
**Vol. 2 No. 2 (2024): Electronics Communications, and Computing
Summit -Summer 2024**

Table of Content

S.no	ARTICLE TITLE	AUTHORS	Page
1	Advanced MEMS-Based Sensors for Next-Gen Electronics and Biomedical Applications: Design, Integration, and Future Directions	Noel Unciano, Mohamad Bin Abdul Hamid	1-9
2	Federated Learning for Next-Gen Computing Applications and Privacy-Preserving Medical Diagnosis	Prerna Dusi	10-18
3	Lightweight CNN Architectures for Next-Gen Computing Applications and Edge Device Inference	Zafar Khan, Freddy Soria	19-27
4	Design and Evaluation of Blockchain-Based Secure Communication Protocols for IoT Networks	F Rahman	28-36
5	AI-Driven Beamforming for Mobility-Aware Massive MIMO in 6G Networks	Salma Ait Fares, Mahmoud Ghorab	37-43
6	6G Terahertz Communication: Key Challenges, Enabling Technologies, and Future Directions	Moti Ranjan Tandi	44-50
7	Design and Evaluation of Neuromorphic Hardware Architectures for Low-Power Edge AI Applications	Zhiyi Chen, Q. Hugha	51-57
8	Design and Implementation of Secure Hardware Architectures for Real-Time Embedded Systems in Adversarial Environments	Ashu Nayak	58-67
9	Security-Centric Hardware Architectures for Advanced Embedded Applications	Ranjan Kumar Dahal, Nurhayati Abdul Malek	68-75
10	Design and Evaluation of Neuromorphic Computing Hardware for Energy-Efficient Edge AI and Advanced Electronics	Aakansha Soy	76-83
11	A Unified MEMS-Based Micro-Sensing Platform for Smart Electronics and Biomedical Monitoring: Design, Fabrication, and Experimental Validation	Qi Duan, Emilia Lahti	84-94
12	Optimized Design and Simulation of Ultra-Low Power Embedded Systems for Energy-Constrained Applications	Dr. Nidhi Mishra	95-103

13	Energy-Efficient Power Amplifier Design for Advanced IoT Devices and Future Electronics	Shahid Mukhtar, Kh. Ariunaaa	104-111
14	Flexible and High-Efficiency Electronics with Novel Semiconductor Materials: Trends and Challenges	Pushplata Patel	112-122
15	Neuromorphic and Fault-Tolerant Nanoelectronic Systems: Design Strategies for Brain-Inspired Computing	Hartwig Henry Hochmair, Nils Bergström	123-132
