Mohammadreza Mohammadi

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Summary of Qualifications

- ✓ A responsible, creative, and business minded structural engineer with strong communication, interpersonal and teamwork skills. Expertise in finite element modeling, seismic analysis, fatigue and fracture mechanics, and numerical analysis of damage propagation, modeling of mechanical behavior of geomaterials such masonry, rock and soil.
- ✓ Professional in Finite Element Software such as Abaqus, and Programming with Fortran, Matlab, Python.
- ✓ Skilled in Structural Analysis Software such as Sap 2000, Etabs, Safe, and Geotechnical Engineering Software such as Plaxis 2D and Plaxis 3D Foundation.
- ✓ Professional in CAD Software such as SolidWorks, Auto Cad 3D& 2D

Education

✓ M.Sc. in Structural Engineering McMaster University, Hamilton, Canada

[Nov. 2015–Expected Jul. 2018]

- M.Sc. Thesis: Modeling of Mechanical Behavior of Structural Masonry (Prof. Pietruszczak, Civil Engineering Department Of McMaster University). Results:
 - 1. Proposing a Macroscopic Failure Criterion for Structural Masonry
 - 2. 3D FE Modeling of a Shaking Table Test of Four Stories Concrete Masonry Building in Abaqus and Incorporating the Failure Criterion using Subroutine (Fortran)
- Courses:
 - 1. Advance Finite Element Analysis: A
 - 2. Theory of Plasticity: A
 - 3. Analytical Fracture/Damage Mechanics: A

✓ B.Sc. in Civil Engineering

[Sept. 2010–Sept. 2015]

- Sharif University of Technology, Tehran, Iran
- **B.Sc. Thesis:** Dynamic Response Analysis of Fixed Offshore Platform with Suction Pile (Civil Engineering Department Of Sharif University of Technology)
- Ranked as top 10% among students in Civil Engineering Department, Jan 2014

Relevant Experience

✓ Internship at SAFF Offshore Industries Co.

[Jun. 2015–Aug. 2015]

Onshore Construction Group. Project: Construction of South Pars Phase 19 Shore Protection. Responsibilities:

- Design drawings in AutoCad 3D, Model protection in SolidWorks
- Prepare and review plans, specifications, cost, material estimates, reports, and contract documents
- Monitor and update construction work schedules
- Provide materials selection documents

- ✓ Head of Sharif Civil Department Scientific Assembly [Sept. 2013–Jun. 2015]
 - Coordinator of academic seminars, workshops, and events
 - Organizer of Structural Analysis Software Training Classes such Opens ETABS & SAFE
- ✓ Research Assistant at McMaster University [Nov. 2015–Jul. 2018] Geomechanics Research Group Under Supervision Prof.Pietruszczak
- ✓ Research Assistant at Sharif University of Technology [Dec. 2013–Sept. 2015]
 Offshore Structures Research Group
- ✓ Research & Teaching Assistant at Material & Concrete Lab [Jan. 2013–Jun. 2015] Sharif University of Technology. Responsibilities:
 - Performing different materials & concrete tests such as concrete quality control
 tests including compressive strength tests (cylinder, cube), tensile strength test,
 slump test, water absorption test
 - Instructing concrete laboratory tests to 50+ students each week and evaluating assignments and reports

Other **Experience**

- ✓ Teaching Assistant, McMaster University
 - Geotechnical Engineering || Course

[Jan. 2017–Apr. 2017] [Jan. 2016–Apr. 2016]

- Municipal Hydraulics Course Roles:
- Held tutorial sessions for 100+ students each week
- Evaluated assignments, exams, and projects

Computer Skills

- 1. Finite Element Software: Abaqus, Ansys, Ansys Aqwa,
- 2. Programming Software: Fortran, Matlab, Turbo Pascal, Python
- 3. Geotechnical Engineering Software: Plaxis 3D Foundation, Plaxis 2D
- 4. Structural Analysis Software: Etabs, Sap 2000, Safe, SeismoSignal
- 5. CAD Software: Auto Cad 3D& 2D, SolidWorks

Honors and Achievement

- ✓ Selected as Exceptional Talent and Given Graduate Admission from Faculty of Civil Engineering Department, Sharif University, Jan. 2014
- ✓ Ranked as top 10% among students in Civil Engineering Department, Jan. 2014
- ✓ Ranked among top 0.05% in 600,000+ applicants in the nationwide university entrance exam in the field of Mathematics and Physics for BS degree, Tehran, Iran

Extracurricular Activities

- ✓ Soccer Player of McMaster Cheetahs (2nd place in Co-Soccer McMaster Intramurals League), Civil Engineering Department Team at Sharif University, Sasad Soccer Team (A Youth Soccer Team in Tehran Soccer League), High School Soccer Team
- ✓ Member of MISA (McMaster Iranian Students Association) and Sharif Civil Magazine
- ✓ Tennis
- ✓ Basketball