioxide Environment **Published in Materials** DOI: 10.3390/MA14247867 Predicting Embodied Carbon and Cost Effectiveness of Post-Tensioned Slabs Using Novel Hybrid Firefly ANN Published in Sustainability DOI: 10.3390/SU132112319 Metaheuristic Prediction of the Compressive Strength of Environmentally Friendly Concrete Modified with Eggshell Powder Using the Hybrid ANN-SFL Optimization Algorithm Published in Materials DOI: 10.3390/MA14206172 Evaluating mechanical properties and impact resistance of modified concrete containing ground Blast Furnace slag and discarded rubber tire crumbs Published in Construction and Building Materials DOI: 10.1016/J.CONBUILDMAT.2021.123603 Experimental and Informational Modeling Study of Sustainable Self-Compacting Geopolymer Concrete Published in Sustainability DOI: 10.3390/SU13137444 Hybrid Krill Herd-ANN Model for Prediction Strength and Stiffness of Bolted Connections Published in Buildings DOI: 10.3390/BUILDINGS11060229 Life-Cycle Assessment of Alkali-Activated Materials Incorporating Industrial Byproducts Published in Materials DOI: 10.3390/MA14092401 Performance Evaluation of Modified Rubberized Concrete Exposed to Aggressive Environments Published in Materials DOI: 10.3390/MA14081900

Performance of Epoxy Resin Polymer as Self-Healing Cementitious Materials Agent in Mortar

Published in Materials

DOI: 10.3390/MA14051255

Application of Component-Based Mechanical Models and Artificial Intelligence to Bolted Beam

to-Column Connections

Published in Applied Sciences

DOI: 10.3390/APP11052297

Seismic Analysis of Concrete Arch Dam Considering Material Failure Criterion Published in IOP Conference Series: Materials Science and Engineering

DOI: 10.1088/1757-899X/1117/1/012004

Assessment of Mechanical Properties and Structural Morphology of Alkali-Activated Mortars with

Industrial Waste Materials

Published in Sustainability

DOI: 10.3390/SU13042062

Evaluation of the Efficiency of Single-Outrigger Structural Systems in Tall Buildings Published in IOP Conference Series: Earth and Environmental Science

DOI: 10.1088/1755-1315/682/1/012010

Evaluation of Mechanical and Environmental Properties of Engineered Alkali-Activated Green

Mortar

Published in Materials

DOI: 10.3390/MA13184098

Numerical and Physical Analysis on the Response of a Dam's Radial Gate to Extreme Loading

Performance

Published in Water

DOI: 10.3390/W12092425

An Overview of Progressive Collapse Behavior of Steel Beam-to-Column Connections Published in Applied Sciences

DOI: 10.3390/APP10176003

Cyclic Behaviour of Fully-Rigid and Semi-Rigid Steel Beam-to-Column Connections Published in International Journal of Steel Structures

DOI: 10.1007/S13296-019-00290-8

AN OVERVIEW OF THE CONNECTION CLASSIFICATION INDEX

Published in Advanced Steel Construction

DOI: 10.18057/IJASC.2019.15.2.4

Hydraulic and structural considerations of dam's spillway - a case study of Karkheh Dam,

Andimeshk, Iran

Published in Structural Monitoring and Maintenance

DOI: 10.12989/SMM.2019.6.1.001

Construction and Monitoring of Cement/Bentonite Cutoff Walls: Case Study of Karkheh Dam. Iran Published in Studia Geotechnica et Mechanica DOI: 10.2478/SGEM-2019-0019 Seismic assessment of base-isolated nuclear power plants Published in Advances in Computational Design DOI: 10.12989/ACD.2017.2.3.211 Seismic Performance of Steel Frames with Semirigid Connections Published in Journal of Engineering DOI: 10.1155/2017/5284247 Classification System for Semi-Rigid Beam-to-Column Connections Published in Latin American Journal of Solids and Structures DOI: 10.1590/1679-78252595 Behaviour and design of cold-formed steel C-sections with cover plates under bending Published in International Journal of Steel Structures DOI: 10.1007/S13296-016-6026-9 Effect of Web Holes and Bearing Stiffeners on Flexural-Shear Interaction Strength of Steel Cold Formed C-Channel Sections Published in Latin American Journal of Solids and Structures DOI: 10.1590/1679-78252033 Performance of steel beams strengthened with pultruded CFRP plate under various exposures Published in Steel & Composite Structures DOI: 10.12989/SCS.2016.20.5.999 Cyclic and Explosive Evaluation of New Proposed Steel Joint Published in Advances in Civil Engineering DOI: 10.1155/2016/4975097 An experimental investigation of stiffened cold-formed C-channels in pure bending and primarily shear conditions Published in Thin-Walled Structures DOI: 10.1016/J.TWS.2015.07.023 Severe Loading Assessment of Modern and New Proposed Beam to Column Connections Published in Latin American Journal of Solids and Structures DOI: 10.1590/1679-78251286 Modification of Grout Properties in Prepacked Aggregate Concrete Incorporating Palm Oil Fuel Ash Published in Indian Journal of Materials Science DOI: 10.1155/2015/353617 Seismic and Progressive Collapse Assessment of New Proposed Steel Connection Published in Advances in Structural Engineering

DOI: 10.1260/1369-4332.18.3.439

Seismic and progressive collapse assessment of SidePlate moment connection system Published in Structural Engineering and Mechanics

DOI: 10.12989/SEM.2015.54.1.035

Investigation of Progressive Collapse Resistance for a Seismically Designed RC Building

Published in Research Journal of Applied Sciences, Engineering and Technology DOI: 10.19026/RJASET.7.510

Economic Design Issues of RC Structures against Progressive Collapse Published in Research Journal of Applied Sciences, Engineering and Technology

DOI: 10.19026/RJASET.7.499

Assessment the Behavior of Seismic Designed Steel Moment Frames Subjected to Progressive

Collapse

Published in Research Journal of Applied Sciences, Engineering and Technology DOI: 10.19026/RJASET.7.508

Evaluation of extreme load performance of pre-Northridge connections Published in Gradjevinar

Analyzing Accidents Caused by Overturn of Vehicles (Case Study of Iran-Zanjan Province in 2010)

Published in Research Journal of Applied Sciences, Engineering and Technology Flexural behaviour of stiffened cold-formed steel rectangular hollow sections

Published in International Journal of Earth Sciences and Engineering

Seismic Performance of RC Beam-Column Connections with Continuous Rectangular Spiral

Transverse Reinforcements for Low Ductility Classes

Published in The Scientific World Journal

DOI: 10.1155/2014/802605

Seismic assessment of RC buildings according to FEMA 356

Published in International Journal of Earth Sciences and Engineering

7.2. Articles published in other peer reviewed international journals

7.3. Papers delivered in international conferences and printed as proceedings

7.4. Books and sections in books published internationally

Self-Healing Cementitious Materials: Technologies, Evaluation Methods, and Applications; GF Huseien, I Faridmehr, MH Baghban; CRC Press

7.5. Articles published in peer reviewed national journals

7.6 Papers delivered at national conferences and printed as proceedings

7.7 Other publications

8. Projects directed and participated

-Exchange experimental data and knowledge related to the project Investigating Embodied Carbon Emissions, Costs, and Serviceability of Post-Tensioned Slabs with Professor Moncef L. Nehdi from MacMaster University, Canada, 2020-2022

 \checkmark -Exchange experimental data on alkali-activated concrete composed of waste materials and investigate mechanical properties, embodied energy, and CO2 emissions. The National University of Singapore. The person in charge: Dr. Ghasan Fahim Huseien. 2020—2022.

✓ Academic collaboration with professor Mohammad Hajmohammadian Baghban, NTNU, Norway toward The Marie Skłodowska-Curie Actions (MSCA) Postdoctoral Fellowships, 2020-2022.

✓ -Academic collaboration with Dr. Rana Muhammad Adnan from Hohai University, China on KarkhehDam's (https://en.wikipedia.org/wiki/Karkheh_Dam) discharge estimation, 2020-2021

✓ -Exchange experimental data on steel beam-to-column connections and developing component- based mechanical model, Mediterranea University of Reggio Calabria. The person in charge: Professor Raffaele Pucinotti. December 2019- March 2020

 \checkmark -Exchange data with SidePlate system (US-based company) to propose a new type of beam-to-column connections The person in charge: Professor Behzad Rafezy, director of R&D Department (https://www.sideplate.com/culture/our-team/), 2015-2016.

9. Administrative designations

Structural designer & supervisor, Dr Ganjavian hospital (http://gh.dums.ac.ir/), maternity & emergency division project (Apr 2016- Sep 2017)

□ Visiting junior research assistant, Universiti Teknologi Malaysia (May 2015 to Feb 2016)

Design administrative for seismic retrofitting radial spillway at Dez Dam Power
Plant Operation generation company (https://en.wikipedia.org/wiki/Dez_Dam)
Lecturer at Islamic Azad University, Dezful, Iran "Part-Time" (2017-present)

10. Membership in scholarly institutions

- CEO & Co-Founder of EcoStruct Building Technologies LTD, BC, Canada https://ecostruct.org/
- ✓ Global Cement and Concrete Association (GCCA) Global Cement and Concrete Association (GCCA) Innovandi Entrepreneur Network member
- ✓ Service as a reviewer board for scientific and scholarly journals: Archives of Civil and Mechanical Engineering, Engineering Structures, Advances in Structural Engineering, SN Applied Sciences, Materials (MDPI), and Construction and Building Materials.
- ✓ Service as a pre-examiner and an opponent of a post-graduate dissertation, 2017 to 2018 (Azad University, Iran)
- ✓ Full member, 2012 to 2015. Engineering Seismology and Earthquake Engineering Research (E-Seer), Malaysia
- ✓ Councilmember, 2010 to 2012. Iran Construction Engineering Organization (IRCEO), Iran
- ✓ Design administrative (part-time) for seismic retrofitting radial spillway at Dez Dam Power Plant (https://en.wikipedia.org/wiki/Dez_Dam), 2017.

11. Awards and grants

- Awards for scientific and artistic research and collaboration with industry (Iran Construction Engineering Organization)
- ✓ Best student award (convocation ceremony, Universiti Teknologi Malaysia, Malaysia)
- ✓ Teaching awards from Islamic Azad University to deliver a research methodology course
- ✓ PhD scholarship (Universiti Teknologi Malaysia (UTM), Malaysia, February 2012- August 2015)

12. Courses taught over the last two academic years

Acadamia	Term	Course Name	Hours/week		Number
Year			Theoretica I	Applied	of Students
	Fall	Computer aided design	1	2	
		static		3	
		Computer application in civil engineering	1	2	
		Strength of materials		3	
		Hydrology		3	
		Dynamic		3	
	Spring	Dynamic of structures		3	
		Engineering drawing	1	2	
		High performance		3	
		concrete			
		Computer aided design		3	
		Static		3	
		Strength of materials		3	

