



**AUTONOMOUS
CONTROL &
INFO TECH**



TECHLAV
Testing, Evaluation, and Control of Heterogeneous Large-scale Systems of Autonomous Vehicles

TECHLAV

TOPIC	Data Driven Development of Autonomous Driving
ORGANIZERS	Student Leadership Council and Faculty of ACIT Institute and TECHLAV Center
AREA	Data Driven Development of Autonomous Driving
SPEAKER	Abenezer Girma
DATE	Friday May 4, 2017
TIME	3:00 – 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

The accessibility of sensors and camera modules is making the car industry increasingly data-driven. Autonomous vehicles are fitted with numerous sensors, radars and cameras to generate a different variety of environmental data. All of these form the Digital Sensorium, through which the autonomous vehicle can see, hear and feel the environment and continuously generate an enormous amount of valuable data. When this combined with state-of-the-art software and advanced computing, data transforms into decisions inside autonomous cars. Cloud based data communication systems are used to securely communicate valuable information (input) to the autonomous driving cloud platform. Yet challenges remain regarding improved performance and safety under all driving circumstances. Autonomous vehicles, which operate in complex dynamic environments, require methods that monitor and generalize unpredictable situations such as emergent behavior and reason in a timely manner to increase reliability. This shows that there is an increasing call to develop descriptive, predictive and prescriptive analytical tools using the big data generated by the vehicles to enable informed strategic decision making, state and behavior monitoring for performance improvement of connected and autonomous cars.

ABOUT THE SPEAKER



Abenezer Girma completed his B.Sc. in Electrical & Electronics Engineering from Addis Ababa Institute of Technology. Currently, he is pursuing his Ph.D. in Electrical Engineering at North Carolina A&T State University. His current research interests are machine learning, big data analysis and data driven algorithms in autonomous vehicles and connected car.