

# MECHANICAL & INDUSTRIAL COLLOQUIUM

Fall 2011 SEMESTER: ME 794-001

Wednesday, November 16, 2011

1:00-2:25pm

MEC 224

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## **Professor Kang Li**

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## **Image-guided Evaluation of Musculoskeletal Disorder and Surgery**

### Abstract

Musculoskeletal injuries are the most common healthcare problem in the United States. Current clinical diagnosis and evaluation methods for most mobility injuries may not be able to detect the injury-induced critical kinematic changes. There is an urgent need to develop a method enabling accurate acquisition of in vivo joint kinematics in the clinical environment. This presentation demonstrates how an image-guided method can fulfill such a need and improve musculoskeletal injury evaluation.

### Biography

Professor Kang Li is an Assistant Professor in the Department of Industrial and Systems Engineering, at Rutgers – The State University of New Jersey. He received his Bachelor of Science degree in Mechanical Engineering (Precision Instruments and Mechanology) from Tsinghua University, China, in 1999, and completed a Master of Science in Industrial Engineering from Mississippi State University in 2004. He received his PhD in Mechanical and Industrial Engineering from the University of Illinois at Urbana-Champaign in May 2009. His research interests are in the areas of orthopedic biomechanics, rehabilitation engineering, occupational biomechanics, and human factors/ergonomics. Dr. Li has published more than ten journal articles and 20 conference papers. His work has been funded by NIH NIAMS and the Charles and Johanna Busch Memorial Fund. He is a finalist for the New Investigator Recognition Award (NIRA) by the Orthopedic Research Society (2011) and a co-recipient of the 2011 O'Donoghue Sports Injury Research Award.

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