SAN DIEGO STATE UNIVERSITY
Minds that move the world.

Department of Mathematics & Statistics
STATISTICS SEMINAR
presents

Tianni Zhou

Department of Preventive Medicine
University of Southern California

Wednesday, April 27, 2011

11:00am

GMCS 405

Tree structured subgroup analysis

Abstract:

Subgroup analysis refers to analysis that is aimed at uncovering possible variation in treatment effect in different patient subgroups. The question to be answered by this type of analysis is for whom does treatment work best? An interaction tree procedure is proposed to optimize the subgroup analysis. The proposed procedure recursively partitions the data into halves that show the greatest interaction with the treatment and leads to a number of objectively defined subgroups. The standard CART methodology is used to construct the interaction tree structure. An applied example of subgroup analysis is presented.