



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Vision and Robotics Seminar

Room 1 ,Ziskind Building
on Thursday, Jul 21, 2016
at 12:15

Ethan Fetaya
Weizmann Institute of Science

PhD Thesis Defense: Learning with limited supervision

Abstract:

The task of supervised learning, performing predictions based on a given labeled dataset, is well-understood theoretically and for which many practical algorithms exist. In general, the more complex the hypothesis space is, the larger the amount of samples we will need so that we do not overfit. The main issue is that obtaining a large labeled dataset is a costly and tedious process. An interesting and important question is what can be done when only a small amount of labeled data, or no data, is available. I will go over several approaches, learning with a single positive example, as well as unsupervised representation learning.