



Vol. 2 No. 4 (2024): Electronics, Communications, and Computing Summit -Winter 2024

Table of Content

S.no	ARTICLE TITLE	AUTHORS	Page
1	Multi-Objective Evolutionary Algorithms for AI-Accelerated Sub-5 nm Floorplanning	Noel Unciano, Amina El- Fahmy	1-11
2	Secure and Scalable Federated Learning for Predictive Maintenance in Industry 4.0 Environments	Prerna Dusi	12-20
3	Design of Smart Wearable for Cardiopulmonary Monitoring with Adaptive Feedback Loop	Zafar Khan, Takashi Mori	21-31
4	Bio-Inspired Edge Intelligence: Neuromorphic Architectures for Real-Time Biomedical Signal Classification	Ashu Nayak	32-41
5	Battery-Free Wearable Electronics Using RF Energy Harvesting and Ultra-Low-Power Sensors	Ranjan Kumar Dahal, Felip Cidea	42-51
6	Edge-Aware Federated Learning-Based Channel Equalization for Robust Communication in 6G-Enabled IoT Networks	F Rahman	52-58
7	GPU-Accelerated Deep Learning Models for High-Volume Signal Processing in VLSI Testing	Hartwig Henry Hochmair, Y. Charabib	59-64
8	Cross-Layer AI Models for Intrusion Detection in Cloud-Integrated IoT Networks	Raj Nandkeolyar	65-71
9	Design and Implementation of Hardware- Embedded Lightweight Cryptographic Engines for Secure IoT Edge Devices	Xiaoye Liu, L. Salabi	72-79
10	Scalable Edge-Based Architecture for Real- Time Video Analytics in Smart Transportation Systems	CharpePrasanjeet Prabhakar	80-85
11	AI-Driven Resource Allocation for Energy- Efficient 6G Massive MIMO Networks	Hartwig Henry Hochmair, Ricardo Alvarez	86-91
12	Fusion of Big Data Analytics and Deep Learning for Predictive Fault Diagnosis in Cyber-Physical Energy Systems	Pushplata Patel	92-98





13	Deep Reinforcement Learning-Based Beam	Noemi Emanuela	99-104
	Selection and Tracking for Energy-Efficient mmWave Beamforming in 6G Networks	Cazzaniga, Barek F. Fatem	
14	Scalable Fabrication Techniques for Flexible	Sumit Ramswami Punam	105-117
	Nanoelectronic Devices		
15	2D Material-Based Tunnel FETs for Energy-	Raveendra H Patil, Cedmir	118-127
	Efficient Logic Switching	Arangunic	