



Javad- Nazari Afshar
Assistant professor of Geotechnical Engineering

Member of the Faculty of Engineering - Department of Civil
and Geotechnical Engineering,
Shahr-e-Qods Branch, Islamic Azad University (IAU),
Tehran, Iran.

Email: j.nazariafshar@qodsiau.ac.ir
nazariafshar@yahoo.com

Educational Background

- Ph.D. in Geotechnical Engineering, 2012
Subject of dissertation: **Theoretical and experimental investigation of load-settlement behavior of unreinforced and geosynthetic reinforced stone-columns**
- M.Sc. in Geotechnical Engineering, 2005
Subject of thesis: **Evaluation of the effect of flexural rigidity of raft on the contribution of bearing capacity of piled – raft foundation**
- B.Sc. in Civil Engineering, 2002

Teaching Experience (Universities)

- Faculty Member of Department of Civil Engineering, Shahr-e-Qods Branch, Islamic Azad University(IAU), 2007-now- Graduate (from 2012) and undergraduate students (from 2007)
- Invited Lecturer in Department of Civil Engineering, south Tehran Branch, Islamic Azad University(IAU),2006- Graduate students
- Invited Lecturer in Department of Civil Engineering, Central Tehran Branch, Islamic Azad University(IAU),2012-2013- undergraduate students
- Invited Lecturer in Department of Civil Engineering, Central Tehran Branch, Islamic Azad University(IAU), 2013 – now- Graduate students
- Invited Lecturer in Department of Civil Engineering, Islamshahr Branch, Islamic Azad University(IAU), For Master 2015- Graduate students

Academic Positions

- Direct manager of Civil Engineering Association- Shahr-e-Qods Branch, Islamic Azad University(IAU) - 2008-2014
- Head of Concrete Team - Shahr-e-Qods Branch, Islamic Azad University(IAU) 2009
- Head of Soil mechanics Laboratory- Shahr-e-Qods Branch, Islamic Azad University(IAU) -2010-now
- Member of Research Council of Department of Civil Engineering- Shahr-e-Qods Branch, Islamic Azad University(IAU) - 2012-2014
- Member of Technical Committee - Shahr-e-Qods Branch, Islamic Azad University(IAU) - 2009-2014
- Direct manager of Department of Civil and Geotechnical Engineering, Shahr-e-Qods Branch, Islamic Azad University (IAU)-2013-2014

- Member of Technical Committee - Shahr-e-Qods Branch, Islamic Azad University(IAU) – 2018- now

Teaching Experience (Courses)

- Undergraduate

Course

Soil Mechanics
 Foundation Engineering
 Static
 Strength of Materials I
 Laboratory of Soil Mechanics
 Methods of construction

- Graduate

Course

Marine Geotechnical
 Reinforced Soil
 Soil Improvement technics
 Advanced Soil Mechanics

Supervisor or consultant - Dissertation and Thesis

M.S

Supervisor	Consultant
6	5

Ph.D

Supervisor	Consultant
1	1

Presented Handouts

- Soil Mechanics
- Foundation Engineering
- Strengths of Materials
- Advanced Soil Mechanics
- Reinforced Soil

Academic Honors

- Winner of the best Article- 1st international congress on earthquake and light weight construction-Qom- Iran 2005
- Distinguished graduated student of Central Tehran Branch, Islamic Azad University(IAU)- 2005
- Winner of the 2008-2009 photo contest competition- by www.geoengineer.org web site, Greece
- Distinguished Researcher of Engineering Faculty- Shahr-e-Qods Branch, Islamic Azad University(IAU)- 2013

Book

- M. Ghazavi, J. Nazari Afshar (2009), “**Design and construction of Stone Column**”, Published by K.N.Toosi University, Tehran, Iran (in Persian language)- (republished 2013)

Membership

- Iranian Society of Civil Engineers
- Iranian Geotechnical Society
- Secretary of in Technical Committee of Geosynthetic, Iranian Geotechnical Society, 2014- now
- Responsible for Training Section in Geosynthetic committee, Iranian Geotechnical Society, 2014
- Member of the technical committee of natural disasters of Tehran Province, 2014.

Establishment

- Soil Mechanics Laboratory in Shahr-e-Qods Branch, Islamic Azad University(IAU), 2010
- Design and made the Large loading frame and Test Box “Foundation Simulator” ,Shahr-e-Qods Branch, Islamic Azad University(IAU), 2010
*Note : with this device it is capable to simulate a physical modeling with weight up to 2000 kg and loading up to 4000 kg. All instruments are digital and tests controls by especial software by personal computer, in all time of tests.
- Design and made the special Apparatus for Triaxial testing machine and Large Test Box(mentioned above)

Research Projects

1. “Numerical investigation about dynamic loading effect on shallow foundation ultimate bearing capacity”, in Shahr-e-Qods Branch, Islamic Azad University (IAU), 2009.
2. “Laboratory investigation on fine grain soils shear strength reinforced by sand columns””, in Shahr-e-Qods Branch, Islamic Azad University (IAU), 2012.

Personal Abilities

1. Civil engineering software: Sap2000, Safe , Auto Cad
2. Geotechnical engineering software: Plaxis (2D), Flac(3D) , Slide , MSEW , RESSA , Settle 3D
3. Good skill and experiences in design and construction of reinforced structures.
4. Good skill and experiences in design and construction of sealing of excavated structures.
5. Good skill in design of ground improvement with stone column method(reinforced and unreinforced methods)

Journal Papers (English language)

- 1- Ghazavi, M. and Nazari Afshar, J. (2013) "**Bearing capacity of geosynthetic encased stone columns**" Geotextiles and Geomembranes, Vol (38), PP.26-36.
- 2- Nazari Afshar, J., Ghazavi, M. (2013). "**Experimental studies on bearing capacity of geosynthetic reinforced stone columns**" Arabian Journal for Science and Engineering (AJSE), DOI 10.1007/s13369-013-0709-8.
- 3- Nazari Afshar, J., Ghazavi, M. (2014). "**A Simple analytical method for calculation of bearing capacity of stone-column**" International Journal of Civil Engineering, Vol 12(1) Transaction B: Geotechnical Engineering.
- 4- Mehrannia, N., Nazari Afshar, J. and Kalantary, F. (2017). "**Experimental Investigation on the Bearing Capacity of Stone Columns with Granular Blankets**" Geotechnical and Geological Engineering, DOI 10.1007/s10706-017-0317-6.
- 5- Nazari Afshar, J., Mehrannia, N., Kalantary, F., Ganjian, N. (2017). "**Bearing Capacity of Group of Stone Columns with Granular Blankets**" International Journal of Civil Engineering, DOI:10.1007/s40999-017-0271-y
- 6- Ghazavi, M., Ehsani Yamchi, A., Nazari Afshar, J. (2018). "**Bearing capacity of horizontally layered geosynthetic reinforced stone columns**" Geotextiles and Geomembranes, Vol (46), PP.312-318.
- 7- Aslani, M., Nazari Afshar, J. & Ganjian, N. (2018) "**Experimental Study on Shear Strength of Cohesive Soils Reinforced with Stone Columns**" Geotechnical and Geological Engineering, <https://doi.org/10.1007/s10706-018-0752-z>

Journal Papers (Persian language)

- 1- Ghazavi, M. and Nazari Afshar, J., kalantary, F. (2011) "**Theoretical and numerical comparison of lateral pressures imposed by surcharge on retaining walls**" Journal of civil and surveying Engineering, Vol (45), No.3, PP.345-349.
- 2- Mehrannia, N., Nazari Afshar, J., Kalantary, F. (2018) "**Experimental Investigation on the Effect of Geometry and Reinforced Floating Stone Columns on Bearing Capacity**" Journal of Ferdowsi Civil Engineering, doi:10.22067/civil.v3i12.57449.
- 3- Aslani, M., Nazari Afshar, J. & Ganjian, N. (2019) "**Experimental Investigation of Equivalent Shear Strength of Loose Sand Reinforced with Stone Column**" Journal of Engineering Geology, Vol (13) No 3.
- 4- Nazari Afshar, J., Aslani, M. (2019) "**Laboratory study of shear strength of loose sand in the case of Individual stone columns, Equivalent trench and Equivalent area method**" Amirkabir Journal of Civil and Environmental Engineering, (DOI): 10.22060/ceej.2019.15104.5830.

- 5- Aslani, M., Nazariafshar, J. (2019) ” **Experimental study about effect of stress concentration ratio on the shear strength of loose sand reinforced by stone column**” Journal of Engineering Geology (In press).
- 6- Mahmoudi Mehrizi , M.E, Nazariafshar, J. (2019) ” **A laboratory study on the effect of anchor shape on the displacement of stabilized wall with helical anchors**” Journal of Engineering Geology (In press).

Conference Papers

- 1- Nazari Afshar, J., H. Vosoghi Far, “Using of UBF Bracing system for decreasing the weight of steel structures”, 1st international congress on earthquake and light weight construction-Qom- Iran, (2005) (In Persian language)
- 2- Nazari Afshar, J., R. Abdollahi, H. Vosoghi Far, “Using of the Stone column for decreasing the Settlement of Shallow Foundation”, First international Conference of Seismic retrofitting, Tehran, Iran (2006) (In Persian language).
- 3- R. Abdollahi, Nazari Afshar, J., H. Vosoghi Far, “Applications and methods of construction of stone columns for stabilization of shallow foundations”, First international Conference of Seismic retrofitting, Tehran, Iran (2006) (In Persian language).
- 4- Nazari Afshar, J., F. Kalantary, Kh. Hemmati, A. Ghorbani,” Evaluation of flexural stiffness of raft on the axial load of piles and controlling the differential settlement of pile-raft foundations” 4th Iranian national congress on civil engineering, Tehran, Iran (2008) (In Persian language).
- 5- Kh. Hemmati, F. Kalantary, Nazari Afshar, J., A. Ghorbani,” investigation on the effect of pile geometry on the settlement of pile-raft foundations” 4th Iranian national civil engineering congress, Tehran, Iran (2008) (In Persian language).
- 6- M. Ghazavi, Nazari Afshar, J.” Analytical approach for increasing of bearing capacity of shallow foundation in cohesive soils” National congress of retrofitting, Yazd university, Yazd, Iran,(2008) (In Persian language).
- 7- M. Ghazavi, Nazari Afshar, J.” Increasing the Seismic Bearing Capacity of shallow foundation reinforced with stone column in cohesive soils” 3th National and First International Conference of retrofitting, Tabriz, Iran,(2008) (In Persian language).
- 8- Nazari afshar, Javad. Ghazavi, Mahmoud. Hemmati, Khashayar." Analytical Method for Seismic Bearing Capacity of Stone-Column Reinforced Shallow Foundations" Fifth international conference on recent advances in geotechnical earthquake engineering and soil dynamics and symposium in honor of professor I. M. IDRIS SAN DIEGO, CA – May 24-29, 2010(on CD)
- 9- Ghazavi, M. and Nazari Afshar, J."Improving the bearing capacity of soft soil beds by using of stone columns" 7th National Congress on Civil Engineering, 7-8 May University of Sistan and Baluchestan, Zahedan, Iran, (2013).
- 10- Nazari afshar, Javad. " Numerical Investigation of Dynamic Load-Settlement Behaviour of Stone-Columns Reinforced Shallow Foundations" sixth international conference on Seismology and Earthquake Engineering, Tehran, Iran – May, 16-18, (2011).
- 11- Nazari afshar, Javad. " Laboratory investigation on the effect of sand columns on increasing of fine soils shear strength” 5th international conference on integrated national disaster management (INDM), Tehran, Iran, (2014), (In Persian language).
- 12- Atefi, M, Nazari afshar, Javad.” Study about effective parameters on the bearing capacity of stone columns” 1st national conference of soil mechanic, shahid Rajaei university, Tehran, Iran, (2014), (In Persian language).
- 13- Atefi, M, Nazari afshar, Javad.” Numerical investigation on the bearing capacity of stone columns with blankets” 1st national conference of soil mechanic, shahid Rajaei university, Tehran, Iran, (2014), (In Persian language).
- 14- Nazari afshar, Javad, Kasaei, S.S, Samimi, A.” investigation about performance of impact rollers in different site and soils” 1st national conference of soil mechanic, shahid Rajaei university, Tehran, Iran, (2014), (In Persian language).

Consulting Experience

- 1- Zigourat construction company- technical engineer- 2003-2007.
- 2- Granteen geotechnical consulting company, designer, 2007-2010.
- 3- Asil Sazan Company, designer and supervisor, 2010-2012.
- 4- Nasr e Zanjan Construction Company, designer and supervisor, 2012-2014.
- 5- Shaloodeh Khak geotechnical Consulting company, designer and project manager, 2014- now