

Nazila Mokarram

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Education

- Ph.D. in Civil Engineering**, expected 2008, GPA 3.8
Master of Science in Civil Engineering, Geotechnical engineering emphasis, 2005, GPA 3.8
University of Southern California (USC), Los Angeles, CA
- Master of Science in Civil Engineering**, Earthquake engineering emphasis, 2002
Bachelor of Science in Civil Engineering, 2000
University of Tehran (UT), Tehran, Iran

Research Experience

- University of Southern California** 2003-present
Los Angeles, CA
Contributed to the research work as a team member of:
- Geotechnical Information Technology Research (ITR) project.
 - NEESgrid: A Distributed Virtual Laboratory for Advanced Earthquake Experimentation and Simulation George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES).
 - Borehole and Ground Deformation Databases (PEER) Development of databases on Boreholes and Liquefaction Induced Ground Deformations.
- University of Tehran** 2001-2002
Research assistant Tehran, Iran
- Analyzed dynamic behavior of earthfill dams with asphaltic-concrete core.
 - Accomplished seismic hazard and risk analysis of Bushehr port.

Teaching Experience

- University of Southern California** Fall 2006- Spring 2007 and 2008
Teaching assistant of "Natural Hazards" (GEOG260)
- Administrated, trained and coordinated two junior teaching assistants, one work study and lab technician for the class and labs.
 - Organized, conducted and supervised laboratory sessions.
- University of Southern California** Fall 2007
Teaching assistant of "Environmental Geographic Information Systems" (GEOG281)
- Prepared the lab material based on syllabus changes.
 - Organized, conducted and supervised laboratory sessions.
- University of Southern California** Spring 2004 and 2005
Teaching assistant of "Introduction to Civil Engineering Graphics" (CE107)
- Assisted students with their coursework.
 - Evaluated students' assignments and exams.
- University of Southern California** Fall 2003, 2004 and 2005
Teaching assistant of "Geotechnical Engineering" (CE467)
- Taught the 45 student class in the lecturer's absence. Estimated 4 times per semester.
 - Directed discussion sessions for the exams and project deadlines.
 - Organized, conducted and supervised laboratory sessions.

Working Experience

- Earth Mechanics Inc.** Summer 2006 and 2007
Fountain Valley, CA
- Analyzed the soil structure interaction (SSI analysis) of pile groups in San Mateo- Hayward and Richmond- San Rafael Bridges.
- Sazeh Consulting Engineers** Spring 2003
Tehran, Iran
- Analyzed and designed "PARS oil refinery" structures.
 - Acquired experience in behavior, design and analyses of concrete and steel industrial structures.
- Fara Darya Arsheh Company** 2001-2002
Tehran, Iran
- Worked collaboratively as part of a five-member design team of "SADRA Dry-Dock".
 - Gained valuable experience in earthquake hazard and risk analysis, soil improvement and designing of marine structures.
- Itook Engineering Inc.** Summer 1999
Tehran, Iran
- Designed steel structures of the Azarshahr Nefelin project.
- Iran International Engineering Company, IRITEC** Summer 1997
Tehran, Iran
- Served as an intern; drafted structural plans using AutoCAD

Professional Qualifications

Tools: Shake, APile, LPile, GIS, ADINA, ANSYS, SAP, AutoCAD, Protégé
Programming languages: HTML, eXtensible Markup Languages, FORTRAN, MATLAB
Software applications: Excel, Word, FrontPage, PowerPoint
Languages: Bilingual in English and Farsi (Persian)
Professional certificates: EIT

Leadership Positions

USC Graduate and Professional Student Senate (GPSS)
Chair, Elections and Recruitment (2007-present)

Fanni Reunion Foundation, Inc. (FRF)
Director and Assistant Secretary (2006-present)

USC Engineering Graduate Student Association (EGSA)
Vice president, Programs (2006-2007)

USC Engineering Graduate Student Association (EGSA)
Senator of Civil and Environmental Engineering Department (2005-2006)

UT Engineering Students' Magazine (Nashre Fan)
Editorial board member (2001-2002)

The History of Engineering Faculty of UT
One of the initiators, collected data about Engineering Faculty establishment, its history and interviewed the first graduated students (1999-2001)

UT Scientific Committee of Civil Engineering Students
Senator (1998-1999)

Honors

- **Leadership Award**, Office of International Services of USC (2008, 2007 and 2006).
- **USC Women in Science and Engineering Certificate of Merit**, WiSE Program of USC (2007).
- **Hami Scholarship Award**, Fanni Reunion Foundation Inc (2005).
- **Academic Achievement Award**, Office of International Services of USC (2008 and 2005).
- **Excellence in Advanced Education Award**, Association of Professors and Scholars of Iranian Heritage (2005).
- **Outstanding Teaching Assistant Award**, Civil Engineering Department of USC (2004).
- **Outstanding Teaching Assistant Award**, Civil Engineering Department of USC (2003).
- **National University Entrance Exam for Graduate Studies in Civil Engineering**, Ranked 52nd among 10,500 (2000).
- **National Olympiad of Computers**, Honor of successful student among 350,000 participants (1995).

Publications

Papers

- **N. Mokarram** and J.P. Bardet, "A Knowledge-Base Ontology Model for Experimental Research". Work in progress, 2008.
- J.P. Bardet, **N. Mokarram** and D. McLeod, "An Analysis of Data Exchange in Geotechnical Engineering". Submitted to IEEE Transactions on Knowledge and Data Engineering, 2008.
- J.P. Bardet, G. Ragusa, D. McLeod and **N. Mokarram**, "Ontologies and Web-Semantics for Improvement of Curriculum in Civil Engineering". 115th Annual American Society for Engineering Education (ASEE) Conference, 2008.
- J.P. Bardet, F. Liu, and **N. Mokarram**, "Data and Metadata Modeling for the George E. Brown Jr. Network for Earthquake Engineering Simulation." EUROODYN 2005 – Proc. of the 6th International Conf. on Structural Dynamics, Paris, France, Sep. 4-7 2005. Millpress, Rotterdam, 2005.
- **N. Mokarram**, B. Gatmiri, "Dynamic analyses of rock fill dams with asphalt concrete cores". Fourth international conference on seismology and earthquake engineering (SEE4) IIEES, Tehran, Iran, 2002.
- **N. Mokarram**, K. Dehghan, "Pre-stressed tension piles and high stress corrosions". Iranian Geotechnical Society journal, 2002.
- **N. Mokarram**, K. Dehghan, "The ways to resist uplift, in semi-buried coastal structures". International Soil Improvement Conference, Polytechnic University, Tehran, Iran, 2001.
- **N. Mokarram**, K. Dehghan, "Lattice shells- new experiences". Nashre Fan, Tehran University, Engineering Faculty Magazine, the 5th special issue for civil engineering, 2000.

Technical Reports

- J.P. Bardet, F. Liu, and **N. Mokarram**, "Metadata for Reporting and Exchanging NEES Data Sets". Report of Civil Engineering Dept, University of Southern California, Los Angeles., 2004.

- J.P. Bardet, F. Liu, and **N. Mokarram**, "Illustration of the NEES Metadata Model Using the miniMOST Experiment." Report of Civil Engineering Dept, University of Southern California, Los Angeles., 2004.
- J.P. Bardet, F. Liu, **N. Mokarram**, S. Brandenberg, B. Kutter, and D. Wilson, "Application of the NEES Metadata Model to Centrifuge Modeling." Report of Civil Engineering Dept, University of Southern California, Los Angeles, 2004.
- J.P. Bardet, F. Liu, and **N. Mokarram**, "Report and Exchange of NEES Data Sets Using Metadata Models." Report of Civil Engineering Dept, University of Southern California, Los Angeles, 2004.
- J. Swift, J. Eng, J.P. Bardet, F. Liu, **N. Mokarram**, and G. Pekcan, "Using the NEES Reference Data Model and the NEES Metadata Browser for Centrifuge Experiments, Version 1.1," Report of Civil Engineering Dept, University of Southern California, Los Angeles, 2004.
- J.P. Bardet, J. Hu, F. Liu and **N. Mokarram**, "Ground Deformation Database for 1999 Turkey Earthquake". Report of Civil Engineering Dept, University of Southern California, Los Angeles, 2003.
- Fara Darya Arsheh Co., "Design and construction of SADRA dry dock". Report submitted to SOGREAH (the international French consultant company), 2001.