



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Vision and Robotics Seminar

Room 1 ,Ziskind Building  
on Thursday, Dec 20, 2018  
at 12:15

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Non-Adversarial Machine Learning for Unsupervised Translation across Languages  
and Images

Abstract:

This talk will describe my past and ongoing work on translating images and words between very different datasets without supervision. Humans often do not require supervision to make connections between very different sources of data, but this is still difficult for machines. Recently great progress was made by using adversarial training a powerful yet tricky method. Although adversarial methods have had great success, they have critical failings which significantly limit their breadth of applicability and motivate research into alternative non-adversarial methods. In this talk, I will describe novel non-adversarial methods for unsupervised word translation and for translating images between very different datasets (joint work with Lior Wolf). As image generation models are an important component in our method, I will present a non-adversarial image generation approach, which is often better than current adversarial approaches (joint work with Jitendra Malik).