

IEEE Malaysia Section Newsletter Universiti Malaya Student Branch (UM SB)

Reported by: Dr. Raja Jamilah Raja Yusof (rjry@um.edu.my) and
Associate Prof. Dr Rodina Ahmad (rodina@um.edu.my)

Modernizing ICT Education for Harvesting Innovation (ICT-INOV) Project

ICT-INOV project is a project funded by the Capacity Building in Higher Education Erasmus+ program and is implemented in Greece, Malaysia, Vietnam, Pakistan, Nepal, Portugal, Italy, and Estonia. Project no: 618768/2020. Faculty of Computer Science and Information Technology (FCSIT), Universiti Malaya is one of the 12 partners involved in this project. For the implementation of the project, there are more than 16 courses which have been using Design Thinking concepts in their respective classes since October 2021 up to June 2023. The total number of students involved is about 730. The project uses a dedicated platform to capture the Design Thinking process that can be seen from the following link: <https://ictinov.e-ce.uth.gr/#/home>. The classes involved are Advanced Algorithm, Computational Thinking, UX Design Studio, Real-Time Systems, Information System, Information System Control and Security, Thinking and Communication Skills, Software Maintenance and Evolution, HCI, Software Requirements Engineering, Algorithm Design and Analysis, Software Modelling, Software Verification and Validation, Software Testing, Advanced IOT,



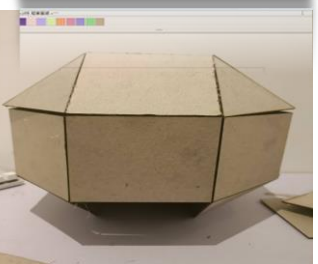
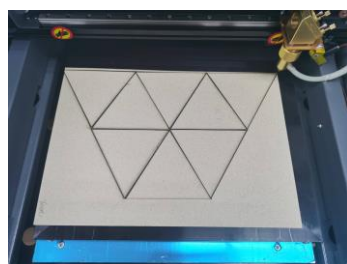
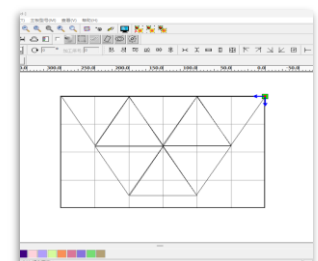
Students in Software Process and Quality Class discussing Design Thinking Process

Class activities in Faculty of Computer Science and Information Technology

Many academic staffs and students from Software Engineering, Information Systems, Artificial Intelligent, System and Network Technology department are involved in the project. There is a specific lab which is called Design Thinking Lab which is also known as TEALS has been designed to support the educational activities. Many equipments such as DIY robots, Laser cutter, 3-D pen and Arduino, Raspberry Pi and IOT Sensors, Sketch Pad and Sketchable TV are available in the lab. Head of the project, Dr. Raja Jamilah Raja Yusoff, who is also the Vice Chair of Women in Engineering in Malaysia has been actively expanding the project to reach more students and staff.



Students in UX Design Studio and Advanced Algorithms Class assembling and presenting DIY Robots



Student using the laser cutter to cut the body of the DIY Robot

IEEE Malaysia Section Newsletter Universiti Malaya Student Branch (UM SB)

Reported by: Dr. Raja Jamilah Raja Yusof (rjry@um.edu.my) and
Associate Prof. Dr Rodina Ahmad (rodina@um.edu.my)

The Drone Challenge Competition and the Drone Dance.

The Drone Challenge Competition was held in conjunction to the Carnival Jom Masuk U in the Dewan Tunku Cencelor, University Malaya (UM) from the 4-5 June 2023. It was one of the two booth set up for showcasing student activity in UM and was lead by Dr Raja Jamilah Raja Yusof. The objective of the challenge is to teach the concept of optimization to students as well as familiarize them with operating drones in real life. The Drone challenge competition challenged the participants to spell the words chosen in the fastest time possible. The words needed to be spelt by hoovering the drone on the alphabet mat on the floor. There were many participants that took the challenge. The fastest time recorded was 12s. It should be highlighted that similar activity is conducted in class under the Erasmus grant. The mobile phone and the drones were bought through the ICT- INOV and ALIEN Erasmus+ grant.



Participants in The Drone Challenge

Apart from the drone challenge, the visitors of the booth was presented with the drone dance by the volunteer team lead by students from the FCSIT and WIE UM Affinity committee members. The drone dance was choreographed so that the drone could dance autonomously using Python Programming Language.

It was choreographed within one week, The duration of the dance was less than two minutes. The dance was specifically choreographed for the Minister of Higher Education Dato' Seri Mohamed Khaled Bin Nordin and Universiti Malaya Vice Chancellor, Prof. Dato' Mohd. Hamdi Abd. Shukor. They visited the booth after officiating the Carnival Jom Masuk U.



The Minister of Higher Education Dato' Seri Mohamed Khaled Bin Nordin and Universiti Malaya Vice Chancellor, Prof. Dato' Mohd. Hamdi Abd. Shukor

The Enjoyable and Educational Experience

The student volunteers, the WIE UM Affinity members as well as the participants enjoyed organizing and participating in the event. We thanked FCSIT and WIE Malaysia for providing the avenue and small sponsorship for the event.



UM WIE Affinity and student volunteers