

**PERSONAL
INFORMATION:**

Surname: Ahmadizadeh
Name: Mehdi
Affiliation: Dept of Civil Engineering, Sharif University of Technology
Position: Assistant Professor
Marital Status: Married
Telephone: 98 (21) 6616-4241
Fax: 98 (21) 6601-4828
Email: ahmadizadeh@sharif.edu
Address: School of Civil Engineering, Sharif University of Technology,
Azadi St., P.O.Box 11155-9313, Tehran, Iran
Web Address: <http://sina.sharif.edu/~ahmadizadeh/>

EDUCATION:

February 2008: PhD in Structural and Earthquake Engineering
Department of Civil, Structural and Environmental Engineering, University at Buffalo, State University of New York

September 2007: Msc in Structural and Earthquake Engineering
Department of Civil, Structural and Environmental Engineering, University at Buffalo, State University of New York

June 2004: MSc in Structural Engineering
Civil Engineering Department, Faculty of Engineering, University of Tehran

September 2001: BSc in Civil Engineering
Civil Engineering Department, School of Engineering, Shiraz University

**ACADEMIC
EXPERIENCE:**

September 2009 – Present: Assistant Professor
Department of Civil Engineering, Sharif University of Technology – Courses Taught: *Advanced Structural Dynamics, Design of Steel Structures, Experimental Methods in Structural Engineering, Structural Analysis, Advanced Engineering Mathematics, Seminar; Structural Control, Loading*

September 2008 – August 2009: Assistant Professor
Department of Civil and Environmental Engineering, Shiraz University – Courses Taught: *Dynamics, Structural Analysis, Structural Dynamics, Design of Steel Structures, Prestressed Concrete Design*

January 2008 – May 2008: Instructor
Department of Civil, Structural and Environmental Engineering, University at Buffalo – Course Taught: *Dynamics*

July 2005 – June 2008: Research Assistant
Department of Civil, Structural and Environmental Engineering, University at Buffalo - *Development of Reliable Procedures for Real-Time Seismic Hybrid Simulations Procedures* – With G. Mosqueda

**ACADEMIC
EXPERIENCE
(CONTINUED):****September 2004 – June 2005: Research Assistant**

Electronic Packaging Laboratory, Department of Civil, Structural and Environmental Engineering, University at Buffalo – *Nanoscale Study of Electromigration in Microelectronics Copper Interconnects* – With C. Basaran

August 2004 – May 2007: Teaching Assistant

Department of Civil, Structural and Environmental Engineering, University at Buffalo – Courses Assisted: *Civil Engineering Materials, Statics, Dynamics, Structural Dynamics, Advanced Structural Analysis* – With C. Basaran, G. Dargush, S. Ahmad, G. Mosqueda, and A. Aref

August 2003 – November 2003: Research Assistant

Iranian Building and Housing Research Center, Tehran, Iran - *Earthquake Design Spectra for Iran* – With H. Shakib

July 2003: Research Assistant

Housing Foundation of the I.R. Iran (Natural Disaster Research Center of Iran), Tehran, Iran - *Evaluation of the Seismic Vulnerability of Important Buildings in the City of Yazd* – With H. Shakib

August 2002 – June 2004: Graduate Student

Department of Civil Engineering, University of Tehran, Tehran, Iran - *An Investigation of the Effects of Socket Joint Flexibility in Space Structures* – With S. Maalek

July 2001 – August 2004: Research Assistant

Housing Foundation of the I.R. Iran (Natural Disaster Research Center of Iran), Tehran, Iran - *Evaluation of the Seismic Behavior and Economizing Single-Story Stone Masonry Buildings* – With H. Shakib

**PROFESSIONAL
EXPERIENCE:****December 2003 – August 2004 and August 2009: Rehabilitation Design Reviewer**

Iranian Engineering Development Company (Management Services Section), Tehran, Iran - *Rehabilitation of Important and Governmental Buildings of Iran*

Several Dates: Structural Designer

Analysis and Design of Several Building Structures, Including Structural Assessment and Rehabilitation of Khiyal Art Gallery, Tehran, Iran (2003), Analysis and Design of a 19-Story RC Structure in Tehran, Iran (2011), and Analysis and Design of Tehran's Birds Garden, the Largest Slack Cable Structure in the Middle East (2011)

August 2000 – June 2001: Structural Design Assistant

Arseh Sazan Consulting Engineers, Shiraz, Iran

JOURNAL PAPERS:

J9. Mosqueda, G and **Ahmadizadeh, M**; Iterative implicit integration procedure for hybrid simulation of large nonlinear structures; *Earthquake Engineering and Structural Dynamics*, Vol 40 (2011) Issue 9, 945-960, DOI: 10.1002/eqe.1066.

**JOURNAL PAPERS
(CONTINUED):**

- J8. Mosqueda, G, **Ahmadizadeh, M**, Tangalos, S and Moore-Russo, D; Internet-Based Instructional Resource Exposing Middle School Students to Structural and Earthquake Engineering; *Computer Applications in Engineering Education*, in press, DOI: 10.1002/cae.20357.
- J7. **Ahmadizadeh, M** and Mosqueda, G; Online Energy-Based Error Indicator for Assessment of Numerical and Experimental Errors in Hybrid Simulation; *Engineering Structures*, Vol 31 (2009) Issue 9, 1987-1996, DOI: 10.1016/j.engstruct.2009.03.002.
- J6. **Ahmadizadeh, M** and Mosqueda, G; Hybrid Simulation with Improved Operator-Splitting Integration Using Experimental Tangent Stiffness Matrix Estimation; *Journal of Structural Engineering – ASCE*, Vol 134 (2008) Issue 12, 1829-1838, DOI: 10.1061/(ASCE)0733-9445(2008)134:12(1829).
- J5. **Ahmadizadeh, M**, Mosqueda, G, and Reinhorn, AM; Compensation of Actuator Delay and Dynamics for Real-Time Hybrid Structural Simulation; *Earthquake Engineering and Structural Dynamics*, Vol 37 (2008) Issue 1, 21-42, DOI: 10.1002/eqe.743.
- J4. Mosqueda, G and **Ahmadizadeh, M**; Combined Implicit or Explicit Integration Steps for Hybrid Simulation; *Earthquake Engineering and Structural Dynamics*, Vol 36 (2007) Issue 15, 2325–2343, DOI: 10.1002/eqe.731.
- J3. **Ahmadizadeh, M**; On Equivalent Passive Structural Control Systems for Semi-Active Control Using Viscous Fluid Dampers; *Structural Control and Health Monitoring*, Vol 14 (2007) Issue 6, 858-875, DOI: 10.1002/stc.182.
- J2. **Ahmadizadeh, M** and Shakib H; Evaluating the Effects of Ground Motion Parameters on Response Spectra of Iranian Earthquakes; *Asian Journal of Civil Engineering (Building and Housing)*, Vol 8 (2007) Issue 1, 25-48.
- J1. **Ahmadizadeh, M** and Shakib H; On the December 26, 2003, Southeastern Iran Earthquake in Bam Region; *Engineering Structures*, Vol 26 (2004) Issue 8, 1055-1070, DOI: 10.1016/j.engstruct.2004.03.006.

**REFEREED
CONFERENCE
PROCEEDINGS:**

- C11. Afsharhasani, R and **Ahmadizadeh, M**; Design of optimal passive energy Dissipation Systems Using Active Control Theory; *Sixth International Conference on Seismology and Earthquake Engineering*, Tehran, Iran, May 2011.
- C10. **Ahmadizadeh, M** and Mosqueda, G; Improved Integration Methods for Accurate Identification of Dynamic Properties of Structural Components Using Seismic Hybrid Simulation; *2010 Iran-Turkey-US Joint Workshop on Earthquake Risk Management*, Istanbul, Turkey, PEER 2011/07, December 2010.
- C9. Mosqueda, G and **Ahmadizadeh, M**; Implicit Numerical Integration for Hybrid Simulation; *3rd International Conference on Advances in Experimental Structural Engineering*, San Francisco, CA, October 2009.

**REFEREED
CONFERENCE
PROCEEDINGS
(CONTINUED):**

- C8. Mosqueda, G and **Ahmadizadeh, M**; Implicit Numerical Integration in Hybrid Simulation with Iteration Strategy for Experimental Substructures; *2009 American Control Conference*, St Louis, MO, June 2009.
- C7. Mosqueda, G and **Ahmadizadeh, M**; Integration Methods for Improved Stability and Accuracy of Hybrid Simulations; *The 14th World Conference on Earthquake Engineering*, Beijing, China, October 2008.
- C6. **Ahmadizadeh, M** and Mosqueda, G; Assessment of Numerical and Experimental Errors in Hybrid Simulation; *2008 ASCE Structures Congress*, Vancouver, Canada, April 2008.
- C5. **Ahmadizadeh, M** and Mosqueda, G; Combined Implicit or Explicit Integration Steps for Real-Time Hybrid Simulation; *2007 ASCE Structures Congress*, Long Beach, CA, May 2007.
- C4. **Ahmadizadeh, M**; Equivalent Passive Systems for Semi-Active Viscous Fluid Dampers; 4WCSCM-430. *4th World Conference on Structural Control and Monitoring*, University of California – San Diego, La Jolla, CA, July 2006.
- C3. **Ahmadizadeh, M**, Mosqueda, G and Reinhorn, AM; Compensation of Actuator Delay and Dynamics for Real-Time Hybrid Structural Simulation; 4WCSCM-310. *4th World Conference on Structural Control and Monitoring*, University of California – San Diego, La Jolla, CA, July 2006.
- C2. Shakib, H and **Ahmadizadeh, M**; 3-D Analysis of One-Story Stone Masonry Buildings Subjected to Earthquake Excitation; *12th Symposium on Earthquake Engineering (Keynote Speaking)*, Roorkee, India, December 2002.
- C1. Shakib, H, **Ahmadizadeh, M** and Rashtian M; Evaluation of Behavior of Buildings in Changureh – Avaj Earthquake Stricken Region; *12th Symposium on Earthquake Engineering*, Roorkee, India, December 2002.

**OTHER
PRESENTATIONS,
REPORTS AND
PUBLICATIONS:**

6. **Ahmadizadeh, M**; Real-Time Seismic Hybrid Simulation Procedures for Reliable Structural Performance Testing; *PhD Dissertation*, Department of Civil, Structural and Environmental Engineering, University at Buffalo, 2007.
5. **Ahmadizadeh, M**; A Comparison Between Passive and Semi-Active Structural Control Systems Using Viscous Fluid Dampers; *Winning Graduate Student Paper Presentation*, EERI Annual Meeting, Universal City, CA, February 2007.
4. Shakib, H, **Ahmadizadeh, M**, *et al.*; Evaluation of the Seismic Behavior and Economizing Single-Story Stone Masonry Buildings; *Project Report*, Housing Foundation of Iran, Natural Disaster Research Center of Iran, 2004 (in Persian).
3. **Ahmadizadeh, M**; An Investigation of the effects of socket joint flexibility in Space Structures; *MSc Thesis*, Faculty of Engineering, University of Tehran, 2004 (in Persian).

OTHER PRESENTATIONS, REPORTS AND PUBLICATIONS (CONTINUED):

2. Shakib, H, **Ahmadizadeh M**, Hamzeloo, H, Farzanegan, A, Mirsanjari, M; Earthquake Design Spectra for Iran; *Project Report – BHRC Publication Number R-430*, Building and Housing Research Center, 2003 (in Persian).
1. Ahmadi, M, Shakib, H and **Ahmadizadeh, M**; Evaluation of Seismic Vulnerability of Important Buildings in the City of Yazd; *Project Report*, Housing Foundation of Iran, Natural Disaster Research Center of Iran, 2002 (in Persian).

REVIEW:

Journals

Earthquake Engineering and Structural Dynamics, ASCE Journal of Structural Engineering, ASCE Journal of Engineering Mechanics, Journal of Earthquake Engineering, Earthquake Spectra, Engineering Structures, Canadian Journal of Civil Engineering, International Journal of Science and Technology, Sharif Journal of Science and Technology, International Journal of Civil Engineering, Amirkabir Journal of Science and Technology, ...

Conferences

8NCEE, ASCE Structures 2007 and 2008, 14WCEE, ACC2009, 8ICCE, 5NCCE, SEE6, ...

OTHER:

Qualified member of the Iranian National Foundation of the Elite.

Member of the Iranian Building Engineering Organization.

Graduated with the highest honors from the University at Buffalo in 2008.

Won the 2006 EERI annual graduate student paper award for “A Comparison Between Passive and Semi-Active Structural Control Systems Using Viscous Fluid Dampers.”

Graduated ranking the first from Shiraz University in 2001.

Developed a program for full nonlinear finite element analysis of framed structures, including analysis modules in FORTRAN and a graphical user interface in Visual Basic.

Fluent in Persian and English languages, with some Arabic language proficiency.