

The Math/Stats Colloquium Department of Mathematics and Statistics San José State University





Cristina Tortora San José State University Finding homogeneous groups within data using cluster analysis OCT 13, 2021

Live in Clark Hall 111 and via Zoom

Abstract: Cluster analysis is a data analysis technique which goal is to group a set of objects in such a way that objects in the same group (called a cluster) are more similar to each other than to those in other groups. For example, cluster analysis can find groups of patients with similar symptoms. In this talk, I'll give an introduction to cluster analysis focusing on model-based clustering, which uses density functions to model each cluster within the data so that the entire data set is defined as a convex combination of the clusters. I'll then focus on some challenges and recent advancements in model-based clustering with examples in different fields.

About the speaker: Cristina Tortora is an Associate Professor in the Dept. of Mathematics and Statistics at SJSU. Her research focuses on data analysis, specifically, on developing advanced clustering techniques addressing cluster flexibility, missing data, robustness in the presence of outliers, and high dimensional data sets. She collaborates with experts in applied fields, including transportation and justice studies.

COLLOQUIUM LIVE IN CLARK HALL 111 AND SIMULCAST VIA ZOOM, 4:15PM PACIFIC EMAIL tim.hsu@sjsu.edu FOR A ZOOM INVITATION For our full schedule, see: http://www.timhsu.net/collog/