California State University San Bernardino School of Computer Science & Engineering

MASTERS PROJECT PRESENTATION

<u>Date/Time</u> March 18, 2015 (Wednesday), 1:00 PM

Location JB 389/391

Topic Density Based Data Clustering

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Abstract

Nowadays, data clustering is used in many fields such as computer science, marketing, bioinformatics etc. The project focused on density based data clustering. The latest density-based (CFSFDP) algorithm is based on the idea that finding the centers (peaks) of clusters by calculating the density of all the points within the radius of its neighbors. However, the weakness of CFSFDP is there is no perfect way to determine the radius. This method has been tested, experimented and improved. This project applied those methods (KNN based-CFSFDP, Gaussian Kernel based-CFSFDP and Iterative Gaussian Kernel based-CFSFDP) to circumvent the weakness of CFSFDP. The methods are applied to four milestone datasets. The Iterative Gaussian kernel showed the best result among the other approaches.

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