

Michael V. Gangone, Ph.D. Assistant Professor Civil Engineering The University of Texas at Tyler

Education:

Ph.D. Civil and Environmental Engineering, Clarkson University, 2012

M.S. Civil Engineering, Clarkson University, 2006 B.S. Civil Engineering, Clarkson University, 2005

E.I.T. New York State - 2005



Honors and Awards:

- ExCEEd Teaching Fellow
- Alpha Chi (national college honor society) Outstanding Faculty Award in the College of Engineering and Computer Science (2013)
- UT Tyler Department of Civil Engineering Outstanding Faculty Award: (2012-2013), (2013-2014), (2014-2015), (2015-2016)
- Clarkson University Most Outstanding Teaching Award for Graduate Students

Research Interests:

My areas of research interest include innovative bridge research and design methods along with the development of structural health monitoring strategies for infrastructure systems. I have significant experience in load testing and rating of highway bridges. I am working on using load testing data to develop improved methods of condition assessment and damage detection. I also have a strong commitment to teaching and improving engineering education. I teach or have taught courses in structural engineering and mechanics, geotechnical engineering, hydraulics, civil engineering materials as well as leadership, business practices, public policy and asset management.





Areas of Research Interests

Remote Sensing:

- Monitoring infrastructure systems remotely using sensor networks
- Autonomous Unmanned Ariel Vehicles (UAVs) for inspection

Damage Detection in Highway Bridges:

- Developing methods of damage detection using strain based load testing data
- Neutral axis and distribution factors

Condition Assessment of Infrastructure:

- Improve on existing methods of condition assessment that relies on visual observation techniques
- Developing assessment methods that incorporate sensor technology into existing inspection protocols

Engineering Education:

- Enhancing online and hybrid education practices
- Enriching the learning environment in the classroom

Select Publications:

- Gangone, M.V., Biswas, M. (2016). "The Effects of Transitioning from a Face-to-Face Fundamentals of Engineering Review to a Virtual Environment," ASEE-GSW, Fort Worth, TX, March. (2nd Place Prize)
- Whelan, M.J., **Gangone, M.V.** (2015). "Effect of Measurement Uncertainties on Strain-based Damage Diagnostics for Highway Bridges," *Journal of Civil Structural Health Monitoring*, 5(3), pp. 321-335.
- McGinnis, M.J., Gangone, M.V. (2015). "Core Drilling Method for Determining Stresses and Tendon Forces in Prestressed Concrete Bridges: A Comparison of 2D and 3D Digital Image Correlation Approaches," 16th European Bridge Conference, Edinburgh, Scotland, UK, 23-25 June.
- Gangone, M.V., Whelan, M.J., Janoyan, K.D., Minnetyan, L. (2014). "Development of performance assessment tools for a highway bridge resulting from controlled progressive damage monitoring," Structure and Infrastructure Engineering: Maintenance, Management, Life-Cycle Design and Performance, 10(5), pp. 551-567.







