

TOPIC	Fault Diagnosis Using Discrete-Event Systems
ORGANIZERS	Student Leadership Council and Faculty of ACIT Institute and TECHLAV Center
AREA	Fault Diagnosis
SPEAKER	Alejandro White
DATE	Friday April 1, 2016
TIME	3:30 – 4:00 p.m. (EST)
VENUE	Fort IRC 410, North Carolina A&T State University,
	UTSA and SIPI will be joining through video-conferencing
FEES	No Charge

SYNOPSIS

Today more than ever, civilian and military research societies are deeply concerned about the safety and reliability of developed autonomous systems. In any reliable system, it is crucial to develop a health monitoring component to timely diagnose (detect and identify) occurred faults in a system. This talk will discuss the fault diagnosis problem within the context of Discrete Event Systems (DESs). The failure diagnosis problem is concerned with detecting occurred faults, identifying the type of occurred faults, and locating the place of failure. Furthermore, we will discuss the concept of diagnosability, a feature of the system that allows us to diagnose failures from the observable behavior of the system within a finite time. Additionally, the necessary and sufficient conditions for diagnosability of a given DES system will be discussed.

ABOUT THE SPEAKER



Alejandro White received his B.S. in Electrical Engineering from N.C. A&T State University in 2003. He later received his M.S. in Electrical Engineering from Virginia Tech in 2007. He is currently enrolled in the Ph.D. program at N.C. A&T State University, under the advisory of Dr. Karimoddini.