



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Vision and Robotics Seminar

Room 1 ,Ziskind Building
on Thursday, Dec 25, 2014
at 13:00

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RingIt: Ring-ordering Casual Photos of a Dynamic Event

Abstract:

The multitude of cameras constantly present nowadays redefined the meaning of capturing an event and the meaning of sharing this event with others. The images are frequently uploaded to a common platform, and the image-navigation challenge naturally arises. In this talk I will present RingIt a novel technique to sort an unorganized set of casual photographs taken along a general ring, where the cameras capture a dynamic event in the center of the ring. We assume a nearly instantaneous event, e.g., an interesting moment in a performance captured by the digital cameras and smartphones of the surrounding crowd. The ordering method extracts the K-nearest neighbors (KNN) of each image from a rough all-pairs dissimilarity estimate. The KNN dissimilarities are refined to form a sparse Weighted Laplacian, and a spectral analysis reveals the spatial ordering of the images, allowing for a sequential display of the captured object.