KHASHAYAR HEYDARPOUR

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EDUCATION

University of Miami *2024-present*
Ph.D in Civil Engineering
Supervisor: Prof. Antonio Nanni

New Mexico State University *2022-2023*
Master of Engineering in Civil Engineering
Overall GPA: 3.64/4.0

Amirkabir University of Technology (Tehran Poly-technique) *2018-2021*
Master of Science in Civil Engineering
Structural branch

Thesis topic: Evaluation of orthogonal seismic demands in horizontally curved RC bridges
Overall GPA: 15.39/20.0 (WES certified 3.41/4.0)

Imam Khomeini International University *2014-2018*
Bachelor of Science in Civil Engineering
Overall GPA: 16.22/20.0 (3.34/4.0)

PUBLICATIONS

Journal articles
1. Ramezani, M., Choe, D.E., Heydarpour, K. and Koo, B. (2023) Uncertainty models for the structural design of floating offshore wind turbines: A review. Renewable and Sustainable Energy Reviews, 185, p.113610. (IF = 15.9)

2. Heydarpour K, Tehrani P. (2022) Influence of abutment stiffness and strength on the seismic response of horizontally curved RC bridges in comparison with equivalent straight bridges at different seismic intensity levels. Shock and Vibration. (IF = 1.6)

Book chapter
Heydarpour K, Bencivenga P, Hadi M.A, Zizi M, De Matteis G. (2022) Effect of Substructure Irregularity on the Seismic Vulnerability of Short-Span Bridges. Proceedings of the 1st Conference of the European Association on Quality Control of Bridges and Structures. EUROSTRUCT 2021. Lecture Notes in Civil Engineering, vol 200. Springer, Cham.

Conference papers
1. Heydarpour, K., Choe, D. and Chung, K. (2023, June) Structural health monitoring of steel moment frame buildings via sequence-based recurrent neural networks. In 2023 IEEE Conference on Artificial Intelligence (CAI) (pp. 349-352). IEEE.
2. Heydarpour K, Tehrani P. (2022) Investigating the effect of different abutment conditions on the seismic responses of horizontally curved RC bridges subjected to orthogonal earthquake excitation. In the 13th National Congress on Civil Engineering, Isfahan, Iran. (In Persian)
3. Heydarpour K, Tehrani P. (2022) Effect of Abutment Modeling on the Seismic Behavior of Horizontally Curved RC Box-Girder Bridges. In 7th International Congress on Civil Engineering, Architecture and Urban Development, Tehran, Iran.
4. Heydarpour K, Tehrani P. (2022) Orthogonal Seismic Demand Prediction of Horizontally Curved RC

Box-Girder Bridges Using Combination Rules in Time History Analyses. In 7th International Congress on Civil Engineering, Architecture and Urban Development, December 2021, Tehran, Iran.

5. Heydarpour K, Tehrani P. (2020) Effects of seismic load directionality on horizontally curved RC bridges. In 1st National Conference on Civil Engineering - Ardabil: Hazards, Performance, and Safety, Ardabil, Iran. (In Persian)

RESEARCH INTERESTS

Artificial Intelligence, Earthquake Engineering, Structural Health Monitoring, Structural reliability, Finite Element Modeling, Concrete structures

AWARDS AND HONORS

Top Paper

My Paper titled "Structural health monitoring of steel moment frame buildings via sequence-based recurrent neural networks" was selected among top 10 papers for oral presentation at 2023 IEEE Conference on Artificial Intelligence (2023).

National University Entrance Exam

I was ranked within top 1 percent in competition for Bachelor's degree (2014) and Master's degree (2018).

SKILLS

Programming

Python — MATLAB — TCL — Fortran

FEM Software

OPENSEES — FAST (Wind Turbine Analysis)

Design and FEM Software

CSI-Bridge — ETABS — SAP 2000

Reliability

FERUM (Finite Element Reliability Using Matlab)

Artificial Intelligence

Machine Learning — Recurrent Neural Networks — Convolutional Neural Networks

TEST SCORES

TOEFL iBT

· Test date: August 7, 2021
· Test score: Total: 106 — Reading: 28 — Listening: 30 — Speaking: 27 — Writing: 21

EXPERIENCE

University of Miami   August 2024 - present
Research Assistant   *Miami, USA*

· Currently, I am working as a research assistant under the supervision of Dr. Antonio Nanni.

University of Central Florida   January 2024 - July 2024
Teacher Assistant   *Orlando, USA*

· I worked as a teacher assistant for structural analysis course at the University of Central Florida

New Mexico State University   August 2022 - August 2023
Research Assistant   *Las Cruces, USA*

· I have worked 10hr/week as a research assistant at New Mexico State University during Fall 2022 and Spring 2023 semesters, and 20hr/week during the summer 2023 semester. The outcome of my assistantship was the publication of a journal paper (No. 1 in "Journal articles" section) and a conference paper (No. 1 in "Conference papers" section).

New Mexico State University   August 2022 - May 2023
Teacher Assistant   *Las Cruces, USA*

· I have worked as a teacher assistant at New Mexico State University for two semesters.

University of Campania "Luigi Vanvitelli"   November 2020 - March 2021
Research   *Aversa, Italy*

· I was participating as a research assistant in a project under the supervision of professor Gianfranco De Matteis along with three Ph.D. fellow researchers. A conference paper was published by the end of this research.

REFERENCES

Prof. Craig M. Newtson
Professor, Head of the Civil Engineering Department, New Mexico State University

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Prof. Paola Bandini
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Dr. Mansoor Yakhchalian
Assistant Professor, Department of Engineering and Technology, Imam Khomeini International University

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