

# Amir Barati Nia

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## EDUCATION

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### PhD Candidate in Civil Engineering (Geotechnical Engineering)

Jun 2021-Now

Portland State University, Portland, USA

*Dissertation title: "Characterization of Low-Plastic Silt Behavior Through Direct Simple Shear Test and Cone Penetration Testing"*

*Supervisor: Dr. Moug*

GPA: 4.0/4.0

### Master of Science in Geotechnical Engineering

Sep 2016-Jan 2019

Sharif University of Technology, Tehran, Iran

*Thesis title: "Numerical Modeling of The Deformation of Rockfill Dams (Case Study: Masjed-Soleiman Dam)"*

*Supervisor: Professor Ali Pak*

GPA: 3.77/4

### Bachelor of Science in Civil Engineering

Sep 2011-Feb 2016

Qom University of Technology, Qom, Iran

GPA: 3.41/4

## PUBLICATIONS

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**Barati Nia, A.**; Moug, D.; Huffman, A.; DeJong, J. (2022) "Numerical Investigation of Piezocone Dissipation Tests in Clay: Sensitivity of Interpreted Coefficient of Consolidation to Rigidity Index Selection", Submitted to 5th International Symposium on Cone Penetration Testing, CPT'22, Bologna, Italy, 8-10 June 2022.

**Barati Nia, A.**, and Pak, A. (2018, Oct). "Evaluation of Collapse Settlement of Masjed-Soleiman Dam Shells Due to Precipitation." 3rd National Conference on Geotechnical Engineering of Iran, University of Tehran, Tehran, Iran. In Persian.

**Barati Nia, A.**, and Pak, A. (2018, Oct). "Performance Evaluation of The Strain-Hardening/Softening Constitutive Model in Simulating of Rockfill Dams and Comparison with The Mohr-Coulomb Model." 3rd National Conference on Geotechnical Engineering of Iran, University of Tehran, Tehran, Iran. In Persian.

## Work & Research Experience

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### Graduate Research Assistance

Summer 2021- Now

Portland State University, Portland, Oregon

- Running Monotonic & Cyclic Direct Simple Shear Tests

### Geotechnical Characterization to the GeoTechTools Website

Summer 2022

Deep Foundation Institution (DFI) Subsurface Characterization Committee

- Gathering the Materials
- Organizing the Format
- Re-draw Some Figures Using AutoCAD

## Graduate Research Assistance

Fall 2017- Winter 2019

Sharif University of Technology, Tehran, Iran

- Simulated the static deformation and collapse settlement of the dam using coupled hydro-mechanical analysis, FISH, and SS models on FLAC 2D

## Teaching Experience

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### Teaching Assistance

Spring 2023 & Fall 2023

Department of Civil Engineering, Portland State University

Course Title: Soil Mechanic Lab

- Instructing the Soil Mechanic Lab

### Teaching Assistance

Winter 2023 & Winter 2024

Department of Civil Engineering, Portland State University

Course Title: Geotechnical Design

- Office Hour
- Grading Homework

### Teaching Assistance

Fall 2022

Department of Civil Engineering, Portland State University

Course Title: Soil Mechanic Lab

- Grading Lab Reports and Quizzes

## COMPUTER/TECHNICAL SKILLS

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### Proficient in:

**FLAC 2D** (*Done on the M.Sc. Thesis*),

**Python** (*Related to two courses: Machine Learning & Computer Methods in CEE*),

**DEEPSOIL** (*Learned on Advanced Geotechnical Earthquake Engineering Course*),

**SAFE, ETABS, AutoCAD, Microsoft Office**

### Familiar with:

GeoStudio, LPILE, PLAXIS, FLAC 3D, SNAP, AutoCAD

## HONORS & AWARDS

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Awarded the Geo-Institute Graduate Student Scholarship to attend the GeoCongress 2025. 2024  
The scholarship award is \$1,500.

Awarded the Paula Harris Scholarship for International Students for the 2023-2024 2023  
academic year. The scholarship award was \$2,000.

Awarded the Dr. Robert D. Dryden Memorial Endowed Scholarship for the 2023-2024 2023  
academic year. The scholarship award was \$3,000.

Awarded the Carl E. Green Endowed Graduate Fellowship for the 2022-2023 academic year. 2022  
The scholarship award was \$1,500.

Ranked 31<sup>st</sup> among more than 35'000 participants in Nationwide M.Sc. University Entrance 2016  
Exam of Iran for Civil Engineering.

Second place in debate competitions at Amirkabir University of Technology. 2018

## VOLUNTEER EXPERIENCES

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Seminar/Event Coordinator for ASCE GI GSO PSU

Fall 2024-Now

Organizing a successful Nowruz event with a \$3,000 budget and 300 attendees	Spring 2024
Served as a part of the leadership team for the Iranian Student Association of Portland	Fall 2023-Now
Organizing a trip to Seattle for the Geotech Symposium of Northwest	Spring 2023
Reviewing papers for Congress 2023	Fall 2022
Held and taught Practical Logic class at Qom University of Technology (Lasted ten sessions)	Fall 2014
Co-founder and Secretary of Public Relations of an intellectual council at Qom University	2013-2015

## REFERENCES

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### **Diane Moug, Assistant Professor**

Department of Civil Engineering, Portland State University  
(503) 725-4283, [Moug@pdx.edu](mailto:Moug@pdx.edu)

### **Arash Khosravifar, Assistant Professor**

Department of Civil Engineering, Portland State University  
(503) 725-4280, [karash@pdx.edu](mailto:karash@pdx.edu)

### **Ali Pak, Professor**

Department of Civil Engineering, Sharif University of Technology  
+98 (21) 6616- 4225, [pak@sharif.edu](mailto:pak@sharif.edu)

### **Abdolreza Karimi, Assistant Professor**

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