

## **DTU Champions of the 2016 CDIO Academy Competition in Finland**

After winning the CDIO Academy Cup at Harvard University and the Massachusetts Institute of Technology in the US in 2013, DTU again participated in the 2016 competition and shared the Cup with four other students from Singapore Polytechnic, the Thermal Power Plant at the Siberian Federal University in Russia and the Chemical Engineering department at the University of Calgary in Canada.

The competition was held in Turku in Finland from June 12th to 16th. In contrast to previous years, students were not allowed to prepare their projects in advance, so could not work with their home support teams. Instead they were divided into groups of students from other institutions. With his in-depth knowledge of software engineering, Ton That Binh from DTU needed only one day to create a demo version of an integrated application to meet the future needs of cruise ship passengers, and his SHIPBOTS project won the 2016 CDIO Academy Cup.



*DTU students at the 2016 CDIO Academy*

Thirty students from technical institutions worldwide attended the event. The objective of this year's competition was to develop an innovative software package for cruise ships, which identified new engineering trends and passenger requirements in 2025, for example.



*Ton That Binh with the champions of the 2016 CDIO Academy*

The DTU team had three members, Nguyen Cong Duc of the K18 Pharmacy class, Ton That Binh of the K19 Information Technology CMU class, and Dao Hai Viet of the K21 PSU Hospitality class.

In only three days, the teams had to identify their strengths, create a team, formulate ideas, develop solutions and prepare a presentation with a prototype for the jury. By teaming up students from all over the world, student engineers were challenged to demonstrate their adaptability of working in an international environment and the communication skills that the CDIO model focuses on.

The SHIPBOTS project won the 2016 CDIO Academy Cup. The team was comprised of students Ton That Binh (from the CMU Information Technology program at DTU), Yvonne Chia (from Business Information Technology at Singapore Polytechnic), Aarynjeet Singh Travis (from Mechatronics & Robotics at Singapore Polytechnic), Igor Zagorodny (from the Thermal Power Plant at the Siberian Federal University in Russia) and Tanvi Torane (from Chemical Engineering at the University of Calgary in Canada).

The SHIPBOTS projects were developed using the following components: Integrated hardware and software for the use of ship passengers; An automated transport system for on-board services; A 3D screen (for information and entertainment purposes); Unmanned drones to take pictures of memorable moments on board; An alliance of several shipping companies to create the optimal environment for passengers using these services in the future.

The prototype that Ton That Binh developed set the path to the highest prize of this year's contest. Binh also took credit for the team's presentation to the jury, thanks to his fluent English presentation skills.

*Ton That Binh said: "Our project was judged to be innovative, practical, potentially profitable and meeting the future standards of cruise ship companies. The contest gave us experience, improved our team-work skills, taught us how to resolve disagreements and increased our self-confidence presenting to an audience. It was an extremely invaluable experience. I chose to study in the CMU Software Engineering program at DTU when I first obtained my entrance exam results and am happy with that decision. At that time I was probably not at all different from the other students taking the High School Graduation Exam, about to select a university to satisfy my personal education needs. The public and private designations are less important to me than investing in the right university to achieve my long-range objectives. DTU is a university with great potential and momentum, which continues to reinvent itself to reach even higher into the future."*

*(Media Center)*