

# Computer Science Seminar

## Cyber-Physical Sensing and Informatics at Large Scales

Dr. Zhihai He

Department of Electrical and Computer Engineering  
University of Missouri



Cyber-physical sensing and informatics integrates smart hardware, cloud computing, machine intelligence to provide an infrastructure for collecting, analyzing, and managing scientific data of at large geographical and time scales. This will enable a host of new research and development opportunities in a wide range of important applications, including smart home, elder-care, ecological observation, biofuel production, on-line education and training.

In this talk, we will cover various aspects in designing a cyber-physical sensing and informatics infrastructure, including camera-sensor network design, crowd-sourcing management, large-scale data annotation, machine learning and visual informatics, etc.

**Bio:** Zhihai He received the Ph.D. degree from University of California, Santa Barbara, CA, in 2001. He worked in Sarnoff Corporation, Princeton, NJ from 2001-2003 as a research scientist. In 2003, he joined the Department of Electrical and Computer Engineering, University of Missouri, Columbia. He received the 2002 IEEE Transactions on Circuits and Systems for Video Technology Best Paper Award and the SPIE VCIP Young Investigator Award in 2004. He served as an Associate Editor for IEEE Transactions on Circuits and Systems for Video Technology, IEEE Transactions on Multimedia, and Journal of Visual Communication and Image Representation.

**Date: February 13, 2017**

**Time: 10:00 am**

**209 Computer Science Building**

MISSOURI  
**S&T**