



دانشگاه کاشان
University of Kashan

Majid Noorian-Bidgoli



Personal Information

Date of birth: 1977.08.23
Place of birth: Aran and Bidgol, Iran
Marital status: Married
Language skills: Persian, English

Addresses

University: Department of Mining Engineering, Faculty of Engineering, University of Kashan,
Ravand Street, Kashan, Iran.
Postal Code: 8731753153
Phone Number: +98-31-55912459
Fax Number: +98-31-55912424
Email: noriyan@kashanu.ac.ir
mnoorian@kth.se
Website: <http://noriyan.kashanu.ac.ir/faculty>

Education

- **Ph.D in Mining Engineering (Rock Mechanics)**
From 2010 to 2014
KTH Royal Institute of Technology, Stockholm, Sweden
Thesis title: Strength and deformability of fractured rocks
Supervisor: Prof. Lanru Jing
- **M.Sc. in Mining Engineering (Mine Exploitation)**
From 2000 to 2003
Shahid Bahonar University of Kerman, Kerman, Iran
Thesis title: Stability analysis and support system design of the Lavasan water transfer tunnel
Supervisor: Prof. Kurosh Shahriyar
- **B. M.Sc. in Mining Engineering (Mine Exploitation)**
From 1996 to 2000
University of Yazd, Yazd, Iran
Thesis title: Stability analysis of the crown pillar between stopes in the Koshk underground mine using FLAC
Supervisor: Dr. Gholam Reza Shamsi

Experiences

2016-present: Educational Assistant, Faculty of Engineering, University of Kashan, Kashan, Iran

2014-present: Assistant Prof., Department of Mining Engineering, Faculty of Engineering, University of Kashan, Kashan, Iran

2006-2009: Lecturer, Department of Mining Engineering, Faculty of Engineering, University of Kashan, Kashan, Iran

2003-2006: Guest Lecturer, Department of Mining Engineering, Faculty of Engineering, University of Kashan, Kashan, Iran

2003-2005: Guest Lecturer, Department of Mining Engineering, Islamic Azad University of Meymeh, Isfahan, Iran

Interested Research Areas

- Rock mechanics of continuum and discontinuum media
- Rock mass characteristics
- Rock engineering design and stability analysis of surface (slope) and subsurface (tunnel, shaft) structures
- Coupled thermo-hydro-mechanical-chemical-biological processes modeling in fractured rock masses
- Surface and underground mining

Memberships

- International Society for Rock Mechanics (ISRM)
- Iranian Society of Mining Engineering (IRSME)
- Iranian Society of Rock Mechanics (IRSRM)
- Iranian Tunneling Association (IRTA)
- Iranian Mining Engineering Organization (IMEO)

Professional Certifications & Workshops

- “Rock mechanics solutions for ornamental rock protection and archaeological site conservation”, 26 May, 2014. Vigo, Spain.
- “Rock mechanics for deep underground excavations in hard rock”, 27 May, 2012, Stockholm, Sweden.
- “Rock Testing and Instrumentation”, Coordinator by Prof. Vutukuri V.S., 14-15 May, 2003, Shahid Bahonar University, Kerman, Iran.

Software Skills

- Mining and Rock Engineering: UDEC, 3DEC, FLAC (2&3D), Plaxis (2&3D), Geoslope, Rocsupport, Rocdata, Swedge, Slide, Unwedge, Examine, Phase2.0 (RS), Datamine, CSMine, Surpac, Dips, Stereonet, Surfer, Roclab.
- Programming Language: Matlab, C, Visual Basic.

Article Reviews for Journals

- Rock Mechanics and Mining Science Journal, Elsevier
- Rock Mechanics and Geotechnical Engineering Journal, Elsevier
- Rock Mechanics and Rock Engineering, Springer
- Computers and Geotechnics Journal, Elsevier
- Arabian Journal of Geosciences, Springer
- Mountain Science Journal, Elsevier

Selected Publications

- **Noorian-Bidgoli M**, Golmohammadi S. 2024. A combination model of multiple regression and rock engineering systems (MR-RES) to identify main parameters effect value on tunnel face advance. *Journal of Analytical and Numerical Methods in Mining Engineering (ANM)*. 13(37), 57-67.
- **Noorian-Bidgoli M**, Behnia B. 2023. Experimental evaluation of the thermal effect on dynamic behavior of travertine. *International Journal of Protective Structures*.
- Golmohammadi S, **Noorian-Bidgoli M**. 2023. Improvement of the Q-System Using the Rock Engineering System: A Case Study of Water Conveyor Tunnel of Azad Dam. *International Journal of Geotechnical and Geological Engineering*, 17(5).
- Abroshan M.R, **Noorian-Bidgoli M**. 2023. Numerical investigation of the effect of impact on the rockfall protective embankment reinforced with geogrid. *International Journal of Geomechanics and Engineering*, 33(2).
- Dallaki A, **Noorian-Bidgoli M**. 2023. Risk assessment of buildings adjacent to inner-city tunnels (Case study: Saidi station of Qom Metro). *The 14th Iranian Tunneling Conference*, 1-10.
- Mohammadi Firouz F, **Noorian-Bidgoli M**. 2023. Numerical investigation of the effect of drilling mud pressure on the geomechanical stability of an oil well and determining the optimal window of drilling mud. *The 4th National Petroleum Geomechanics Conference*, 1-11.
- Khodaei M, **Noorian-Bidgoli M**. 2023. Stability analysis of ancient man-made underground spaces (Case study: Nushabad underground city). *Journal of Research on Archaeometry*, 2(8): 47-64.
- Yavari M.D, **Noorian-Bidgoli M**. 2022. Investigating the coupled effect of hydro-mechanical pressures on the fracture behavior of the jointed concrete using numerical modeling. *Second Conference on Mechanical Behavior Modeling of Materials*, 1-9.
- Dallaki A, **Noorian-Bidgoli M**. 2022. Numerical stability analysis of station wall at the entrance and exit points of TBM-EPB (Case study: Kamkar Castle station, Qom metro tunnel). *The 8th Iranian Rock Mechanics Conference*, 1-9.
- Rezaee H, **Noorian-Bidgoli M**. 2022. Investigation the effect of dynamic loading on the deformation of ancient man-made underground spaces. *Journal of Earthquakes and Structures*, 22(3): 227-285.
- Ansari-Shad M, **Noorian-Bidgoli M**. 2022. Numerical analysis of land subsidence due to water withdrawal from pumping well in urban areas. *Journal of Water and Wastewater Science and Engineering (JWWSE)*, 7(2), 42-52.
- Golmohammadi S, **Noorian-Bidgoli M**. 2022. Design of stable slope of Almas-Kavir Toot iron mine. *The 10th Iranian Mining Engineering Conference*, 1-9.
- Dallaki A, **Noorian-Bidgoli M**, Alvandi, H. 2022. Numerical study to determine the optimum pressure of tunnel face in EPB-TBM (Case study: Line A of Qom urban railway project). *The 10th Iranian Mining Engineering Conference*, 1-9.
- Noorinezhad A, **Noorian-Bidgoli M**. 2022. Hydro-mechanical analysis of stability of the Golab water conveyance tunnel. *The 40th National Conference of Earth Sciences*, 1-8.
- Golmohammadi S, **Noorian-Bidgoli M**. 2022. Reserve evaluation and design of the final pit limit of Almas-Kavir Toot iron mine. *The 40th National Conference of Earth Sciences*, 1-12.
- Karimi-Khajelangi B, **Noorian-Bidgoli M**. 2022. Numerical study of the effect of rock anisotropy on stresses around an opening located in the fractured rock mass. *Journal of Petroleum Science and Engineering*, 208: 1-11.
- Fathi M, **Noorian-Bidgoli M**. 2022. Evaluation of land subsidence due to water-level decline in Kashan plain. *Journal of Water and Wastewater Science and Engineering (JWWSE)*, 6(4): 45-57.
- Bozorgi F, Aalianvari A, **Noorian-Bidgoli M**. 2021. Stability analysis and selection of optimal support system of adjacent large-scale cavern-A case study. *Journal of Dam and Hydroelectric PowerPlant*, 8(30): 1-11.

- Dallaki A, **Noorian-Bidgoli M**, Alvandi, H. 2021. Design of optimum ventilation system during operation in urban train stations (Case study: The third station of Khordad "A12" of the Qom metro project). The 7th International Congress on Civil Engineering, Architecture and Urban Development, 1-15.
- Karimi-Khajelanghi B, **Noorian-Bidgoli M**. 2021. Analysis of effective parameters on the induced stresses around the opening located in the fractured rock mass. The Second National Conference on Data Mining in Earth Sciences, 1-9.
- Golmohammadi S, **Noorian-Bidgoli M**, Biabangardi M, Nezam-Hosseini, A. 2021. Investigation of effective parameters in the production rate of processing unit of the Kavir Toot Almas iron mine using multiple regressions. The Second National Conference on Data Mining in Earth Sciences, 1-9.
- Alghasi-Chegeni M, **Noorian-Bidgoli M**. 2021. Coupled hydromechanics modeling of fractured rock mass for water transfer tunnel of the Seymareh dam. The 9th Iranian Mining Engineering Conference and 6th International Mine & Mining Industries Congress, 1-11.
- Rezaee H, **Noorian-Bidgoli M**. 2021. Numerical hydro-mechanical analysis of stress-deformation of embankment dam. The 19th Iranian Hydraulic Conference, 1-8.
- Behnia B, **Noorian-Bidgoli M**. 2020. Experimental study of the effect of temperature changes on the dynamic behavior of rock (Case study: Torshab travertine stone). The 7th Iranian Rock Mechanics Conference, 1-8.
- Golmohammadi S, **Noorian-Bidgoli M**, Moradi S. 2020. Improvement of the Q classification system using rock engineering system (Case study: Water tunnel of Azad dam). The 7th Iranian Rock Mechanics Conference, 1-8.
- Alghasi-Chegeni M, **Noorian-Bidgoli M**. 2020. Numerical analysis of deformability behavior of tunnel in the fractured rock mass (Case study: Water intake tunnel of Saymareh Dam). The 23rd Symposium of Geological Society of Iran, 1-11.
- Noorinezhad A, **Noorian-Bidgoli M**. 2020. Numerical analysis of static load applied to the tunnel's precast concrete segment (Case study: Shiraz metro Line 2 tunnel). The 23rd Symposium of Geological Society of Iran, 1-12.
- Pouryani R, Aalianvari A, **Noorian-Bidgoli M**. 2019. Control of settlement affected excavation by TBM-EPB with ADECO-RS approach in urban area using numerical analysis-A case study: Qom subway line A. Tunnelling and Underground Space Engineering Journal, 9(1): 1-15.
- Moghaddasi MR, **Noorian-Bidgoli M**. 2018. ICA-ANN, ANN and multiple regression models for prediction of surface settlement caused by tunneling. Tunnelling and Underground Space Journal, 79: 197-209.
- Lajavardi B, **Noorian-Bidgoli M**. 2016. Sensitivity analysis of joints orientation and support in stability of the underground structures roof. The 4th International Congress on Civil Engineering, Architecture and Urban Development. Shahid Beheshti University, Tehran, Iran.
- Kaviani M.A, **Noorian-Bidgoli M**. 2016. Support system design of the TBM work shaft of Isfahan urban railway tunnel (Line 2). The 4th International Congress on Civil Engineering, Architecture and Urban Development. Shahid Beheshti University, Tehran, Iran.
- Hasanipanah M, **Noorian-Bidgoli M**, Armaghani, D.J, and Khamesi H. 2016. Feasibility of PSO-ANN model for predicting surface settlement caused by tunneling. Engineering with Computers Journal, 32: 705. 1-11.
- **Noorian-Bidgoli M**. 2016. Using of underground mines as economic multi-purpose structures of passive defense. The national conference on passive defense and sustainable development. Tehran, Iran.
- **Noorian-Bidgoli M**, Kochaki M. 2016. Design and stability analysis of underground structures in rock with respect to passive defense. The national conference on passive defense and sustainable development. Tehran, Iran.

- Kaviani M.A, Bolboli M, **Noorian-Bidgoli M**, Zamzam M.S. 2016. Stability analysis of the TBM work shaft of Isfahan urban railway tunnel (Line 2) using the FLAC3D software. The 10th student Mining Engineering conference. University of Kashan, Iran.
- **Noorian-Bidgoli M**. 2015. Reviewer Acknowledgement. Journal of Rock Mechanics and Geotechnical Engineering. 7(6): 726-726.
- **Noorian-Bidgoli M**, Jing L. 2015. Stochastic analysis of strength and deformability of fractured rocks using multi-fracture system realizations. International Journal of Rock Mechanics and Mining Sciences. 78: 108-117.
- **Noorian-Bidgoli M**, Jing L. 2014. Water pressure effects on strength and deformability of fractured rocks under low confining pressures. Rock Mechanics and Rock Engineering Journal. DOI:10.1007/s00603-014-0628-3. 1-15.
- **Noorian-Bidgoli M**, Jing L. 2014. Effects of loading conditions on strength and deformability of fractured rocks- a numerical study. In Proceeding of the European rock mechanics symposium. ISRM. Rock engineering and rock mechanics: structures in and on rock masses. Vigo, Spain. 365-368.
- **Noorian-Bidgoli M**, Jing L. 2014. Anisotropy of strength and deformability of fractured rocks. Journal of Rock Mechanics and Geotechnical Engineering. 6(1):156-164.
- **Noorian-Bidgoli M**, Zhao Z, Jing L. 2013. Numerical evaluation of strength and deformability of fractured rocks. Journal of Rock Mechanics and Geotechnical Engineering. 5(6):419-430.
- Hakimiyan M, Maleki-Nejad H, **Noorian-Bidgoli M**. 2012. Stability analysis of rock wedges for the Isfahan subway tunnel using the Unwedge software. In Proceeding of the 4th Iranian Mining Engineering Conference. Tehran, Iran.
- Taei S, **Noorian-Bidgoli M**. 2012. Design and optimization of the belt conveyor transport system- A case study: Semirom fireclay mine. In Proceeding of the 1st Iranian Mining Technologies Conference. Yazd, Iran.
- Taei S, **Noorian-Bidgoli M**. 2012. Design and optimization of the belt conveyor system using the BeltAnalyst software. In Proceeding of the 1st National and International Conference on Conveyor Belt Systems. Tehran, Iran.
- **Noorian-Bidgoli M**, Jing L. 2011. A review of numerical modeling of strength and stability of underground openings considering hydro-mechanical effect. Literature survey report. KTH Royal Institute of Technology. 1-81.
- **Noorian-Bidgoli M**, Hamed Shibani. Stability analysis and support system design of portal of tunnels in the discontinuous media (case study: k" portal of water transport tunnel of Karaj-Tehran). In Proceeding of the 4th Iranian Rock Mechanics conference (IRMC4). 5 May, 2011, Tehran, Iran.
- **Noorian-Bidgoli M**. 2010. Processing and analysis of the discontinuities data in order to optimization mining operations in the building stone mines- A case study: Ateshkoh travertine stone mine. In Proceeding of the 27th Symposium on Geosciences and the 13th Geological Society of Iran. Tehran, Iran.
- **Noorian-Bidgoli M**. 2010. Stability analysis of rock engineering structures using the Phase2.0 software- A case study: Final part of the Kohrang-3 tunnel. In Proceeding of the 27th Symposium on Geosciences and the 13th Geological Society of Iran. Tehran, Iran.
- **Noorian-Bidgoli M**, Seyameki A, Forghani M. 2010. Analysis of deformation and interaction support system-ground (GRC) using the Rocsupport3.0 Software- A case study: Isfahan Subway tunnel. In Proceeding of the 3th Iranian Mining Engineering Conference and Exhibition. Yazd, Iran.
- Nadimi S, Bahri-Najafi A, Mozdianfard M.R, **Noorian-Bidgoli M**. 2010. Roads to a precious salt field. Rah Abrisham Journal. Vol 102.
- Khadamiyan Z, **Noorian-Bidgoli M**, Pezeshki V. 2009. Slope stability analysis of the southern wall of the Chador-Malu open pit mine using the descriptive and numerical methods. Mines Development Journal. Vol 2.

- **Noorian-Bidgoli M.** 2009. Investigation of the surface subsidence in the twin tunneling projects- A Case study: Isfahan subway tunnel. In Proceeding of the 8th Iranian Tunneling Conference. Tehran, Iran.
- **Noorian-Bidgoli M.** 2009. Evaluation of land-surface subsidence caused by twin tunnels construction in urban areas (case study: Isfahan urban railway tunnel). In Proceeding of the 8th Iranian Tunneling Conference. Tehran, Iran.
- Nadimi S, Bahri-Najafi A, **Noorian-Bidgoli M.** 2009. Estimation of optimal sizes of the room and pillar stopes using numerical method- A case study: Sultanabad underground mine. In Proceeding of the 1th Greatest Miners and Mine Industries Festival in Isfahan Province. Isfahan, Iran.
- **Noorian-Bidgoli M,** Shahriyar K. 2005. Development of a method for estimating the geotechnical parameters of a real site using the numerical method. In Proceeding of the 1st Iranian Mining Engineering Conference. Tehran, Iran.
- **Noorian-Bidgoli M,** Shamsi G. 2004. Stability analysis of the crown pillar between stops in the Koshk underground mine. In Proceeding of the 2nd Iranian Rock Mechanics Conference. Tehran, Iran.
- **Noorian-Bidgoli M,** Shahriyar K, Afsari-Nejad M. 2003. Determination of mechanical parameters of the Lavasan tunnel using the Roclab1.0 software. In Proceeding of the 6th Iranian Tunneling Conference. Tehran, Iran.
- **Noorian-Bidgoli M,** Shahriyar K, Afsari Nejad M. 2003. Stability analysis and support system design of the Lavasan tunnel. In Proceeding of the 6th Iranian Tunneling Conference. Tehran, Iran.
- **Noorian-Bidgoli M,** Shahriyar K, Afsari-Nejad M. 2003. Back analysis of the Lavasan tunnel for determining the area actual geotechnical parameters using the FLAC 4.0 Software. In Proceeding of the 3th Iranian Engineering Geology and Environmental Conference. Bu-Ali Sina University, Hamedan, Iran.
- **Noorian-Bidgoli M,** Shahriyar K, Afsari-Nejad M. 2003. Effective factors on the collapses phenomena in the Lavasan tunnel with estimating damages and presenting some solutions for increasing of safety level. In Proceeding of the 3th Iranian Engineering Geology and Environmental Conference. Bu-Ali Sina University, Hamedan, Iran.
- **Noorian-Bidgoli M,** Shahriyar K, Afsari-Nejad M. 2003. Study of the environmental problems associated by the Lavasan tunnel construction with presenting solution methods. In Proceeding of the 3th Iranian Engineering Geology and Environmental Conference. Bu-Ali Sina University, Hamedan, Iran.
- **Noorian-Bidgoli M.** 2002. Numerical modeling process of the finite difference method in the FLAC Software. In Proceeding of the 3th International Conference on Geotechnical Engineering and Soil Mechanics. Tehran, Iran.