

## DTU Comes First at the 2016 National Microsoft Imagine Cup

The DTU team, consisting of Nguyen Dang Minh Hung, Pham Huu Chau Dat, Le Quang Thanh and Phan Hong Sang, outstandingly surpassed six other strong teams nationwide to win the first-place award at the 2016 National Microsoft Imagine Cup. This winning enabled them to become one of the two teams of Vietnam to advance in the 2016 Imagine Cup Asia-Pacific Finals on April 23rd.

Annually held by Microsoft, the Microsoft Imagine Cup is the world's most prestigious student technology competition, bringing together student innovators from all over the world. Seven outstanding teams competed with each other to select the best three projects for the 2016 Imagine Cup Asia-Pacific Finals in July 2016.



*The DTU team with their Smart Garden project*

In fifteen minutes, each team presented their projects, demonstrated their product and answered the questions given by the judge in English. Winning the heart of the judge with the innovative Smart Garden

project, using the latest advanced Microsoft software, applied to the production of untainted foodstuffs, DTU team won the first prize on the World Citizenship section.

As an instructor of DTU team, Mr. Nguyen Duy Luan, said: *“The Microsoft Imagine Cup is a great opportunity for students to apply theory in practice, prove themselves and orient their future careers. In the 2015 Microsoft Imagine Cup, the DTU team just reached the second round which meant they have made a significant progress in a large-scale playground.”*

Smart Garden was developed on a Universal Windows Platform. It operates on many devices, including smart phones, 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.

By 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 have been integrated from reliable sources. A casual gardener can now confidently turn into a professional one.”*

(Media Center)