

Class Cover Variants and Spherical Classifiers: Improved Results for Some Not So Special Cases

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Abstract

The class cover problem has been motivated by problems in facility location and high dimensional classification. Approximation algorithms for class cover were originally derived with the goal of obtaining results that were independent of dimension and inter-point cost function. This goal was achieved and general results have been established. Here we look at some special cases that are frequently relevant in classification. We refine the previous analysis to obtain improved approximation results for these settings.