

Two PhD Positions in Structural Health Monitoring and Control

Department of Civil, Environmental and Architectural Engineering

The University of Kansas, Lawrence, KS, USA

Two graduate research assistantships (GRA) are available for prospective PhD students in the Department of Civil, Environmental and Architectural Engineering at The University of Kansas. Research topics for these two GRA positions include 1) computer vision and augmented reality for fatigue crack inspection of steel structures, and 2) mitigation of wind-induced vibrations for high mast illumination structures.

A Master's degree in civil/structural engineering or related fields is preferred but not required, a minimum of 3.0 GPA, TOFEL or IELTS scores (international students). **Note that the GRE has been waived for the 2020-2021 terms.** Please refer to the graduate admission website for more information on the application process (<http://ceae.ku.edu/graduate-program>). Candidates with background in structural dynamics, image/signal processing, structural health monitoring and control are especially welcome to apply.

The students will join a multidisciplinary team of faculty members in smart structures, structural health monitoring and control, fatigue and fracture, steel structures, experimental dynamics and field testing, and will have opportunity to collaborate with research groups outside of KU.

The positions are available starting Spring 2021. Interested students are invited to contact Prof. Jian Li (jianli@ku.edu) directly with Curriculum Vitae, transcripts, English scores, and research/personal statements.

About the PI: Dr. Jian Li is an Associate Professor in the Department of Civil, Environmental and Architectural Engineering at the University of Kansas. He received Ph.D. in 2013 from the University of Illinois at Urbana-Champaign, and MS in 2007 and BS in 2005 from Harbin Institute of Technology, all in Civil/Structural Engineering. His research focuses on both theoretical and experimental developments of advanced sensing and health monitoring techniques to improve the resiliency and sustainability of civil infrastructure under operational and extreme loading conditions. His specific research interests include data assimilation, vibration-based damage detection and model updating, wireless smart sensor networks, computer vision and innovative sensing techniques, uncertainty quantification, risk assessment and mitigation. Dr. Jian Li's research has been funded by the National Academy of Sciences, the Transportation Pooled Fund program of the Federal Highway Administration, and state Departments of Transportation. He has served as PI or Co-PI on research grants worth \$2.5 million in the past six years, with \$1.4 million as PI. He has published 46 peer-reviewed journal papers, 44 conference papers, 10 technical reports, and co-edited one book.

Dr. Li was awarded the 2017 Takuji Kobori Prize by the International Association of Structural Control and Monitoring (IASCM), the Chair's Council Professorship in 2018, and the Rising Stars in Structural Engineering Award from the Civil + Structural Engineer Magazine in 2019. He currently serves as the secretary and a member of the Board of Directors of the US-China Earthquake Engineering Foundation, an associate editor of the Journal of Frontiers in Built Environment, as well as editorial board members of several international journals.