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2024



International Industrial Revolution 4.0 Exposition

"INNOVATING IDEAS, TRANSPIRING DREAMS"

ABSTRACT BOOK

Strategic Partners:



Perpustakaan
Sultan Badlishah

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

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Copy Editors: Mohd Zhafri Mohd Zukhi
Shahida Farhan Zakaria
Norin Rahayu Shamsuddin
Nor Athirah Mohd Zin
Khairul Adilah Ahmad

Cover Design: Syahrini Shawalludin
Jasmin Ilyani Ahmad

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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CATEGORY C

NOISE INDUCED HEARING LOSS PREDICTION MODEL USING SUPPORT VECTOR MACHINE

Siti Fairus Mohd Zain¹, Mohamad Fahmi Hussin², Azri Aziz³, Ahmad Asari
Sulaiman⁴, Ismaniza Ismail⁵

^{1,2,3,4}*School of Electrical Engineering, College of Engineering,
Universiti Teknologi MARA, 40450 Shah Alam, Selangor*

¹2020630798@student.uitm.edu.my, ²fahmi478@uitm.edu.my,

³azriaziz@uitm.edu.my, ⁴asari100@uitm.edu.my

⁵*School of Chemistry and Environment, Faculty of Applied Sciences,
Universiti Teknologi MARA, 40450 Shah Alam, Selangor*

⁵ismaniza@uitm.edu.my

ABSTRACT - Hearing Wellness is an Artificial Intelligence (AI)-powered mobile application poised to revolutionize how we approach Noise Induced Hearing Loss (NIHL) in the workplace. By harnessing the predictive prowess of Support Vector Machine (SVM) technology, this innovative application predicts the NIHL level among workers with the symptoms, to prevent the spread of this disease in the workplace. The mobile application system serves as predictive modelling system of NIHL and also aims to assist Occupational Health Doctors (OHD) in upgrading the current system from the conventional manual data keeping to digital Drawing insights from real-world NIHL cases sourced from the Department of Occupational Safety and Health Selangor (DOSH), Hearing Wellness empowers workers and Occupational Health Doctors (OHD) alike with a cutting-edge predictive modeling system. This shift from traditional manual record-keeping to seamless digital data management not only streamlines processes but also enhances efficiency in monitoring and addressing NIHL concerns. By facilitating swift intervention and fostering a safer, healthier work environment, this transformative tool is set to redefine workplace safety standards and lead the charge in mitigating the impact of NIHL.

Keywords: Noise induced hearing loss, Support vector machine, Prediction model, Artificial intelligence



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