TOPIC	Change detection in non-stationary time series based on genetic algorithm
AREA	Data mining, Statistical Modeling
SPEAKER	Mohammad Gorji, PhD students, ACIT Center, North Carolina A&T State University
DATE	15 July 2015, Wednesday
TIME	2:00 PM to 3:00 PM
VENUE	ACIT Center, Room 342, Fort IRC Bldg., North Carolina A&T State University, 1601 East Market Street, Greensboro, NC 27411
FEES	No Charge

SYNOPSIS

In statistical Modeling, the generalized linear model (GLM) is defined as a generalization of ordinary linear regression that allows for response variables that have error distribution models other than a normal distribution. In the GLM, a linear model is found between the response variable and explanatory variables via a nonlinear function. The unknown parameters of GLM are found by maximum likelihood via iteratively reweighted least squares. GLM are used in climate system for modeling the time series with discrete and binary values. In this work, we propose a non-stationary time series modeling based on the genetic algorithm and GLM. This model is applied for modeling of hurricane activity, and it shows the temporal pattern of change in the number of hurricanes.

ABOUT THE SPEAKER

Mohammad Gorji received his BSc and MSc in control engineering from Iran University of Science & Technology. He is a PhD student in electrical and computer engineering of North Carolina A&T State University. His interest areas are computational statistics and machine learning.

REMARKS, IF ANY