

# UW CENTER FOR PATTERN ANALYSIS AND MACHINE INTELLIGENCE

## GRADUATE SEMINAR SERIES

### Urban Land-Cover Classification from Very High Resolution Remote Sensing Imagery

**Speaker:** Safaa Mahmoud A. Bedawi

**Date:** May 28, 2014

**Time:** 4:30pm – 5:00pm

**Place:** E5 (5128) Refreshments will be served

#### **Abstract :**

Dense urban environment sensed by Very High-Resolution optical sensors is one of the most challenging problems in pattern analysis and machine intelligence systems in remote sensing. In this talk, we consider an invariant Generalized Hough Transform (GHT) as a shape based extractor to improve the quality of the urban land-cover classification. A three stage framework for extracting urban land-cover will be discussed where segmented images are classified serially using Particle Swarm Optimization classifier and then GHT shape based classifier. The suggested framework shows remarkable enhancement in building areas detection.