

World Journal of Innovation and Modern Technology

ADWEN HOUSE PUBLISHING LIMITED
Bramford House 23 Westfield Park,
Bristol, United Kingdom BS6 6LT

Websites:
<http://www.wjimt.org/>

Emails:
editorial@wjimt.org

Cover design: Ravindra Kumar Sharma
Photograph: Vikas Kumar Goel

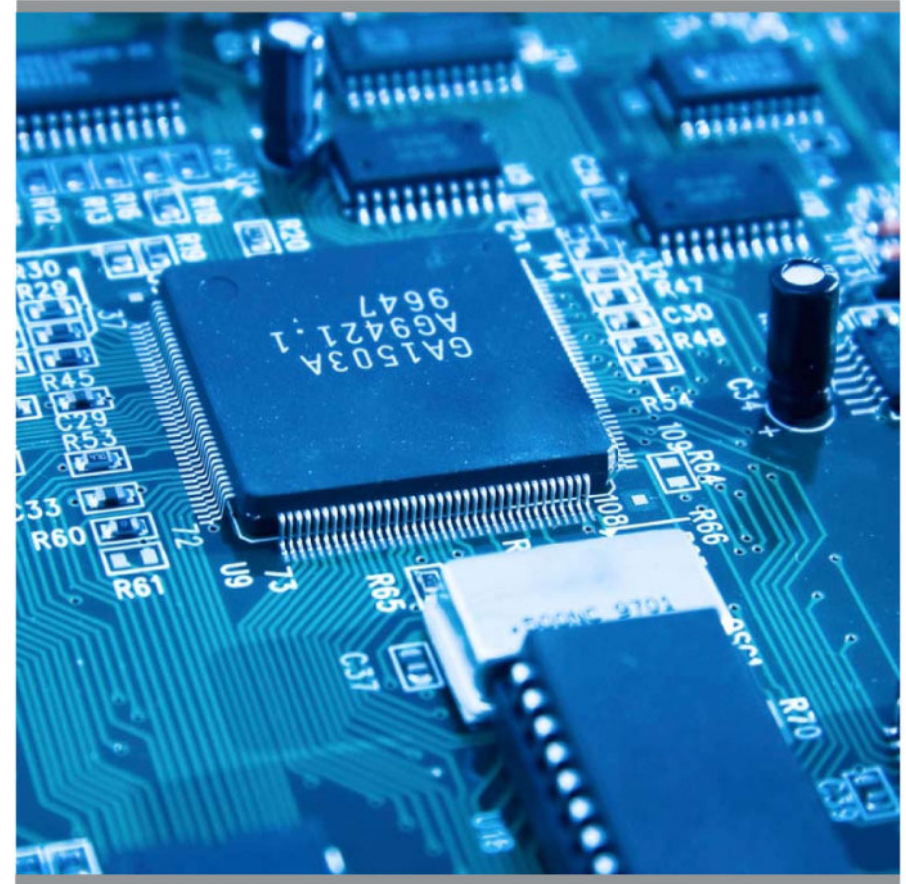
Copyright © 2024 AHP



World Journal of Innovation and Modern Technology (WJIMT)

ISSN: 2682-5910

World Journal of Innovation and Modern Technology



ADWEN HOUSE PUBLISHING LIMITED
Multidisciplinary Academic Journal Publisher

About us

Since 2018, as an international journal published on the web, ADWEN HOUSE PUBLISHING LIMITED is dedicated to the dissemination of fundamental knowledge in all areas of science research.

The main purpose of the World Journal of Innovation and Modern Technology (WJIMT, ISSN: 2682-5910) is to enhance our knowledge spreading in the world under the free opinion publishing principle.

It publishes full-length papers (original contributions), reviews, rapid communications, and especially it publishes any debate and opinion in all the fields of Engineering and Natural Science Research.

The World Journal of Innovation and Modern Technology (WJIMT) aims to establish itself as a platform for exchanging ideas in new emerging trends that needs more focus and exposure and is always committed to publish articles that will strengthen the knowledge of upcoming Researchers and Scientists.

This journal is a high-standard and high-level peer-reviewed academic journal. The editors encourage contribution of articles with theoretical and practical related to education.

Plagiarism is strictly prohibited in this journal.

Copyright

World Journal of Innovation and Modern Technology (WJIMT) uses Creative Commons signature- non-commercial use 4.0 international (CC BY-NC 4.0) copyright. Readers have the right to Any media shall reproduce and distribute the articles of this magazine in any form. It can also be modified, converted or created on the basis of articles in this journal. Sharing and using this magazine.

When writing articles, users must indicate the author and origin of the original text and mark the revisions made to the articles in this journal. On the Final Right of Interpretation of Copyright of Articles in this Journal belongs to ADWEN HOUSE PUBLISHING LIMITED.

World Journal of Innovation and Modern Technology (WJIMT)

EDITOR-IN-CHIEF

Anthony Goerzen California State University, USA

HONORARY EDITORIAL BOARD

Prof. P. Sreeramana Aithal Srinivas Institute of Management Studies,
Mangalore, India

Dr. Andreas Psychogios Associate Professor, Informatics Engineering
Department, Petra Christian University, Indonesia

EDITORIAL BOARD

Prof. Naresh Grover Associate Professor, Informatics Engineering
Department, Petra Christian University,
Indonesia

Prof., G. Venkateswarlu FDepartment of Mechanical Engineering, Sree
Chaitanya College of Engineering, Karimnagar,
India

Dr. Nandini M Naik Associate Professor, Chemical Engineering
Department, KLE DR. M.S.Shesagiri College of
Engineering and Technology, Belgaum,
Karnataka, India

Dr. Rajkumar Yadav Computer Science and Engineering
Department University Institute of
Engineering & Technology (M.D. University
Rohtak, Haryana) India

Paul K Phillips Advanced Engineering Centre, University of
Central Florida, Orlando, FL 32827, USA

K. Delbert Turner University of California, Davis, USA

Kristopher L. Mitchell University of California, Davis, USA

Kenigoys Willsomilen University of California, Davis, USA

Himonti Yamazaki Tokushima Bunri University, Japan

PUBLISHER

ADWEN HOUSE PUBLISHING LIMITED

Bramford House 23 Westfield Park,

Bristol, United Kingdom BS6 6LT

Email: editorial@wjimt.org

TABLE OF CONTENTS

Enhancing User Engagement through Adaptive UI/UX Design: A Study on Personalized Mobile App Interfaces	
Yingchia Liu, Hao Tan, Guanghe Cao, Yang Xu.....	1
AI-powered Strategies for Optimizing Waste Management in Smart Cities in Beijing	
Yao Yao, Jiewei Weng, Chao He, Chengliang Gong, Peng Xiao.....	22
Transforming User Experience (UX) through Artificial Intelligence (AI) in Interactive Media Design	
Yingchia Liu, Yang Xu, Runze Song.....	30
Optimizing Quality Control on Electric Vehicle Production Lines with AI and Machine Learning	
Zhichao Ma, Yefang Wang.....	40
Data - Driven Optimization of Production Efficiency and Resilience in Global Supply Chains	
Zihao Liu, Cecelia Costa, Ying Wu.....	47
A Better Sense Amplifier Improves the Resilience in Compute-In-Memory and Row Hammer	
You Zhang, Tianyuan Xu, Yihan Wang.....	58
Facial Expression Recognition Based on the FER2013 Dataset	
Yang Lou, Dan Li.....	70
Matting Image Background Switching Application	
Yueqi Shen, Dan Zhong.....	76
Comparative Analysis of Classification and Segmentation Performance of Different Dog Breeds Based on Mask R-CNN	
Youtian Luo, Dan Li.....	83
Development of Specialized PDC Drill Bits for the Interaction of Soft and Hard Strata in Igneous Rocks	
Guang Lv.....	89
Enhancing the Heat Dissipation Efficiency of Computing Units Within Autonomous Driving Systems and Electric Vehicles	
Yaonian Zhong.....	100
Optimizing Supply Chain Transparency and Customer Compatibility with AI-Driven Models	
Min Liu, Shui'e Chan.....	105
The Application of AJAX and JSON in the Case	
Xi Li, Zhengde Bao.....	113
Artificial Intelligence Generated Content (AIGC) in Empowering Vocational English Teaching Evaluation Systems	
Xiaoli Hu.....	120
Leveraging Data-Driven Insights to Enhance Supplier Performance and Supply Chain Resilience	
Zihao Liu, Cecelia Costa, Ying Wu.....	125
Multi-Beam Surveying Ocean Exploration Model and Applications	
Wenbo Yang, Zhenzhen Li, Fei Tang.....	132
Comparative Modulation of Immune Responses and Inflammation by n-6 and n-3 Polyunsaturated Fatty Acids in Oxylipin-Mediated Pathways	
Yawen Wang, Miaohong Shen, Lili Wang, Yan Wen, Hongwei Cai.....	139
The Application and Research of Probiotics in the Treatment of Diabetes	
Zhe Sun, Chao Dong.....	145
Research Progress of Ovarian Tissue Cryopreservation and Transplantation	
Ouyang Biao, Dong Chao.....	151
Optimizing Supply Chain Efficiency Using Cross-Efficiency Analysis and Inverse DEA Models	
Min Liu, Shui'e Chan.....	157