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MAY
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
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IRX095	'ROBOCRAB' PEMBERSIH SAMPAH	8
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CATEGORY B

AUTOMATIC SYSTEM OF HEALTH TRACKER (ASTHRA)

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ABSTRACT - Automatic System of Health Tracker or “ASTHRA” is a product that automates and integrates several features such as weight scale, height measurer, and pulse oximetry. At its core is a centralized database linked to an authentication scanner. Powered by a Raspberry Pi CPU, the system updates the record of the user after authentication and measurement. This idea counters the flaws of the current system used to calculate and store health information of an individual, specifically students in schools. Manually measuring the height, weight, and data entry not only exhausts but wastes the time of the staff who are in charge of data management, as they have to calculate and repeat the process for each student in the school. Furthermore, students tend to forget their BMI results because there isn't any recorded data that can be checked regularly through any platform. But with ASTHRA, instant results will be obtained via the school's database and students' email for health monitoring. Thus, data processing and health monitoring will become easier and less time-consuming. In conclusion, ASTHRA offers an efficient solution for health monitoring and data management. It has a user-friendly interface, generates fast analysis, automated processes, and displays the latest results.

Keywords: Health, Measurement, Database, School, Automatic



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