

Device inventors from UPM enjoy 'shocking' win

PENANG

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A CONTROLLER that could calculate the suitable amount of shock to be delivered on a heart patient linked to an Automated External Defibrillator (AED) clinched the top prize at the Moto Innocup 2016 competition in Penang.

Called the Fully Automated Controller for External Defibrillator (Faced), it was designed by four Computer and Communication Systems Engineering students from Universiti Putra Malaysia (UPM).

Team leader Amira Deuraseh said the AED devices to treat sudden cardiac arrest were available at some public places.

"The AED automatically analyses and looks for shockable heart rhythms, advises the rescuer of the need for defibrillation and delivers a shock if needed.

"However, the rescuer may not know the amount of shock that is

needed by the patient.

"There is concern that a victim may receive more than the sufficient shock required in the defibrillation process which may damage the internal organs of the receiver," she said after receiving the prize at the competition held at Inti International College Penang (Inti Penang).

The competition was organised by Inti and sponsored by Motorola Solutions Foundation.

Amira, 19, said Faced worked on two factors namely the age (adult or children) and weight (normal or obese) of the receiver.

"So, once these factors are finalised, the controller will determine the correct amount of shock to be given to the patient," she explained.

Amira said her team did not expect to win the competition as the other five finalists presented creative and useful inventions, too.

She said her team, which won RM5,000, a trophy and a certificate, aimed to create an AED that was



implanted with the controller that they had designed.

In his speech, Motorola Solutions Malaysia Penang operations managing director Dr Hari Narayanan said the event aimed to cultivate interest in embedded systems

development among university and college students.

"This year's theme 'Sensors: Detection Enablers for Mission Critical Solutions', focuses on various types of sensors used to detect and alert users of potential

hazards," he said.

Inti Penang chief executive Hemalatha Murugiah congratulated the six teams in the finals and hoped that their projects would become a stepping stone for their future inventions.

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The winning team of Moto Innocup 2016 (from left) Kerk Hui Hong, 21, Amira Deuraseh, 19, Hor Jia Sheng, 22, with their supervisor Dr Syamsiah Mashohor, who won for their newly invented Fully Automated Controller for External Defibrillator (Faced) (orange box).