



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Vision and Robotics Seminar

Room 1 ,Ziskind Building
on Thursday, Apr 11, 2019
at 12:15

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Few-Shot Object X

Abstract:

Learning to classify and localize instances of objects that belong to new categories, while training on just one or very few examples, is a long-standing challenge in modern computer vision. This problem is generally referred to as 'few-shot learning'. It is particularly challenging for modern deep-learning based methods, which tend to be notoriously hungry for training data. In this talk I will cover several of our recent research papers offering advances on these problems using example synthesis (hallucination) and metric learning techniques and achieving state-of-the-art results on known and new few-shot benchmarks. In addition to covering the relatively well studied few-shot classification task, I will show how our approaches can address the yet under-studied few-shot localization and multi-label few-shot classification tasks.