

# Seminar Talk

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**Friday, April 24, 2015**  
**3:00 p.m. KH 224**

**Title:** Importance of shadow in image analysis for computer vision applications

**Abstract:**

Shadow is an essential component in many scenes and ignoring its existence during image analysis leads to decrease in system performance in many computer vision applications. This talk highlights the importance of shadow in image analysis for computer vision applications. In particular, shadows definition, its effect on performance on tracking systems, and classification of shadow detection algorithms will be explained. Additionally, the talk will present the results of a recently published work for shadow detection of buildings in panchromatic satellite images.

**Bio:**

Dr. Mohamed Elbakary received the Ph.D. degree in Electrical and Computer Engineering from The University of Arizona in December 2005 and B. S. and M. S. from The Department of The Electronics Engineering at Mansoura University, Egypt, in 1991 and 1996, respectively. Having finished his B. S. degree, he worked as a researcher assistant and then assistant researcher in Electronics Research Institute (ERI), Egypt, until 2000. He completed his postdoctoral research with the research team at the University of South Alabama working on hyperspectral and infrared sensors. Then he returned and joined his ERI in 2008 as Assistant Professor in the Department of Computers and Systems Engineering. Currently he is in leave from ERI and working as a Research Faculty with ODURF. Dr. Elbakary worked in projects funded by national agencies such as NASA and DARPA and his research interests and experience include Image processing and analysis, pattern recognition, computer vision, image registration, super-resolution imaging (2D/3D), intelligent systems, satellite image processing and analysis. and multispectral/hyperspectral image processing and analysis.