



# Moslem Moradi

## Advanced Testing Specialist

[moslemmoradi@tdi-bi.com](mailto:moslemmoradi@tdi-bi.com), (979) 693-3446

**TDI-Brooks International, Inc.**  
14391 S. Dowling Rd, College Station, TX 77845  
Ph: (979) 693-3446 Fax: (979) 693-6389  
[www.tdi-bi.com](http://www.tdi-bi.com)

---

### PROFESSIONAL EXPERIENCE

---

- Advanced Testing Specialist, TDI-Brooks International, Inc., February 2020 – Present
- Research Assistant in Stochastic Geomechanics Laboratory (SGL), Texas A&M University, January 2016-2020
- Risk Management Intern, TechnipFMC, June 2019-September 2019
- Geotechnical Engineering Intern, Gessner Engineering, February 2019 -May 2019
- Research assistant in geophysics department, NIOC Exploration Directorate (part- time), September 2011-February 2013
- Petrophysicist, Paravar Engineering, April 2010 - September 2010

---

### KEY ACHIEVEMENTS - TDI BROOKS INTERNATIONAL, INC.

---

Advanced Testing Specialist:

- Initiated TDI-Brooks' advanced soil testing program including Constant Rate of Strain (CRS) and Direct Simple Shear (DSS) tests
- Research and development studies for improved geotechnical acquisition and testing

---

### KEY ACHIEVEMENTS – STOCHASTIC GEOMECHANICS LABORATORY

---

Conducting research on:

- Probabilistic site characterization: Developed a geostatistical seismic tomography data inversion framework
- Data integration: Utilized Bayesian statistics for the integration of geophysics, geotechnics, and geology data
- Data-driven modeling and simulation: Developed a graph-based random-walk for site characterization process

---

### KEY ACHIEVEMENTS – TECHNIPFMC

---

- Quantitative and qualitative risk assessment of large-scale offshore, onshore, and subsea projects
- Developed an improved Risk Management Plan for engineering projects

---

### KEY ACHIEVEMENTS – GESSNER ENGINEERING

---

- Prepared borehole logs and geotechnical report for small to medium scale residential, commercial, and pavement projects

---

### KEY ACHIEVEMENTS – NIOC EXPLORATION

---

Conducted research on:

- Joint geostatistical inversion of 3D seismic and borehole data
- Geostatistical simulation of reservoir rock properties

---

### KEY ACHIEVEMENTS – PARAVAR ENGINEERING COMPANY

---

- Developed petrophysical logs and report for comprehensive study of an offshore oil field

## FORMAL EDUCATION

---

- Texas A&M University, College Station, TX—Ph. D. in Civil Engineering, 2016-present
- University of Tehran, Tehran, Iran – M.Sc. in Petroleum Exploration Engineering, 2013
- Amirkabir University of Technology, Tehran, Iran – B.Sc. in Petroleum Engineering - 2010

## TEACHING EXPERIENCE

---

- Teaching assistant for “Physical and engineering properties of soil”, Fall 2017
- Teaching assistant for “Introduction to Geotechnical Engineering”, Fall 2017 & Spring 2018
- Teaching assistant for “Engineering Mathematics” at University of Tehran, Fall 2011
- Teaching assistant for “Geo-statistics” at University of Tehran, Spring 2011

## HONORS AND AWARDS

---

- Recipient of SUT-US scholarship, 2019
- Two times recipient of Dr. Don Murff '70 Endowed Fellowship, 2017 & 2019
- Best Thesis Award from Exploration Directorate of NIOC, 2013
- Ranked 1st among 11 Masters students of petroleum exploration program, 2013

## PUBLICATIONS

---

### Journal Papers

- **Moradi, M.**, Asghari, O., Norouzi, Gh., Riahi, M.A., 2015, “*Joint Bayesian stochastic inversion of well logs and seismic data for volumetric uncertainty analysis*”, International Journal of Mining and Geo-Engineering, 49(1), pp. 131-142
- **Moradi, M.**, Asghari, O., Norouzi, Gh., Riahi, M.A., 2014, “*Application of Bayesian stochastic inversion in a carbonate oilfield*”, Journal of Petroleum Research

### Conference Presentations

- **Moradi, M.**, Medina-Cetina, Z., 2020, “*Application of Probabilistic Calibration of Geostatistical Parameters in Seismic Travel Time Inversion*”, 4th International Symposium on Frontiers in Offshore Geotechnics (ISFOG 2020), Houston, USA
- **Moradi, M.** and Medina-Cetina, Z., 2020, “*Reconstruction of P-Wave Velocity Model through Geostatistical Inversion of Seismic Travel Time for Offshore Site Characterization*”, NSG2020 4th Applied Shallow Marine Geophysics Conference (Vol. 2020, No. 1, pp. 1-4). EAGE.
- Medina-Cetina, Z., Son, J., **Moradi, M.**, 2019, “*Bayesian Stratigraphy Integration of Geophysical, Geological and Geotechnical Surveys*”, Offshore Technology Conference, Houston, USA
- **Moradi, M.**, Asghari, O., Norouzi, Gh., Riahi, M.A., 2013, “*Using stochastic seismic inversion for porosity and pore volume prediction and uncertainty analysis*”, Oral Presentation, 1st PTCE conference (Petroleum Technical Conference and Exhibition), Tehran, Iran
- **Moradi, M.**, Asghari, O., Norouzi, Gh., Riahi, M.A., 2013, “*Porosity analysis in an Iranian oilfield, using stochastic seismic inversion*”, Poster Presentation, 1st PTCE conference, (Petroleum Technical Conference and Exhibition), Tehran, Iran
- **Moradi, M.**, Asghari, O., Norouzi, Gh., Riahi, M.A., 2015, “*Application of stochastic Bayesian inversion for pore volume uncertainty analysis in an Iranian Oilfield*”, 33rd National Geoscience Symposium, Shiraz, Iran