

Autonomous Driving Vehicles and TCS's vision for Robotics: Research Implications and Methods

Session by Dr. Roshy, Robotics and AI manager, TCS

Resource Person: Dr. Roshy John, Head of TCS Robotics

Venue: Shraddha Hall, Amritapuri Campus

Date: October 1st, 2015

Attendees: AMMACHI Labs' MTech students and faculty

Workshop Introduction:

Tata Consultancy Services (TCS) Artificial Intelligence and Robotics Group are known for their cutting edge solutions for the consumer, banking, and retail industry. Dr. Roshy John, head of TCS Robotics and Cognitive Systems Group, Kochi, Project Manager Rajaram, and Reeja George, the Academic Relationship Manager for TCS Kerala, visited Amrita Vishwa Vidyapeetham to interact and present the seminar on Autonomous Driving Vehicles and TCS's vision for Robotics: Research Implications and Methods for AMMACHI Labs' MTech students and faculty. Dr. Roshy John gave an inspiring talk to students on autonomous driving vehicles and his personal project of retrofitting a Tata Nano into a driverless vehicle. According to Dr. Roshy, "Robotics is becoming ubiquitous today, opening up a myriad of possibilities with innovations in robotics, drones, and machine intelligence." He encouraged the students to pursue robotics with passion saying, "Go and create opportunities rather than go searching for them."

During his meeting with the Amrita Vishwa Vidyapeetham Vice-Chancellor Dr. P. Venkat Rangan, Prof. Rao R. Bhavani, Dr. Maneesha Ramesh, Prof. Gayathri Manikutty and other key members, he discussed TCS's vision for robotics and ways to further collaborate in terms of student internships and collaborative projects between TCS and Amrita. MTech student Ananthakrishnan U. recently completed a two-month internship with Dr. Roshy's Robotics group in Kochi. As Amrita is strengthening its robotics programs, it is gaining recognition as an upandcoming leader in robotics research. On that day, Amrita Vishwa Vidyapeetham also launched its MTech program in Automotive Engineering exclusively for TCS employees at its Coimbatore campus. The Amrita ABB Robotics Lab, the first of its kind by an Indian university Robotics Research Lab, boasts of two ROS-Industrial robots among other robots such as the Clearpath Husky Unmanned Ground Vehicle and Parrot and DJI Mini drones. ROS-Industrial provides an open-source software framework for next-generation manufacturing automation.



Dr. Roshy John trying out pipe cutting simulator Aptah made by haptics team, Ammachi labs



Figure 1Dr. Roshy addressing students, faculty and researchers



Figure 2 Students were excited to interact with TCS team

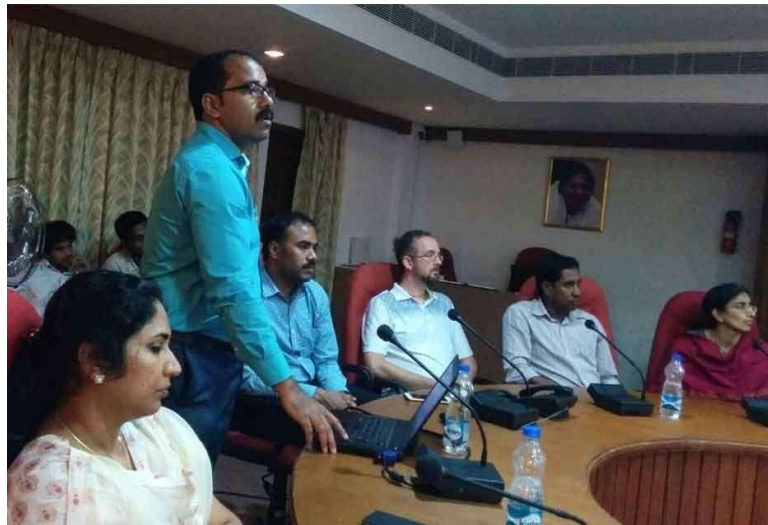


Figure 3 During the seminar



Figure 4 A meeting with core faculty of Robotics at Amrita



Figure 5 Meeting with the robotics faculty

Figure 6 flyer

A flyer for a seminar. The background is dark blue. In the top left, there are three light blue starburst graphics. The main title, "Seminar on Autonomous Driving Vehicles and TCS's Vision for Robotics", is written in large, bold, yellow sans-serif font. Below the title, the event details are listed in white: "DATE: 2015-09-30", "TIME: 09:00 TO 17:00", and "VENUE: AMRITA UNIVERSITY". At the bottom, there is a white line-art illustration of a car's side profile. The footer contains the Amrita University logo and name, and the ammachi labs logo.

**Seminar on
Autonomous
Driving Vehicles
and TCS's Vision
for Robotics**

DATE: 2015-09-30
TIME: 09:00 TO 17:00
VENUE: AMRITA UNIVERSITY

AMRITA
UNIVERSITY
Established via 3 of USC Act 1958

ammachi labs