SPEAKER: Dave Mount

TITLE: "Mini-Size Me": Minimization Diagramsand Their Applications

AbSTRACT:

In this talk we will introduce the concept of a minimization diagram. This is a general-purpose data structure for answering exact and approximate nearest neighbor queries in multi-dimensional spaces. After presenting classical results on this structure, we will explore recent work of ours on space-efficient variants of the minimization diagram for approximate nearest neighbor searching involving non-Euclidean distance functions, including convex distance functions, Mahalanobis distances, and Bregman divergences.