

DTU Students Participate in the 2016 National Finals of the Microsoft Imagine Cup

The annual Microsoft Imagine Cup was kicked off in Vietnam in November 2015 and has attracted students from universities and colleges nationwide. There are three sections focusing on World Citizenship, Innovation and Games.



Project developed by DTU students

The DTU team, consisting of Nguyen Dang Minh Hung, Pham Huu Chau Dat, Le Quang Thanh and Phan Hong Sang, developed the innovative Smart Garden project, using the latest advanced Microsoft software, applied to the production of untainted foodstuffs and were selected to enter the national finals in Ho Chi Minh City on April 6th .

Smart Garden was developed on a Universal Windows Platform. It operates on many devices, including smart phone, tablets and computers, integrating Azure Machine Learning and Power BI, and other sensors. Smart Garden helps gardeners to monitor their plants anywhere at anytime, over the Internet.



Gardeners using the Smart Garden product

After gathering and monitoring gardening data, Smart Garden gives suggestions about which plants are suited to specific environments, and how to fertilize and care for them, to novice gardeners or ones that are too busy to conduct horticultural research themselves. The system gives warnings when issues arise, and allows the user choose the best way to deal with them. Meanwhile, it automatically waters and fertilizes the plants when they reach established threshold values. Smart Garden can be used at home or on farms to improve the quality of vegetables and other foods.

Nguyen Dang Hung of the DTU Faculty of Electrical Engineering said: *“Today, the requirement to grow pure food is becoming a serious issue in Vietnam. Busy people don’t have time to tend their gardens. The Smart Garden provides a clean, smart and friendly family vegetable garden. Horticultural information on fertilization, temperature, humidity and lighting requirements has been integrated from reliable sources. A casual gardener can now confidently turn into a professional one.”*

Seven of the best teams will compete to select the winning three projects for the 2016 Imagine Cup Asia-Pacific Finals and the World Finals, in July 2016.

(Media Center)