

Saman Hedjazi

Assistant Professor, Department of Civil Engineering and Construction Management, Georgia Southern University
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RESEARCH AND TEACHING EXPERIENCE

1- Georgia Southern University, Statesboro, Georgia (Current Position)

Assistant Professor, and Member of the Graduate Faculty, Department of Civil Engineering and Construction Management, August 2017-Present

- Research area: Numerical and experimental analysis of bridges, buildings and infrastructures
- Supervising of graduate and undergraduate students on their thesis, graduation and senior projects
- Teaching courses and labs
- Developing brand new course: Civil Engineering Computations
- Preparing proposals, working on my current grant and writing research papers

2- Cleveland State University, Cleveland, Ohio

Visiting Associate Lecturer, Civil and Environmental Engineering Department, August 2016-August 2017

- Supervising of Capstone projects
- Teaching courses and labs and supervising students in their experiments
- Involved in ABET accreditation process in our department
- Preparing proposals and writing research papers
- Teaching senior students in classes in order to get prepared for FE exam (Fundamental of Engineering)

3- Ryerson University, Toronto, Ontario, Canada

Researcher, Adjunct Professor and Associate Member of the School of Graduate Studies, Civil and Environmental Engineering Department, March 2015-August 2016

Research focus area:

- Numerical and experimental analysis of bridge barriers incorporating FRC and FRP under impact loading

Researcher, Civil and Environmental Engineering Department, 2005-2007

Research focus areas:

- Finite-element modeling of wind mills made of round steel plates and intermittent vertical joints
- Investigation on behavior and numerical simulation of composite box girder bridges

Research and Teaching Assistant, Civil and Environmental Engineering Department, 2003-2005

Research focus areas:

- Time-dependent and finite element modeling of prestressed concrete box-girder bridges

TEACHING AND ADVISING

Courses taught:

- Structural Steel Design, Steel Structures, Civil Engineering Computations, Strength of Materials (Mechanics of Materials), Statics (Engineering Mechanics), Strength of Materials Lab, Concrete Technology and Lab, Structural Analysis, Civil Engineering Materials, Structural Concrete Design, Bridge Design and Construction, and graduate courses in structural engineering

Advisor and supervisor of Graduate students for their thesis.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Professional Engineer, Ontario, Civil and Structural Engineer, 2015-Present
- Professional Engineer, Iran, Civil and Structural Engineer, 2001-Present
- Member of Iranian Concrete Code Committee for Earthquake Resistant Lightweight and Prefabricated Structures, Code 385, 2008

PUBLICATIONS

Recent Works:

Sennah, K. and Hedjazi, S., "Structural Qualification of a Developed GFRP-Reinforced PL-3 Concrete Bridge Barrier Using Vehicle Crash Testing". *Journal of Crash Worthiness (Submitted August 2017, accepted for publication November 2017)*.

Sennah, K., Troynina, E., Ibrahim, Z. and Hedjazi, S., "Structural Qualification of a Developed GFRP-Reinforced Concrete Bridge Barrier Using Ultimate Load Testing". *Journal of Composite Structures (Submitted and, accepted for publication August 2017)*.

Hedjazi, S., Khederzadeh, H., and Sennah, K. (2016), " Numerical Modeling for Structural Behavior of Bridge Deck Barriers Made of Fiber Reinforced Concrete", *CSCE 2016 Annual General Meeting and Conference of the Canadian Society for Civil Engineering*, London, Ontario, Canada To be presented June 1-4, 2016.

Najafi, R., Hedjazi, S., and Sennah, K. (2016), " Finite-Element Modeling for FRP Strengthening of Prestressed Concrete Box Girder Bridges Built by Cantilever Method", *CSCE 2016 Annual General Meeting and Conference of the Canadian Society for Civil Engineering*, London, Ontario, Canada To be presented June 1-4, 2016.

Refereed journal papers

1- Sharif, M., Rahai, A. and Hedjazi, S. (2013), "Effect of Connection Type on The Transferring of Dead and Live Loads in Prestressed Concrete Bridges", *Amirkabir Journal of Civil and Environmental Engineering (AUT Journal); Iran*; spring 2013; Vol.44, No.2, pp 1-10.

2-. Hedjazi, S., Rahai, A. and Sennah, K. (2007), " Evaluation of Creep Effects on the Time-Dependent Deflections and Stresses in Prestressed Concrete Bridges", *Journal of Bridge Structures*, Vol. 3, No.2, June 2007, pp 119-132

- 3-Hedjazi, S., Rahai, A. and Sennah, K. (2005), "Long-term Behavior of Segmentally-erected Prestressed Concrete Box-girder Bridges", *Journal of Structural Engineering and Mechanics*, August 20, 2005, Vol. 20, No 6, pp 673-693.
- 4- Rahai, A. and Hedjazi, S. (2005), "Evaluation of Seismic Performance and Fatigue of Orthotropic Steel Bridges", *Journal of Transportation Research - Iran*, September 2005, Vol.2, No.2, pp83-94.
- 5- Hedjazi, S. and Rahai, A. (2004), "External Prestressing in Retrofitting of Bridges and Buildings", *Jadeh Transportation Journal of Iran Road Development Organization (IRDO)*; Iran, June 2004, No.50, pp 68-80.
- 6- Kabir, M.Z. and Hedjazi, S. (2002), "Experimental Evaluation of elastic Modulus of Shotcrete Materials in Load Bearing Sandwich Panels" *Journal of Iranian Society of Civil Engineering (I.S.C.E)*, Iran, Spring2002, Vol.5, No.13, pp12-20.

Presented conference papers

- 7- Hedjazi, S., Khederzadeh, H., and Sennah, K. (2016), " Numerical Modeling for Structural Behavior of Bridge Deck Barriers Made of Fiber Reinforced Concrete", *CSCE 2016 Annual General Meeting and Conference of the Canadian Society for Civil Engineering*, London, Ontario, Canada To be presented June 1-4, 2016.
- 8- Najafi, R., Hedjazi, S., and Sennah, K. (2016), " Finite-Element Modeling for FRP Strengthening of Prestressed Concrete Box Girder Bridges Built by Cantilever Method", *CSCE 2016 Annual General Meeting and Conference of the Canadian Society for Civil Engineering*, London, Ontario, Canada To be presented June 1-4, 2016.
- 9- Sharif, M., Rahai, A. and Hedjazi, S. (2011), "Comparison between the Neoprene Bearing's Performances with Different Design Criteria in Prestressed Concrete Bridge Connections", *The 6th National Congress on Civil Engineering*, Semnan University, Semnan, Iran, April 26-28,2011,pp1-10 .
- 10- Rahai,A., Hedjazi, S. and Hosseini,S. F.,(2009), "Evaluation of the Fiber Reinforcement Polymers (FRP) Effects on the Shear Resistance and the Performance of the Prestressed Concrete Beams", *The 8th International Conference on Civil Engineering*, Shiraz University, Shiraz, Iran, may 11-13,2009, pp1-10 .
- 11- Hedjazi, S., Sennah, K. and Rahai, A. (2007), " Determination of Creep Effects on Prestressed Concrete Bridges, Using ABAQUS Software", *CSCE 2007 Annual General Meeting and Conference of the Canadian Society for Civil Engineering*, Yellowknife, Northwest Territories, Canada June 6-9, 2007, GC-293- pp 1-10.
- 12- Hedjazi, S., Rahai, A. and Sennah, K. (2004), "Computer Simulation of Balanced Cantilever Construction of Concrete Box Girder Bridges". *1th Structural Specialty Conference of the Canadian Society for Civil Engineering*,CSCE, Saskatoon, SK, Canada, ST-112-1-10.
- 13- Hedjazi, S., Sennah, K. and Rahai, A. (2004), "Ultimate Load Analysis of Segmentally Erected Prestressed Concrete Box-Girder Bridges", *fib Symposium on Segmental Construction in Concrete & fib Expo'04*, CEB-FIP, New Delhi, India, pp 1-10.
- 14- Hedjazi, S., Sennah, K. and Rahai, A. (2004), "Time-dependent Effects on the Deflection of Segmental Box-girder Bridges". *The 18th Australian Conference on the Mechanics of Structures & Materials*, Keynote Conferences, Perth, Western Australia, pp 835-931.
- 15- Rahai, A. and Hedjazi, S., (2003), "Investigation of Creep and Shrinkage Effects on Pre-stressed Concrete Bridges Built by Cantilever Construction". *The 2nd International Symposium, Integrated Lifetime Engineering of Buildings and Civil Infrastructures*, ILCDES, Kuopio, Finland, pp 1-7.
- 16- Kabir, M.Z. and Hedjazi, S. (2003), "Energy Saving in Buildings by Using the Lightweight Shotcrete in 3D Wall Panels". *The 3th International Conference on Energy Saving in Buildings*, Tehran, Iran, pp73-81.
- 17- Hedjazi, S. and Kabir, M.Z. (2002), "Utilization of Lightweight Shotcrete in 3D Wall Panels". *The 9thWorld Habitat Conference*, Tehran, Iran, pp 1-10.

- 18- Kabir, M.Z. and Hedjazi, S. (2001), "Determination of Elastic Modulus of Shotcrete Used in Prefabricated Lightweight Structures", *The International Conference on Strengthening and Retrofitting of Structures*, Amirkabir University, Tehran, Iran, pp330-339.
- 19- Kabir, M.Z., Hedjazi, S. and Rahbar, M. (2000), "Effects of Silica Fume on the Shotcrete behavior Used in Prefabricated Lightweight Structures". *The International Conference of Concrete and Development*, Tehran, Iran, pp 986-998.
- 20- Kabir, M.Z. and Hedjazi, S. (1999), "Post-Buckling Behavior of Stiffened Steel Plates", *The International Conference on Civil Engineering*, Mashhad, Iran, pp233-244.

SELECTED ACADEMIC COMMUNITY INVOLVEMENT

- International Scientific Committee of the 4th International Structural Specialty Conference (ISSC-IV) of the Canadian Society for Civil Engineering, CSCE, Halifax, NS, Canada, 2013-2014
- Scientific and Organizing Committee of the International Congress on Seismic Retrofitting (RETICO) of the Iranian Society for Civil Engineering, ISCE, Tehran, Iran, 2008-2009
- Technical Reviewer, Journal of Transportation Research, Tehran, Iran 2007-2008
- Scientific Committee of the 9th World Habitat Conference, Tehran, Iran, 2001-2002