## 專題演講

## 講 者:王學誠教授(國立交通大學電機系)

- 題目: AI Robots and Team NCTU's Approaches on Autonomy, Perception, Mobility, and Communication for the Participations to Maritime RobotX Challenge and DARPA Subterranean Challenge
- 摘要: Autonomous vehicles has become one of the most impactful topics in recent years. I will start with the robotic education efforts: Duckietown, which is an open, inexpensive and flexible platform for autonomy education and research. The platform comprises small autonomous vehicles ("Duckiebots") built from off-the-shelf components, and cities ("Duckietowns") complete with roads, signage, traffic lights, obstacles, and citizens (duckies) in need of transportation. The Duckietown platform offers a wide range of functionalities at a low cost. The infrastructure and capabilities allow Duckietown community around the world to host "The AI Driving Olympics" in NeurIPS 2018, 2019, and ICRA 2019.

I will continue the participations of the world-class robotics competition: RobotX Challenge and the DARPA Subterranean Challenge. I will focus on the autonomy, perception, communication, and mobility problems and our strategies of approaching the challenges. Team NCTU entered the final round in RobotX 2018 in Hawaii and eventually won the fifth place among the 15 international teams participated. Team NCTU ranked the 7th among the the 11 remarkable teams in the Tunnel Circuit of the DARPA Subterranean Challenge in Pittsburgh, 2019.

## 簡歷:

Dr. Wang is an assistant professor in the Department of Electrical and Computer Engineering, National Chiao Tung University, Taiwan. He was a postdoctoral associate in the Marine Robotics Group (MRG) in the Computer Science and Artificial Intelligence Laboratory (CSAIL), MIT from 2013 to 2016. Dr. Wang received Ph.D. from Department of Computer Science, UMass Boston, and his B.S. and M.S. in National Taiwan University.