



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Vision and Robotics Seminar

Room 1 ,Ziskind Building  
on Sunday, Mar 18, 2018  
at 12:15

Please note the Special Date!!

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Striving for Adaptive Representations in Neural Networks

Abstract:

Some sub-problems in visual recognition already enjoy very impressive performance. However, the deep-learning solutions that underlie them require large training data, are brittle to domain shift and incur a large cost in parameters for adapting to new domains - all in stark contrast to what is observed in human beings. I will talk about my recent work on this area, including (1) introduce a new dataset on which the strongest of learned representations perform very poorly in mimicking human perceptual similarity (2) discuss recent results hinting that the parameters in neural networks are under-utilized and show an alternative method for transfer learning without forgetting at a small parameter cost and (3) show some recent work on conditional computation, inspired by the psychophysical phenomena of visual priming in humans.