



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Vision and Robotics Seminar

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

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OrCam

Fast Face Recognition with Multi-Batch

Abstract:

A common approach to face recognition relies on using deep learning for extracting a signature. All leading work on the subject use stupendous amounts of processing power and data. In this work we present a method for efficient and compact learning of metric embedding. The core idea allows a more accurate estimation of the global gradient and hence fast and robust convergence. In order to avoid the need for huge amounts of data we include an explicit alignment phase into the network, hence greatly reducing the number of parameters. These insights allow us to efficiently train a compact deep learning model for face recognition in only 12 hours on a single GPU, which can then fit a mobile device.

Joint work with: Oren Tadmor, Tal Rosenwein, Shai Shalev-Schwartz, Amnon Shashua