

Lecturer: Ofer Neiman
School of Computer Science and Engineering, The Hebrew University of Jerusalem

Title: Local Embedding of Metric Spaces

Abstract:

In many application areas, complex data sets are often represented by some metric space and metric embedding is used to provide a more structured representation of the data. In many of these applications much greater emphasis is put on the preserving the local structure of the original space than on maintaining its complete structure. In this paper we initiate the study of local embeddings of metric spaces and provide embeddings with distortion depending solely on the local structure of the space.

Joint work with Ittai Abraham and Yair Bartal