




<b>TOPIC</b>	Prediction of Atlantic hurricane trajectories with a partially connected recurrent neural network
<b>AREA</b>	Time series prediction, Hurricane trajectories
<b>SPEAKER</b>	Mina Moradi, PhD students, ACIT Institute, North Carolina A&T State University
<b>DATE</b>	29 July 2015, Wednesday
<b>TIME</b>	11:00 to 13:00 PM
<b>VENUE</b>	ACIT Institute, Room 342, Fort IRC Bldg., North Carolina A&T State University, 1601 East Market Street, Greensboro, NC 27411
<b>FEES</b>	No Charge

## SYNOPSIS

Predicting the trajectory of ongoing hurricane, based on past climatological data has been a challenging problem for several decades. National Oceanic and Atmospheric Administration (NOAA) tracked the Atlantic hurricanes from 1851-2013. In this work, using historical observations of the ongoing hurricane, prediction of the future trajectories are performed in two steps. First, find the most similar hurricanes and then build a relationship between speed and acceleration of those similar hurricanes. Dynamic of the system is estimated using a partially connected recurrent neural network while the topology and connection weights of the network are trained through the evolutionary process of Genetic Algorithm.

## ABOUT THE SPEAKER

	Mina Moradi received her MSc in control engineering from Isfahan University of Technology. She is a PhD student in electrical and computer engineering of North Carolina A&T State University. Her interest areas are control, data mining and machine learning.
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## REMARKS, IF ANY