INTERNATIONAL JOURNAL OF ELECTRICAL ENGINEERING AND APPLIED SCIENCES

Contents

Volui	me 4 Number 1	April 2021
No.	Title	Page
1.	Development of an Energy-Efficient Wireless Sensor Network Model of Perimeter Surveillance Agbotiname Lucky Imoize, Opeyemi Ahmed Ajibola, Taiwo Remilekun Oye Joshua Onyeka Ogbebor, Simeon Olumide Ajose	edare,
2.	Development of Application to Find a Nearby Live Blood Donor Using to Updated Location e-Information Hasibur Rahaman, Dr. M. A. Khan, Iskedaheer Alam, Khayrul Alam, Sumon Mondal, Alimuzzaman Khan	
3.	Performance Evaluation of Symmetric and Asymmetric XG Passive O Networks Mortada M. Abdulwahab and Mogahid M. Eldaw	•
4.	Development of Smart Glove System for Blind People Sahazati Md Rozali, Rozilawati Mohd Noor, Aliza Che Amran, Saleha Mol Iskandar Zulkarnain Hamzah	
5.	Modeling an Overcurrent Relay Protection and Coordination in a Pov System Network Using PSCAD Software Mohd Hendra Hairi, Muhammad Nizam Kamarudin, Ahmad Sadhiqin Mo Mohamed Fauzi Packeer Mohamed, Sharizal Ahmad Sobri	hd Isira,
6.	Design of Wireless Monitoring and Controlling System of Insulin Pum Mortada M. Abdulwahab, Wafa A. Abdalla, Randa B. Abdelrahman, Moha Mohammed T. Musa	amed S.,
7.	Learning Soft Robot and Soft Actuator Dynamics using Deep Neural I Hari Prakash Thanabalan	

MESSAGE FROM CHIEF EDITOR

Assalamualaikum and Greetings to all,

Again, welcome to the 7th edition of the International Journal of Electrical Engineering and Applied Sciences (IJEEAS). IJEEAS is an open access journal with the aim of publishing a variety of research articles in Electrical Engineering and Applied Sciences. This edition covers various topics such as High Voltage, Control System, Mechatronics & Intelligent Robotics, Mathematics and Applied Science in Electrical Engineering contributed by our local and international contributors.

The high voltage and power system theme features an article from Hendra et al., presents an insightful study on the modeling of 132/33/11kV distribution network, where a protection scheme by providing the appropriate relay Pickup current/Plug Setting (PS) and Time Multiplier Setting (TMS)/ time dial setting (TDS) for discrimination process is proposed.

As for the control theme, an article on designing of Wireless Secure Monitoring and Controlling of Insulin Pump by Mortada Mohammed Abdulwahab and friends from Gezira University is presented. It discusses on innovation proposed for an insulin pump, a small electronic device which can be used to help diabetes patients to control the glucose level, where it can be carried easily and placed under clothes. Featuring functionalities such as glucose monitoring and secured information between patient and doctor, it shows how technology can be made simple and flexible for the end user. The same author also contributes another article on the Performance Evaluation of Symmetric and Asymmetric XG Passive Optical Networks, which discusses the basic structure and performance of symmetric and asymmetric XG-PON.

The mechatronics and intelligent robotics theme features an interesting work by Hari Prakash Thanabalan from School of Engineering and Material Science, Queen Mary University of London on the application of Deep Neural Network for Learning Soft Robot and Soft Actuator Dynamics. The research is inspired by living organisms and being the forefront of robotics evolution.

Next the mathematics and applied science theme presents an articles discusses about the Development of an Energy-Efficient Wireless Sensor Network Model for Perimeter Surveillance by Agbotiname L. Imoize et al. from University of Lagos, Nigeria. This article investigates an energy-efficient wireless sensor network model adapted for perimeter surveillance. Building on the existing low-energy adaptive clustering hierarchical protocol and amending its random cluster head selection, and they design the efficient routing algorithm that seeks to balance the energy among the nodes evenly.

Other intriguing contributions for this edition are work by Sahazati Md Rozali on the Development of Smart Glove System for Blind People by using Electronic Travel Aids (ETA) and Finding a Nearby Live Blood Donor Using Updated Location e-Information by Mohammad Asaduzzaman Khan et al. from Bangladesh which definitely are an example how human wellbeing is benefitting from an advancement of technology.

On behalf of the editorial board, I would also like to thank all the researchers and IJEEAS's editorial members who have contributed to the success of this edition. Last but not least, a special thanks to all readers who keep following our publication and supporting IJEEAS.

Prof. Ir. Dr. Marizan bin Sulaiman Chief Editor IJEEAS