



UNIVERSITI
TEKNOLOGI
MARA

Cawangan Perak



BUILDCON2023

**COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023**

EMBRACING SMART CONSTRUCTION TRANSFORMATION

BUILDERS' CONVENTION DAY 2023

**Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch**

BUILDCON 2023
COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023



Organised by
Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch
Malaysia

BUILDCON 2023

COMPILATION OF PROJECT INNOVATION IDEAS

SEMESTER MARCH – AUGUST 2023

Editors

Siti Akhtar Mahayuddin

Noor Rizallinda Ishak

Nor Asma Hafizah Hadzaman

Sallehan Ismail

© Unit Penerbitan UiTM Perak, 2024

All rights reserved. No part of this publication may be reproduced, copied, stored in any retrieval system or transmitted in any form or by any means; electronic, mechanical, photocopying, recording or otherwise; without permission on writing from the director of Unit Penerbitan UiTM Perak, Universiti Teknologi MARA, Perak Branch, 32610 Seri Iskandar Perak, Malaysia.

Perpustakaan Negara Malaysia

Cataloguing in Publication Data

No e- ISBN: 978-967-2776-24-6

Cover Design: Muhammad Naim Mahyuddin

Typesetting : Siti Akhtar Mahayuddin

e ISBN 978-967-2776-24-6



SITE SAFETY WITH ABILITY OF ARTIFICIAL INTELLIGENT CAMERA

Marshitah Mustafa¹ and Mohd Fareh Majid²

^{1,2}Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA Perak Branch,

32610 Seri Iskandar, Perak

Email: 2021846946@student.uitm.edu.my¹, mohdf898@uitm.edu.my²



Site Safety With Ability Of Artificial Intelligent Camera

Innovation Idea:

Site safety with the ability of Artificial Intelligence (AI) camera highlights the integration of advanced technology to enhance safety in various work environments. This innovative solution combines AI-powered cameras with real-time monitoring capabilities to detect potential hazards and ensure the well-being of workers. The AI camera system utilises computer vision algorithms to identify safety risks, track movements, and analyse behaviours that could lead to accidents. By providing early warning alerts and enabling prompt action, the AI camera significantly improves safety management in construction sites, industrial facilities, and other hazardous locations. This innovation has garnered attention in the construction industry and among companies, as it brings many benefits and positive outcomes to safety monitoring work. Moreover, this innovation offers a comprehensive and eco-friendly solution for safety management in high-rise buildings that has zero internet connection and wide area for monitoring. The study emphasises the benefits of this technology in preventing accidents, reducing risks, and creating a safer work environment, ultimately contributing to improved safety standards and the protection of workers' rights.

Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim
Rektor
Universiti Teknologi MARA
Cawangan Perak



Tuan,

**PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UiTM CAWANGAN PERAK
MELALUI REPOSITORI INSTITUSI UiTM (IR)**

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

PROF. MADYA DR. NUR HISHAM IBRAHIM
REKTOR
UNIVERSITI TEKNOLOGI MARA
CAWANGAN PERAK
KAMPUS SERI ISKANDAR