



✧ Encourage Participation in the RobotX – International Competitiveness

- **NCTU was awarded a Surface Vehicle (75,000 USD)**
 - We received a WAM-V (Wave Adaptive Modular Vessel) from AUVSI (Association for Unmanned Vehicle Systems International, AUVSI) in Dec, 2017.
 - The WAM-V was demonstrated on April 4, 2018 during NCTU 60 Years Anniversary.
 - We encourage team building across departments and domains, and carry out learning-by-doing, team work, and leadership training.
 - NCTU will participate RobotX Challenge in Hawaii in Dec. 2018, together with top universities around the world: MIT, University of Michigan, University of Florida, Osada University, Seoul National University, KAIST, National University of Singapore, University of Newcastle, University of Flinders, and etc.
- **RobotX Competition**
 - RobotX was initiated by Office of Naval Research (ONR), USA in 2012, and has been held in 2014 and 2016 in Singapore and Hawaii, respectively.
 - The competition includes tasks for surface and underwater missions, including obstacle avoidance, underwater ring recovery, docking, and navigation.



✳️ Host AI Driving Olympics Competition Teaching and International Coll

- NCTU will host the AI Driving Olympics in NIPS (Neural Information Processing Systems), the Top Conference in Machine Learning
- NCTU will build a competition site, along with ETHZ, Georgia Tech, University of Montreal, and Tsing Hua University in academics as well as Amazon in industry.
- NCTU has offered relevant courses on autonomous vehicles since 2016, and been scaled up (students: 22 to 57; robots: 8 to 30).

NIPS 2018 Live Competition Proposal The AI Driving Olympics

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國立交通大學
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清華大學
Tsinghua University



nuTonomy



amazon
web services



2016



2017



2018

✂Robotics Program on Industry 4.0 Cyber Physical System

- No Robot is an Island – Cyber Physical System
 - Communication, Computing, and Control for Multiple Robots.
- IoT for Robotic Arms and AGV (Automatic Guided Vehicle)
- Warehouse Applications (such as Amazon Picking Challenge)
- Human Robot Collaboration
- NCTU has established graduate program of robotics.

