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# Enabling Industry 4.0 through Advances in Mechatronics

Selected Articles from iM3F 2021, Malaysia

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Presents selected articles from the mechatronics track of the iM3F 2021 conference, Malaysia

Highlights recent findings in mechatronics pertinent toward the realization and embodiment of Industry 4.0

Contains contributions of leading experts from both industry and academia

## About this book

This book presents part of the iM3F 2021 proceedings from the mechatronics track. It

highlights key challenges and recent trends in mechatronics engineering and technology that are non-trivial in the age of Industry 4.0. It discusses traditional as well as modern solutions that are employed in the multitude spectra of mechatronics-based applications. The readers are expected to gain an insightful view on the current trends, issues, mitigating factors as well as solutions from this book.

## Keywords

**Robotic vision** 

**Autonomous mobile robots** 

**Motion control** 

**Intelligent sensors and actuators** 

**Industrial antennas** 

**MEMS** and system integration

**Machine learning** 

**Systems modelling** 

Signal processing

**Electromagnetic devices** 

Sensing and control systems

**Microcontrollers/PLC Technology** 

**Industrial automation** 

## About the editors

Dr. Ismail Mohd Khairuddin is a lecturer at Universiti Malaysia Pahang. He received his Bachelor's Degree in Mechatronics Engineering from Universiti Teknikal Malaysia Melaka (UTeM) in 2010 and was awarded with a Master's Degree in Mechatronics and Automatic Control from Universiti Teknologi Malaysia in 2012. Then, he pursued his Ph.D. studies in Biomechatronics Engineering at the International Islamic University Malaysia. His research interests include rehabilitation robotics, mechanical and mechatronics design, mechanisms, control and automation, bio-signal processing as well as machine learning.

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