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2024



International Industrial Revolution 4.0 Exposition

"INNOVATING IDEAS, TRANSPIRING DREAMS"

ABSTRACT BOOK

Strategic Partners:



Perpustakaan
Sultan Badlishah

Organized By:

**COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS,
UNIVERSITI TEKNOLOGI MARA, KEDAH BRANCH**

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UITM Cawangan Kedah Channel

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IREx 2024

The successful inauguration of IR4.0 Exposition IREx 2019 has witnessed ground breaking initiatives, ideas, and innovations materialised into numerous practical devices today. Treading on the same triumph, the College of Computing, Informatics, and Mathematics, UiTM Kedah is thrilled to announce the continuation of said event, IREx 2024 with the theme: *Innovating Ideas, Transpiring Dreams*.

The IREx 2024 aspires to incorporate even more exciting new technologies including, but not limited to, Information & Communication Technology (ICT), Educational Technology & Innovation (ED), Operational Excellence (OE), Internet of Things (IoT), Process Improvement, Ideas & Design, Multimedia, and Electronics that will chart new milestones in human history. This will serve as an excellent platform for scientists and innovators alike to meet the like-minded individuals and showcase inspiring ideas and notable innovations.

PROGRAM SCHEDULE

International Industrial Revolution 4.0 Exposition (IREx 2024)
21ST May 2024 (Tuesday)
Dewan Perdana, UiTM Kedah Branch

TIME	EVENT
8.00 – 9.00 am	Registration & Booth Set Up
9.00 am – 12.00 pm	Exhibition & Judging Session
12.00 pm – 2.00 pm	Obedient Drone Session & Break
2.00 pm – 5.00 pm	Official Closing & Prize Giving Ceremony
5.00 pm	Program Ends

Official Closing Ceremony

International Industrial Revolution 4.0 Exposition (IREx 2024)

TIME	EVENT
2.00 pm	Arrival of Guests and Participants
2.30 pm	Arrival of VVIP
	National anthem - Negaraku And Wawasan Setia Warga
2.40 pm	UiTM
	Welcoming Speech
3.00 pm	Rector's Welcoming Speech
	Officiating Speech
3.10 pm	Gimmick & Montage presentation
3.30 pm	Prize Giving Ceremony
4.00 pm	Photography
5.00 pm	Program Ends

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IRX082	MULTIPURPOSE SOAP	5
IRX083	PUFFER FISH BOAT	6
IRX092	MY GAMES ACADEMIA	7
IRX095	'ROBOCRAB' PEMBERSIH SAMPAH	8
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CATEGORY B

DIGITAL SIT AND REACH TOOL

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ABSTRACT - Reaching out is a requirement for students who are required to take the SEGAK test in physical education subjects (Pendidikan Jasmani & Pendidikan Kesihatan). However, at school we cannot be alone to measure our own reach, and need help from someone to read the distance. So it will burden other students. To solve this problem, we have developed Digital Sit and Reach Tool, which is a new technology of a digital sit and reach that is equipped with an ultrasonic sensor and an LCD. The LCD is a small device that works to make it easier for users to read the count more easily and accurately, similar to a self-service machine. After the user push the distance board, the ultrasonic sensor will detect the movement then displays the distance reach by the distance board on the LCD. By implementing this technology, we do not have to trouble other students with a significant rate and users can get access immediately to get their own reach count. This is very useful during busy times, such as when SEGAK tests are conducted, where many students are crowded to do this process. Sit and reach measurement tool can reduce the burden on other students and save time and resources. As a conclusion, extending reach measurement is a good tool for SEGAK since it coincides with the development of technology considering that the existing scaling tool is a traditional tool that is no longer relevant.

Keyword: SEGAK, Digital, Ultrasonic sensor, LCD.



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