



<b>TOPIC</b>	Vision based Cloud Robotics
<b>ORGANIZERS</b>	Student Leadership Council and Faculty of the TECHLAV
<b>AREA</b>	Robotics, control systems, multi-agent systems, Robot Operating System (ROS)
<b>SPEAKER</b>	Mohan Muppidi, Joaquin Labrado
<b>DATE</b>	June 10
<b>TIME</b>	11-12EST
<b>VENUE</b>	Lecture Room 4, McNair Bldg, North Carolina A&T State University, UTSA and SIPI are joining through video-conferencing.
<b>FEES</b>	No Charge

### SYNOPSIS

Robotics has been helping mankind for the past 60 years. Most of the implementations of robotics are in the industrial setting. For years people have been dreaming about working closer with robots in day to day activities in their houses or offices and this dream still remains as strong as ever. The advancements in robotics are phenomenal, unfortunately most of the algorithms require high computational power and therefore are highly time consuming. To provide the required computational power groups of onboard computers can be added to the robot, this makes the robot heavy and battery life is reduced. The addition of cloud computing to robotics can address some of the important problems stated above. The talk is on a cloud based VSLAM approach that can be extended to distributed file systems such as Hadoop for dealing with large scale environments and a landmark database. It can also be utilized in swarm applications to localize the robots in an environment.

### ABOUT THE SPEAKERS



Mohan Muppidi received the bachelors' degree in electrical and instrumentation engineering from the Jawaharlal Nehru Technological University, Hyderabad, in 2013. In 2013, Mohan began working on his masters' degree at the University of Texas at San Antonio. He received a M.S. degree in electrical engineering at the University of Texas at San Antonio in 2015.

He is currently pursuing his Ph.D. in electrical engineering at the University of Texas at San Antonio. Mr. Muppidi worked as a Research Assistant and a Teaching Assistant during his masters' degree. He received "Best Teaching Assistant Award Spring 2014" for his performance as a Teaching Assistant. He received several scholarships and stipends from

UTSA during his masters.

His areas of interest include control systems, robotics, cloud based robotics, machine vision and computer vision.



Joaquin Labrado Earned his Bachelors and Masters degrees in Electrical Engineering from The University of Texas at San Antonio in 2011 and 2013. He is currently pursuing his Ph.D. in electrical engineering while working full time at SRC Inc.

Previously he has been a part of the LSAMP program (Louis Stokes Alliance for Minority Participation) working on bluetooth commucation for mobile robots. He also interned at the NASA Marshall Space Flight Center in Huntsville Alabama and worked in the Flight Robotics Labority build test platforms for orbital debris removal missions.

His areas of interest inculde: robotics, spacecraft control, UAS's, computer vision, control systems, and orbital debris removal missions.