

2025 IEEE Twelfth International Conference on Communications and Networking (ComNet 2025)

**Tunis, Tunisia
4-6 November 2025**

IEEE Catalog Number: CFP2508I-POD
ISBN: 979-8-3315-9401-5



Copyright © 2025, IEEE

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:	CFP2508I-POD
ISBN (Print-On-Demand):	979-8-3315-9401-5
ISBN (Online):	979-8-3315-9400-8
ISSN:	2163-663X

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

TABLE OF CONTENTS

Agriculture 5.0: Enhancing Decision-Making with AI and Satellite Remote Sensing	1
<i>Cherni Aya, Bousselmi Anis, Gabssi Karim, Neji Youssef</i>	
AI-Driven Hybrid NOMA-RSMA Access for next generation Networks	8
<i>Mohamed Amine Hechmi, Sonia Ben Rejeb, Sami Tabbane</i>	
Opportunistic routing protocols in wireless sensor networks: a low-energy consumption approach	17
<i>Hager Ben Fradj, Monia Hamdi, Ridha Ejbal</i>	
Improving User Privacy Through Deep Learning: JavaScript Tracking Detection	27
<i>Aminah Alqahtani, Mounir Frikha, Ahmad Aljughaiman</i>	
A Two-Stage Generative Framework for URLLC-Constrained Packet Routing in 6G Networks	36
<i>Iacovos Ioannou, Prabagarane Nagaradjane, Vasos Vassiliou</i>	
Medical Image Captioning in Radiology Reporting Using Artificial Intelligence	45
<i>Enas Abbas Abed, Taoufik Aguil</i>	
How to Detect FTP-Brute Force Attack by IDS Using Machine Learning	51
<i>Mohammed AlOlaqi, Ahmed Algailani, Mounir Frikha</i>	
Optimized Lightweight CNN Architecture for Real-Time IDS Deployment on Raspberry Pi with TensorFlow Lite	63
<i>Rahma Jablaoui, Noureddine Liouane</i>	
A wavelet-based deep neural network for content-based image retrieval with an adapted loss function	70
<i>Arsène Amoya, Mounir Kaaniche, Amel Benazza-Benyahia</i>	
Performance Evaluation of SLMs on Edge Devices	78
<i>Masato Oguchi</i>	
A Novel Dataset for DDoS Attack Analysis in SDN Environments	85
<i>Jlassi Wadii, Karmous Nader, Ould-Elhassen Aoueileyine Mohamed, Bouallegue Ridha</i>	
Zero Trust Meets AI: A Survey Across Multi-Cloud and Hybrid Environments	90
<i>Abdullah Abdulrahman Albuali</i>	
Design of a Dual U-Slot Patch Antenna for CubeSat Platforms	100
<i>Najet Bougdim, Mondher Dhaouadi, Fethi Choubani</i>	
Blockchain-Enabled AI Framework for Peer-to-Peer Energy Markets: Simulation and Case Studies in KSA	106
<i>Mounir Bouzguenda, Adel Benhamed, Noura Karray, Mohamed Amine Ksiksi</i>	
A new proposal architecture for fish feed waste detection in an aquaculture cage	114
<i>Mahdi Hamzaoui, Mohamed Ould-Elhassen Aoueileyine, Ridha Bouallegue</i>	
Towards Secure Medical Data Management: A Self-Sovereign Identity-Enabled DApp with Decentralized and Hybrid Deployment Models	120
<i>Hela Makina, Idadaha Anderson Ojen, Asma Ben Letaifa, Rim Farhat</i>	