

SenSIP Graduate Seminar Series

Consensus Inference on Mobile Phone Sensors for Activity Recognition

Presenter: Huan Song, PhD Candidate

February 4 (Thursday), 2016, 12:00 PM

Room: GWC 409

Abstract

The pervasive use of wearable sensors in activity and health monitoring presents a huge potential for building novel data analysis and prediction frameworks. In particular, approaches that can harness data from a diverse set of low-cost sensors for recognition are needed. In this work, we developed a novel two-stage recognition system that enables a systematic fusion. We employed graph consensus and ensemble learning for fusion at sensor level and feature level respectively. Experimental results on a collected dataset show that our framework significantly improves the recognition performance when compared to using any single sensor.



Biography:

Huan started PhD at Arizona State University from 2013 under advisory of Professor Andreas Spanias. His research interests are on machine learning and computer vision. More recent focus is on using kernel method and deep architecture for feature fusion and sensor fusion.

Refreshments

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