

## AHMADREZA HEDAYAT, PH.D.

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### EDUCATION

- **Ph.D. in Civil Engineering, Purdue University, West Lafayette, IN (August 2013)**  
Dissertation: Mechanical and Geophysical Characterization of Damage in Rocks  
Advisors: Prof. Antonio Bobet and Prof. Laura J. Pyrak-Nolte
- **M.S. in Civil Engineering, Tehran Polytechnic, Tehran, Iran (August 2009)**  
Dissertation: Stress-Displacement Analysis of Tunnels Considering Ground-Lining Interaction  
Advisor: Prof. Ahmad Fahimifar
- **B.S. in Civil Engineering, Shiraz University, Shiraz, Iran (August 2006)**

### PROFESSIONAL EXPERIENCE

- Assistant Professor, Department of Engineering, IPFW (August 2013-Present)
- Research Assistant, School of Civil Engineering, Purdue University (August 2009-July 2013)
- Teaching Assistant, School of Civil Engineering, Purdue University (August 2012-May 2012)
- Research Assistant, Department of Civil Engineering, Tehran Polytechnic (August 2007-May 2009)
- Teaching Assistant, Department of Civil Engineering, Shiraz University (August 2005-May 2006)

### PUBLICATIONS

- Hedayat, A., Pyrak-Nolte, L and Bobet, A. (2013-in review). Detection and quantification of slip along non-uniform frictional discontinuities using digital image correlation. *Geotechnical Testing Journal*.
- Hedayat, A., Pyrak-Nolte, L and Bobet, A. (2013-in review). Multi-modal Monitoring of Slip along Frictional Discontinuities. *Rock Mechanics and Rock Engineering Journal* (Invited to publish in a special issue).
- Hedayat, A., Pyrak-Nolte, L and Bobet, A. (2013). Multi-modal monitoring of slip along frictional discontinuities. *Proceedings of the 47<sup>th</sup> US Rock Mechanics Symposium, San Francisco, June 23-26.*
- Hedayat, A., Bobet, A and Pyrak-Nolte, L. (2012). Monitoring slip initiation and propagation along frictional interfaces with seismic wave transmission. *Proceedings of the 46<sup>th</sup> US Rock Mechanics Symposium, Chicago, June 24-27.*
- Bobet, A., Pyrak-Nolte, L., Choi, M.K., and Hedayat, A. (2011). Mechanical and geophysical characterization of damage in anisotropic rock. *Proceedings of the NSF CMMI Grantees, Atlanta, January 4-7.*
- Fahimifar, A., Monshizadeh, F., Hedayat, A., and Vakilzadeh, A. (2010). Analytical solution for the excavation of circular tunnels in a visco-elastic Burger's material under hydrostatic stress field. *Tunnelling and Underground Space Technology, Vol. 25, No. 4, pp. 297-304.*
- Fahimifar, A. and Hedayat, A. (2010). Elasto-plastic analysis in conventional tunnelling excavation. *Proceedings of the ICE - Geotechnical Engineering, Vol. 163, Issue 1, pp. 34-45.*
- Fahimifar, A. and Hedayat, A. (2009). The elasto-plastic analysis of a circular opening excavated in elastic-strain-softening Hoek-Brown rock. *Proceedings of the 8<sup>th</sup> International Congress on Civil Engineering, Shiraz, Iran, May 11-13.*
- Fahimifar, A. and Hedayat, A. (2008). Determination of ground response curve of the supported tunnel considering progressive hardening of shotcrete lining. *Proceedings of the 5<sup>th</sup> Asian Rock Mechanics Symposium, Tehran, Iran, November 24-26.*

### HONORS AND AWARDS

- Gerald and Beryl Leonards Fellowship Award (2009).
- Honor Student, Geotechnical Engineering Master's Program (2009).
- Honor Student, Civil Engineering Bachelor's Program (2006).

### PROFESSIONAL AFFILIATIONS

- American Rock Mechanics Association (ARMA)
- American Society of Civil Engineers (ASCE)
- United States Universities Council on Geotechnical Education and Research (USUCGER)
- American Geophysical Union (AGU)
- ASTM International