Hashem Jahangir

Assistant Professor

Faculty: Ferdows Technical College

Department: Civil Engineering

Education

Degree	Graduated in	Major	University
BSc	2009	Civil Engineering	University of Isfahan
MSc	2012	Structural Engineering	Ferdowsi University of Mashhad
Doctoral	2018	Structural Engineering	Ferdowsi University of Mashhad

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Department of Civil Engineering	Assistant Professor	Tenure Track	Full Time	

Work Experience

Pahang Payesh Pars Co., South Khorasan Science and Technology Park, Birjand, Iran • Chief Executive Officer (CEO)	2019 to Present
Meghyas Masir Khavaran Consultant Engineering Co., Birjand, Iran • Chairman of the Board (COB)	2020 to Present
South Khorasan Construction Engineering Organization, Birjand, Iran • Secretary of the Surveying Engineering Committee	2019 to Present
South Khorasan Construction Engineering Organization, Birjand, Iran • Senior Member of Assessing Design Offices Committee	2018 to Present
No. 34th **South Khorasan Engineering Office**, Birjand, Iran • Head of the Survey Department	2018 to Present
Fanavaran Saze Technology Institute, South Khorasan Science and Technology Park, Birjand, Iran • Chairman of Members	2018 to Present

Aasa Saze Shargh Birjand Co., Birjand, Iran • Technology Executive Officer (TEO)	2017 to Present
Rah Afarin Ghohestan Co., Birjand, Iran • Head of Technical Office	2017 to Present
Abpooy Consultant Engineering Co., Mashhad, Iran • Senior Structural Technologist	2017 to 2018
Daneshkavan Co., Science and Technology Park, Ferdowsi University of Mashhad, Mashhad, Iran • Researcher and Structural designer	2014 to 2016
Maghsoud Porcelain Factories Group, Mashhad, Iran • Structural designer	2012 to 2013
International Construction Development Co. (Peyman Ghadir), Mashhad, Iran • Representative of consulting group	2011 to 2012

Awards

Patent, **Jahangir, H.**, Bagheri, M., Delavari, S.M.J., "Natural and Environmental - Friendly Nano Additives for Raising Concrete Curing Speed", C04B 16/06, Patent No.: 99291, Application No.: 139750140003010022.	2019
Patent, **Jahangir, H.**, Esfahani, M.R., "Steel Fiber Reinforced Inorganic Matrix Composites for Strengthening of Structures" C04B 41/46, Patent No.: 95485, Application No.: 139650140003011329.	2018
Ph.D. comprehensive exam, Engineering Faculty, Ferdowsi University of Mashhad, Mashhad, Iran • Ranked 1st among all Ph.D. students	2017
National university entrance exam for Ph.D. degree, Iran • Ranked 16th among all participants	2012
Top Student Award, Engineering Faculty, Ferdowsi University of Mashhad, Mashhad, Iran • Ranked 1st among all M.S. students	2012
The Iranian festival of most innovative companies in construction industry, Sharif University of Technology, Tehran, Iran • Acclaimed as a member of the best construction project	2010

Subjects Taught

University of Birjand, Birjand, Iran • Teaching - Dynamics - Statics - Concrete Structures Construction - Masonry Structures Construction - Quantity Surveying & Estimation - Road Construction and Pavement - Bridge Design - Asphalt & Concrete Pavement - Railway Engineering - Environment Engineering	2016 to Present
Birjand University of Technology, Birjand, Iran • Teaching - Design of Reinforced Concrete Structures I - Design of Reinforced Concrete Structures II - Mechanics of Materials - Structural Analysis - Masonry Structures - Quantity Surveying and Estimating	2016 to Present

Islamic Azad University, Birjand Branch, Birjand, Iran • Teaching - Design of Reinforced Steel Structures I - Structural Analysis	2016 to Present
Hormozan Institute of Higher Education, Birjand, Iran • Teaching - Finite Element Method (Graduate Course) - Structural Earthquake Resistant Design (Graduate Course) - Structural Control (Graduate Course) - Bridge Design (Graduate Course)	2016 to Present
Ferdowsi University of Mashhad, Mashhad, Iran • Teaching Assistant - Finite Element Method (Graduate Course) - Matrix Structural Analysis (Graduate Course) - Advanced Engineering Mathematics (Graduate Course) - Theory of Elasticity and Plasticity (Graduate Course) - Structural Earthquake Resistant Design (Graduate Course) - Advanced Steel Structures (Graduate Course) - Advanced RC Structures (Graduate Course) - Advanced Earthquake Engineering (Graduate Course)	2012 to 2018
Sadjad University of Technology, Mashhad, Iran • Teaching - Statics - Mechanics of Materials - Computer Programming - Construction Methods	2012 to 2016
Eqbal Lahoori Institute of Higher Education, Mashhad, Iran • Teaching - Design of Reinforced Concrete Structures I - Design of Reinforced Concrete Structures II	2013 to 2014
Binaloud Institute of Higher Education, Mashhad, Iran • Teaching - Statics - Mechanics of Materials - Design of Reinforced Concrete Structures I - Design of Reinforced Concrete Structures II	2013 to 2016
Shandiz Institute of Higher Education, Mashhad, Iran • Teaching - Statics	2012 to 2014

Executions And Scientific Activities

Computer Skills:

- Programming Languages: Fortran, C++, Visual Basic
- Applications: Microsoft Office and other common productivity applications for Windows
- Mathematical Software: MATLAB, Maple
- Civil Engineering Software: Abaqus, SAP2000, ETABS, SAFE, SeismoStruct, SeismoMatch, SeismoSignal, AutoCAD
- Surveying Software: CSDP Pro, CSDP Map, Civil 3D, Autodesk Land, ArcGIS

Language Skills:

- Persian (Native)
- English (Advanced)
- Italian (Intermediate)

- French (Basic)
- Arabic (Reading and Writing)

Course Topics

- Structural Retrofitting, Rehabilitation and Strengthening Methods
- Health Monitoring and Damage Detection
- Seismic Hazard and Random Vibration Analysis
- Reinforced Concrete Structures Analysis

Papers in Conferences

1. HamidReza NASSERI,hamed hasani,Hashem Jahangir, ,Behavior Investigation of Rectangular Concrete Columns Confined by Fiber Reinforced Polymer Composites ,دومین کنفرانس بین المللی شهرسازی،معماری،عمران،محیط زیست, pp. 0-0 ,08 12 2022, تبریز.
2. Hashem Jahangir,Saeed Hamidi,abolfazl yousefi ,A Comprehensive Overview of Neural Networks, Deep Learning and Machine Learning Applications in Engineering Fields ,چهاردهمین کنگره ملی مهندسی عمران, pp. 0-0 ,21 05 2024, زنجان.
3. HamidReza NASSERI,Sajjad Haghighi,Hashem Jahangir ,Compressive Behavior of Concrete Columns Confined by PET and Aramid FRPs ,نجمین کنفرانس بین المللی و ششمین کنفرانس ملی عمران، معماری، هنر و طراحی شهری, pp. 0-0 ,27 06 2023, تبریز.
4. HamidReza NASSERI,Sajjad Haghighi,Hashem Jahangir ,Comparing the Confining Effect of E-GFRP and GFRP Composites on Concrete Columns ,نجمین کنفرانس بین المللی و ششمین کنفرانس ملی عمران، معماری، هنر و طراحی شهری, pp. 0-0 ,27 06 2023, تبریز.
5. Hashem Jahangir,Saeed Hamidi,abolfazl yousefi ,The Artificial Intelligence Usage in Estimating the Compressive Strength of Fiber-Reinforced Concrete ,پنجمین کنفرانس بین‌المللی محاسبات نرم, pp. 0-0 ,رشت 22 11 2023,.
6. Hashem Jahangir,Seyede Banafsheh Mirkazemi,Ali Zahmatkesh ,Wavelet-Based Time-Domain Damage Localization in RC Beams ,چهارمین کنفرانس بین المللی و پنجمین کنفرانی ملی عمران، معماری، هنر و طراحی شهری, pp. 0-0 ,16 03 2022, تبریز.
7. Hashem Jahangir,hamed hasani,Danial Rezazadeh Eidgahee,HamidReza NASSERI ,Evaluation of Existing Axial Compressive Strength Models of FRP-Confined Circular Concrete Columns ,چهارمین کنفرانس بین المللی و پنجمین کنفرانی ملی عمران، معماری، هنر و طراحی شهری, pp. 0-0 ,16 03 2022, تبریز.
8. Hashem Jahangir,Hasani,Soleymani,Mohammad Bashir Azizi ,A Novel Strip Model to Investigate the Seismic Behavior of Frames Equipped with Composite Steel Shear Walls ,سیزدهمین کنگره ملی مهندسی عمران, pp. 0-0 ,10 05 2022, اصفهان.
9. Hashem Jahangir,Soleymani,Hasani ,A Comprehensive Review of FRP-Concrete Bond Behaviour ,سیزدهمین کنگره ملی مهندسی عمران, pp. 0-0 ,10 05 2022, اصفهان.
10. Hashem Jahangir,Hasani,Soleymani,Mohammad Bashir Azizi ,Investigating the Effect of Sintered Fly Ash Aggregate on Mechanical Properties of Concrete: A Review ,سیزدهمین کنگره ملی مهندسی عمران, pp. 0-0 ,10 05 2022, اصفهان.
11. Mosavi Nezhad Seyed Mojtaba,hamed hasani,,Hashem Jahangir ,The Influence of Treated and Untreated Crumb Rubber on Concrete Mechanical Properties: A Review ,سیزدهمین کنگره ملی مهندسی عمران, pp. 0-0 ,10 05 2022, اصفهان.
12. Hashem Jahangir,hamed hasani ,Identification of Concentrated and Distributed Damages in Reinforced Concrete Beams ,هفتمین کنگره سالانه بین المللی عمران، معماری و توسعه شهری, pp. 0-0 ,تهران 07 12 2021,.

13. Hashem Jahangir,hamed hasani ,Signal Processing-Based Gradual Damage Detection of RC Frames ,هفتمین کنگره سالانه بین المللی عمران، معماری و توسعه شهری, pp. 0-0 ,07 12 2021, تهران.
14. Hashem Jahangir,Vaziri,Soleymani,Hasani ,Evaluation of the Seismic Behavior of Steel Braced Frames Equipped with Shape Memory Alloy (SMAs) ,هشتمین کنفرانس ملی پژوهش های کاربردی در مهندسی عمران، معماری و مدیریت شهری, pp. 0-0 ,16 09 2021, تهران.
15. Hashem Jahangir,Soleymani,Vaziri,Hasani ,A Review of Recycled Aggregate Concrete (RAC) Usage in Civil Engineering ,هشتمین کنفرانس ملی پژوهش های کاربردی در مهندسی عمران، معماری و مدیریت شهری, pp. 0-0 ,16 09 2021, تهران.
16. Hashem Jahangir,Soleymani,Hasani,Mohammad Bashir Azizi,Kimia Momivand ,Application of Shape Memory Alloys (SMAs) in Improving the Seismic Behavior of Reinforced Concrete (RC) Buildings ,هشتمین کنفرانس ملی پژوهش های کاربردی در مهندسی عمران، معماری و مدیریت شهری, pp. 0-0 ,09 2021, تهران 16.
17. Hashem Jahangir,Soleymani,Hasani,Kimia Momivand,Mohammad Bashir Azizi ,The Wind Analysis of Reinforced Concrete (RC) Cooling Towers ,هشتمین کنفرانس ملی پژوهش های کاربردی در مهندسی عمران، معماری و مدیریت شهری, pp. 0-0 ,16 09 2021, تهران.
18. Hashem Jahangir,Vaziri,Soleymani,Hasani,Kontoni ,Numerical Investigation of Soil-Structure Interaction Effect on Separation Distance of Adjacent Buildings ,کنفرانس ملی عمران، شهرسازی و افق‌های هنر اسلامی در بیانیه گام دوم انقلاب, pp. 0-0 ,27 05 2021, تبریز.

Papers in Journals

1. Hashem Jahangir,Onyelowe,Ebid,Riofrio,Soleymani,Baykara,Kontoni,Mahdi,Global warming potential-based life cycle assessment and optimization of the compressive strength of fly ash-silica fume concrete; environmental impact consideration,Frontiers in Built Environment,Vol. 1,No. 213,pp. 1-15,2022,Scopus.
2. Hashem Jahangir,Raunaq Singh Suri,Ajay Kumar Jain,Nishant Raj Kapoor,Aman Kumar,Harish Chandra Arora,Krishna Kumar,Air Quality Prediction - A Study Using Neural Network Based Approach,Journal of soft computing in civil engineering,Vol. 1,No. 7,pp. 93-113,2023,Scopus.
3. Hashem Jahangir,Onyelowe,Jayabalan,Ebid,Samui,Singh,Soleymani,Evaluation of the Compressive Strength of CFRP-Wrapped Circular Concrete Columns Using Artificial Intelligence Techniques,Designs,Vol. 6,No. 6,pp. 1-20,2022,Scopus.
4. Hashem Jahangir,Onyelowe,Ebid,Riofrio,Baykara,Soleymani,Mahdi,Ibe,Multi-Objective Prediction of the Mechanical Properties and Environmental Impact Appraisals of Self-Healing Concrete for Sustainable Structures,Sustainability,Vol. 15,No. 14,pp. 1-28,2022,ISI،JCR،Scopus.
5. Hashem Jahangir,,,,,,,Practical applicable model for estimating the carbonation depth in fly-ash based concrete structures by utilizing adaptive neuro-fuzzy inference system,Computers and Concrete,Vol. 2,No. 32,pp. 119-138,2023,JCR،Scopus.
6. Hashem Jahangir,Onyelowe,Ebid,Mahdi,Soleymani,Jayabalan,Samui,Singh,Modeling the confined compressive strength of CFRP-jacketed noncircular concrete columns using artificial intelligence techniques,Cogent Engineering,Vol. 1,No. 9,pp. 1-26,2022,Scopus.
7. Hashem Jahangir,Jayabalan,Dominic,Ebid,Soleymani,Onyelowe,Estimating the Buckling Load of Steel Plates with Center Cut-Outs by ANN, GEP and EPR Techniques,Designs,Vol. 5,No. 6,pp. 1-13,2022,Scopus.
8. Hashem Jahangir,Onyelowe,Kontoni,Ebid,Dabbaghi,Soleymani,Nehdi,Multi-Objective Optimization of Sustainable Concrete Containing Fly Ash Based on Environmental and Mechanical Considerations,Buildings,Vol. 7,No. 12,pp. 1-25,2022,ISI،JCR،Scopus.
9. Hashem Jahangir,Aman Kumar,Harish Chandra Arora,Krishna Kumar,Harish Garg,Development of Efficient Prediction Model of FRP-to-Concrete Bond Strength Using Curve Fitting and ANFIS Methods,ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING,pp. 0-0,2023,ISI،JCR،isc،Scopus.
10. Hashem Jahangir,,,hamed hasani,,Flexural capacity estimation of FRP reinforced T-shaped concrete

beams via soft computing techniques,Computers and Concrete,Vol. 1,No. 32,pp. 1-13,2023,JCR،Scopus.
11. Hashem Jahangir,,,,,Compressive strength prediction of hollow concrete masonry blocks using artificial intelligence algorithms,Structures,Vol. 1,No. 47,pp. 1790-1802,2022,ISI،JCR،Scopus.
12. Hashem Jahangir,Atefeh Soleymani,Denise ,& Penelope N. Kontoni,Random vibration-based investigation of required separation gap between adjacent buildings,Earthquakes and Structures,Vol. 4,No. 26,pp. 285-297,2024,JCR،Scopus.
13. Hashem Jahangir,Amirhossein abbasi,Mohsen Khatibinia,,,Shearography-Wavelet-Based Damage Detection Methodology for Aluminum Beams,Journal of Rehabilitation in Civil Engineering,Vol. 4,No. 11,pp. 22-43,2023,isc،Scopus.
14. Hashem Jahangir,Daneshvar,Saffarian,Sarmadi,Damage identification of structural systems by modal strain energy and an optimization-based iterative regularization method,Engineering with Computers,Vol. 1,No. 1,pp. 1-21,2022,JCR،Scopus.
15. Hashem Jahangir,Onyelowe,Rezazadeh Eidgahee,Aneke,Nwobia,Forecasting shear parameters, and sensitivity and error analyses of treated subgrade soil,Transportation Infrastructure Geotechnology,Vol. 1,No. 1,pp. 1-26,2022,Scopus.
16. HamidReza NASSERI,Hashem Jahangir,EHSAN JANFADA,Performance Evaluation of Compressive Strength Models for SRP and SRG-Confined Concrete Columns,Journal of Rehabilitation in Civil Engineering,Vol. 2,No. 12,pp. 69-85,2024,isc،Scopus.
17. Hashem Jahangir,,,,,,Damage Identification in Reinforced Concrete Beams Using Wavelet Transform of Modal Excitation Responses,Buildings,Vol. 8,No. 13,pp. 1-44,2023,ISI،JCR،Scopus.
18. Hashem Jahangir,mina naseri nasab,hamed hasani,Mohammadhassan Majidi,Saeed Khorashadizadeh,Estimating the punching shear capacities of concrete slabs reinforced by steel and FRP rebars with ANN-Based GUI toolbox,Structures,Vol. 1,No. 50,pp. 1204-1221,2023,ISI،JCR،Scopus.
19. Hashem Jahangir,abolfazl yousefi,The Influence of Natural Additives on Mechanical Properties of Concrete Specimens: A Review,عمران و پروژه,Vol. 2,No. 5,pp. 11-20,2023,isc.
20. Hashem Jahangir,,,Damage detection and monitoring in heritage masonry structures: Systematic review,Construction and Building Materials,Vol. 1,No. 397,pp. 1-24,2023,ISI،JCR،Scopus.
21. Hashem Jahangir,Hajikazemi,Sahranavard,An experimental and numerical investigation of RC slabs externally strengthened by perforated steel plates,Structures,Vol. 1,No. 45,pp. 1239-1252,2022,ISI،JCR،Scopus.
22. Hashem Jahangir,Rezazadeh Eidgahee,Solatifar,Fakharian,Rezaeemanesh,Data-driven estimation models of asphalt mixtures dynamic modulus using ANN, GP and combinatorial GMDH approaches,Neural Computing and Applications,Vol. 1,No. 34,pp. 17289-17314,2022,JCR،Scopus.
23. Hashem Jahangir,hamed hasani,Jos□ Viriato Ara□jo dos Santos,Hern□ni Miguel Lopes,A Comprehensive Study on the Selection of Mother Wavelets and Mode Shapes for Multiple Damage Identification,Iranian Journal of Science and Technology-Transactions of Civil Engineering,Vol. 1,No. 48,pp. 1313-1327,2024,JCR،isc،Scopus.
24. Hashem Jahangir,,,,Performance Based Review and Fine-Tuning of TRM-Concrete Bond Strength Existing Models,Journal of soft computing in civil engineering,Vol. 1,No. 7,pp. 43-55,2023,Scopus.
25. Hashem Jahangir,Rezazadeh Eidgahee,Esfahani,Bond strength characterization and estimation of steel fibre reinforced polymer - concrete composites,Steel and Composite Structures,Vol. 6,No. 44,pp. 803-816,2022,JCR،Scopus.
26. Hashem Jahangir,Soleymani,Esfahani,Investigating the Confining Effect of Steel Reinforced Polymer and Grout Composites on Compressive Behavior of Square Concrete Columns,Iranian Journal of Science and Technology-Transactions of Civil Engineering,Vol. 1,No. 1,pp. 1-17,2022,JCR،isc،Scopus.
27. Hashem Jahangir,Esfahani,Bond Behavior Investigation Between Steel Reinforced Grout Composites and Masonry Substrate,Iranian Journal of Science and Technology-Transactions of Civil Engineering,Vol. 1,No. 1,pp. 1-17,2022,JCR،isc،Scopus.
28. Hashem Jahangir,Mohsen Khatibinia,Mehran Mokhtari Masinaei,Damage Detection in Prestressed

Concrete Slabs Using Wavelet Analysis of Vibration Responses in the Time Domain,Journal of Rehabilitation in Civil Engineering,Vol. 3,No. 10,pp. 21-36,2022,isc،Scopus.

29. Hashem Jahangir,Mohsen Khatibinia,کاووسی,Application of Contourlet Transform in Damage Localization and Severity Assessment of Prestressed Concrete Slabs,Journal of soft computing in civil engineering,Vol. 2,No. 5,pp. 39-67,2021,Scopus.

30. Hashem Jahangir,Mohammad Reza Esfahani,hamed hasani,Wavelet-based damage localization and severity estimation of experimental RC beams subjected to gradual static bending tests,Structures,Vol. 1,No. 34,pp. 3055-3069,2021,ISI،JCR،Scopus.

31. Hashem Jahangir,Arash Karimipour,Danial Rezazadeh Eidgahee,A thorough study on the effect of red mud, granite, limestone and marble slurry powder on the strengths of steel fibres-reinforced self-consolidation concrete: Experimental and numerical prediction.,journal of building engineering,Vol. 1,No. 44,pp. 103398-103398,2021,ISI،JCR،Scopus.

32. Hashem Jahangir,hamed hasani,Mohammad Reza Esfahani,Damage Localization of RC Beams via Wavelet Analysis of Noise Contaminated Modal Curvatures,Journal of soft computing in civil engineering,Vol. 3,No. 5,pp. 101-133,2021,Scopus.

33. Hashem Jahangir,Visar Farhangi,Danial Rezazadeh Eidgahee,Arash Karimipour,Seyed Alireza Nedaei Javan,hamed hasani,Nazanin Fasihihour,Moses Karakouzian,Behaviour Investigation of SMA-Equipped Bar Hysteretic Dampers Using Machine Learning Techniques,Applied Sciences,Vol. 21,No. 11,pp. 10057-10057,2021,ISI،JCR،Scopus.