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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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IRX068	PRO CROSS-MATH CHALLENGE	4
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

CAR SAFETY REMAINDER v2

Muhammad Syahir Iman Bin Suib¹ , Adam Muqriz bin Mohd Yusof²,
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ABSTRAK - Berita kejadian kenderaan terbakar ketika mengisi petrol di stesen minyak, kematian disebabkan keracunan gas karbon monoksida dan kematian kanak-kanak kerana ditinggalkan didalam kereta seringkali menjadi laporan utama media, namun ia masih lagi berlaku meskipun pelbagai kempen kesedaran telah dilaksanakan. Car Safety Remainder (CSRv2) adalah merupakan inovasi yang berfungsi untuk mematikan enjin apabila penutup minyak dibuka, memberi amaran jika paras karbon monoksida merbahaya serta memberi amaran jika tertinggal hidupan di dalam kabin kenderaan setelah pintu pemandu dikunci. CSRv2 dihasilkan dengan menggabungkan peralatan elektronik dan komponen kenderaan yang menggunakan punca kuasa dari bateri. CSRv2 sesuai dipasang sebagai alat tambahan untuk setiap kenderaan bagi tujuan keselamatan semasa mengisi minyak dan mengelakkan tragedi mati mengejut disebabkan menghidu gas karbon monoksida secara berlebihan serta kematian kanak-kanak kerana ditinggalkan lama dalam kenderaan. Bagi CSRv2, ianya juga dilengkapi dengan sistem *blackbox* bagi merekod kedudukan /lokasi, masa, kualiti udara serta kadar gas karbon monoksida dalam kabin kenderaan secara *cloud storage*. Inovasi ini diyakini dapat meningkatkan tahap keselamatan pengguna kenderaan. Syarikat pengeluar kenderaan serta syarikat pengeluar alat keselamatan kenderaan sudah pastinya boleh mengaplikasikan inovasi ini pada masa akan datang.

Kata Kunci: Karbon monoksida, *blackbox*, *cloud storage*.



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