

2021 International Conference on Artificial Intelligence of Things (ICAIoT 2021)

**Virtual Conference
3 – 4 September 2021**



IEEE Catalog Number: CFP21BG4-POD
ISBN: 978-1-6654-0177-7

**Copyright © 2021 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP21BG4-POD
ISBN (Print-On-Demand):	978-1-6654-0177-7
ISBN (Online):	978-1-6654-0176-0

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

2021 International Conference on Artificial Intelligence of Things (ICAIoT) ICAIoT 2021

Table of Contents

Preface .vii
Conference Organization Committee .viii
Conference Organizers .x

Technical Papers

A Sustainable Deep Learning Based Computationally Intelligent Seafood Monitoring System for Fish Species Screening .1
<i>Jawad Rasheed (Istanbul Aydin University, Turkey)</i>	
Particle Swarm Optimization for Adaptive Social-Distance of Neighborhood in the IoT and COVID-19 Era .7
<i>Mohammed Zaki Hasan (University of Mosul, Iraq), Tarfa Yaseen Hamed (University of Mosul, Iraq), and Fadi Al-Turjman (Near East University, Turkey)</i>	
IoT-Enabled Lean Manufacturing: Use of IoT as a Support Tool for Lean Manufacturing .15
<i>Ahmed Zarrar (Middle East Technical University, Northern Cyprus Campus, Turkey), Muhammad Haseeb Rasool (Middle East Technical University, Northern Cyprus Campus, Turkey), Syed Mohammad Meesam Raza (Middle East Technical University, Northern Cyprus Campus, Turkey), and Ahmad Rasheed (Eastern Mediterranean University, Turkey)</i>	
Enhanced Hybrid Combiner Scheme for Wireless Network Communication .21
<i>Bülent Bilgehan (Near East University, Turkey) and Omid Mirzaei (University of Tabriz, Iran)</i>	
A Framework for the Emerging Smart Infrastructure in the IoT Era .25
<i>Suleiman Abdulahi Ali (Near East University, Turkey) and Fadi Al-Turjman (Near East University, Turkey)</i>	
PSO-Based Autocalibration for Differential Pressure Level Sensor .30
<i>Parisa Esmaili (Politecnico di Milano, Italy), Federico Cavedo (Politecnico di Milano, Italy), Parvaneh Esmaili (Near East University, Turkey), and Michele Norgia (Politecnico di Milano, Italy)</i>	

A Smart Data Pre-Processing Approach by Using ML Algorithms on IoT Edges: A Case Study .36
Şükrü Mustafa Kaya (Istanbul Aydın Universty, Turkey), Ali Güneş (Istanbul Aydın University, Turkey), and Atakan Erdem (University of Calgary, Canada)

IoT Based Enhanced Techno-Economic Feasibility of Photovoltaic-Battery System for a Household in Northern Cyprus .43.....
Muhammad Haseeb Rasool (Middle East Technical University, Northern Cyprus Campus, Turkey), Syed Mohammad Meesam Raza (Middle East Technical University, Northern Cyprus Campus, Turkey), Muhammad Musadiq (Middle East Technical University, Northern Cyprus Campus, Turkey), and Ahmed Zarrar (Middle East Technical University, Northern Cyprus Campus, Turkey)

Smart Tourism: A Proof of Concept for Cyprus Museum of Modern Arts in the IoT Era .49.....
Auwalu Saleh Mubarak (Near East University, Turkey), Zubaida Said Ameen (Near East University, Turkey), Paul Tonga (Near East University, Turkey), and Fadi Al-Turjman (Near East University, Turkey)

Author Index 55