



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Vision and Robotics Seminar

Room 1 ,Ziskind Building  
on Thursday, Jan 07, 2016  
at 12:15

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Rich Representations for Parsing Visual Scenes

Abstract:

I will describe recent work on building and using rich representations aimed at automatic analysis of visual scenes. In particular, I will describe methods for semantic segmentation (labeling regions of an image according to the category it belongs to), and on semantic boundary detection (recovering accurate boundaries of semantically meaningful regions, such as those corresponding to objects). We focus on feed-forward architectures for these tasks, leveraging recent advances in the art of training deep neural networks. Our approach aims to shift the burden of inducing desirable constraints from explicit structure in the model to implicit structure inherent in computing richer, context-aware representations. I will describe experiments on standard benchmark data sets that demonstrate the success of this approach.

Joint work with Mohammadreza Mostajabi, Payman Yadollahpour, and Harry Yang.