TOPIC	Developing a Type-2 Fuzzy Logic Inference System
AREA	Autonomous Control, Artificial Intelligence, Test and Evaluation
SPEAKER	Nnamdi Enyinna, MS student, ACIT Center, North Carolina A&T State University
DATE	5 November 2014, Wednesday
TIME	10:30 AM to 11:05 AM
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

With the proliferation of Unmanned Systems and the increase in the Intelligence of such systems, there is the increasing need for the ability to predict the behavior and evaluate system performance, minimizing failure that leads to damage, injury and unintended engagement. To this end, we propose the Perception Inference Engine (PIE) which incorporates expert knowledge of a System under Test to model and infer the system's internal processes so as to actively regulate the device.
At the heart of the PIE is the Type-2 Fuzzy Logic Inference System (FLIS), and in this talk we will discuss its development. The Type-2 FLIS, known to be a versatile inference system unique in its ability to handle uncertainties in data among other things while still being able to handle complex Control systems.

ABOUT THE SPEAKER

Nnamdi Enyinna received Bachelor degrees in Electrical Engineering and Mathematics from the University of Texas at Tyler and is now pursuing his MS degree in Electrical Engineering with a focus in Autonomous Control, here at North Carolina A&T State University. His current work is in the Cooperative Formation Control of Autonomous Unmanned Aerial Vehicles. His interests lie in Autonomous Control, Artificial Intelligence, and their applications to Aerospace and Robotics.

REMARKS, IF ANY