

Curriculum Vitae

Name: Mohammad Amin Asareh (Assareh)

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Education:

PhD candidate (2009 - Present)

Department of Civil and Environmental Engineering, Missouri University of Science and Technology

Master of Science in Structural Engineering (2005-2008)

GPA: 17.73/20

Thesis Title: "Nonlinear incremental dynamic analysis on fixed offshore jacket type platforms considering Soil-Pile-Structure interactions"

Department of Civil and Environmental Engineering, Khajeh Nassir Toosi University of Technology (Tehran)

Bachelor's degree, Civil Engineering (2001-2005)

GPA: 15/20

Department of Civil and Environmental Engineering, Khajeh Nassir Toosi University of Technology

Work Experience:

Graduate Research Assistant in Missouri University of Science and Technology (2009)

Mehr Ab Pouyesh Consultant Engineering Company (Apr. 2007- Aug. 2009)

Head of Structural Engineering Department

Mahab Ghodss Consultant Engineering Company (sep.2004-Sep. 2006)

Producing the construction machinery codes and standards of Iran

Concrete Laboratory of Khajeh Nassir University for the ACI concrete competition (June 2004-Sep.2004)

Concrete Team which led to ACI (American Concrete Institute) Award

Research Institute of Forest and Rangeland (RIFR) (June 2002-Sep. 2002)

Site Engineer

Research Experience:

- Done three months of practical work in the concrete laboratory at Khajeh Nassir Toosi University of Technology of Tehran for ACI competition in 2004.
- Modeled and designed an intake plant for the steel factory complex in south of Iran with the finite element program of SAP2000 and OpenSees.
- Modeled an offshore platform considering soil-pile-structure interaction with Pushover and IDA (Incremental Dynamic Analysis) with OpenSees.
- Modeled the tower of Tehran (Milad Tower) with the height of 435m and done nonlinear dynamic analysis with OpenSees and Ansys and verification with both programs.
- Designed industrial buildings for the pumping station of Soome Dam in north-east of Iran.
- Modeled and designed an earth fill dam (A Tailing Dam) with 25m of height and 830m of length and volume of 12 million cubic meters for the Gol-e-Gohar hematite mining company with "FLAC".
- Expert in modeling and evaluating Soil -Structure Interaction and liquefaction effects.
- worked on effect of modeling assumptions regarding soil-structure-interaction and liquefaction to seismic fragility of Bridges.

- A case study on nonlinear dynamic behavior of Skew-Bridges from the recent Chile Earthquake
- Recently been working on modeling of offshore wind turbines

Publications:

Dissertation:

- Assareh M.A., 2008. *Nonlinear Incremental Dynamic Analysis On fixed offshore Jacket Type Platforms Considering Soil-Pile-Structure Interactions*. K.N. Toosi University of Technology.

Seminar:

- Assareh M.A., 2006. *Performance Based Design and the effects of soft soil on seismic demand of structures*. K.N.Toosi University of Technology.

Papers:

- Assareh M.A. and Asgarian B. 2008. "Nonlinear Behavior of Single Piles in Jacket Type Offshore Platforms Using Incremental Dynamic Analysis". Published in *American Journal of Applied Sciences*. Vol. 5, No. 12, P: 1793-1803.
- Asgarian B., Aghakouchak A.A., Alanjari P. and Assareh M.A. 2008. "Incremental Dynamic Analysis of Jacket Type Offshore Platforms Considering Soil-Pile Interaction". *Proceedings of the 14th world Conference of Earthquake Engineering*. October 12-17, 2008, Beijing, China.
- Asgarian B., Assareh M.A. and Alanjari P. 2008. "Nonlinear behavior of single piles in jacket type offshore platforms". *Proceedings of the 27th International Conference on Offshore Mechanics and Arctic Engineering*. Estoril, Portugal.

Technical and Computer Skills:

- Auto CAD, 3D Studio, Microsoft Office
- Finite Element Programs ANSYS, Abaqus, SAP2000, ZEUS-NL, and OpenSEES.
- FAST design code for HAWTs
- Programming in Matlab
- Also worked with seismosignal, seismostruct, Nonlin, Cyclic1D, Drain3D, FIAC, ,ETABS, SAFE.

Honors and Awards:

- Participated in the Junior Certificate examination in Ireland with two honor grades.
- Winning Third Place, ACI International Student Concrete Competitions, San Francisco, 2004.
- Top Student Award, Master Degree, Khajeh Nassir University, 2007.
- Participated in producing the construction machinery codes and standards of Iran.

Research Interests:

- Numerical analysis
- Nonlinear Dynamic Analysis and Adaptive Pushover
- Offshore structures (Offshore Wind Turbines)
- Soil-Pile-Structure Interaction
- Performance Based Design