SCHOLARLY PUBLICATIONS
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Journal Name: IEEE Open Journal of the Communications Society **IF: 6.2**

Title: QoE-Driven Multimodal Multi-Agent NDN-Enabled Blockchain Framework for Adaptive 6G Communication Networks

Author: Yadav A.S.; Pawar V.; Mazid A.; Barik R.K.; Balusamy B.; Kumar G.

Details: 3rd July, 2026

Abstract: Sixth-generation (6G) communication networks are expected to support immersive, intelligent, and latency-sensitive applications that require scalable, secure, and adaptive communication infrastructures. However, conventional IP-based blockchain systems suffer from significant communication overhead, redundant data dissemination, synchronization delays, and limited scalability, which hinder their applicability in dynamic 6G environments. To address these challenges, this paper proposes a Quality of Experience (QoE)- driven multimodal multi-agent Named Data Networking (NDN)-enabled blockchain framework for adaptive 6G communication systems. The proposed architecture integrates content-centric networking, in-network caching, multicast dissemination, and blockchain-based decentralized trust management to improve communication efficiency and scalability. Furthermore, the framework incorporates multimodal data fusion, cooperative multi-agent coordination, QoE-aware adaptive learning, and federated edge intelligence to enable intelligent and user-centric communication optimization. A distributed peer-to-peer overlay and optimized NDN-based communication protocols are designed to support efficient blockchain synchronization while maintaining interoperability with existing Ethereum infrastructures. The proposed framework is evaluated using ndnSIM, NS-3, and a modified Go-Ethereum client across multiple distributed network topologies. Experimental results demonstrate significant reductions in end-to-end latency, redundant traffic transmission, and synchronization overhead, while improving caching efficiency, traffic utilization, and adaptive content dissemination performance compared with conventional IP-based blockchain communication systems. The results validate the effectiveness of integrating NDN, blockchain, multimodal intelligence, and distributed adaptive coordination to establish a scalable, secure, and QoE-aware foundation for future intelligent 6G communication ecosystems.

URL: https://ieeexplore.ieee.org/document/11594918

SCHOLARLY PUBLICATIONS
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Journal Name: Scientific Reports **IF: 4.9**

Title: Multimodal deep feature fusion with transformer for brain tumor classification from magnetic resonance imaging

Author: Pajany M.; Boopalan K.; Rajesh R.; JaiSingh W.; Dash B.B.; Rout S.K.; Kumar P.P.

Details: Volume 16, Issue 1, December 2026

Abstract: Brain tumors (BTs) arise due to abnormal cell growth, which has a high mortality rate globally. Millions of lives can be saved through the timely identification of BT. Precise identification and segmentation of BTs are essential to enhance the precision of analysis and the efficiency of therapeutic strategies. Magnetic resonance imaging (MRI) is a broadly utilized analytical tool. Furthermore, deep learning (DL) has recently shown efficiency in addressing several computer vision tasks. Several DL-driven methods are implemented for BT segmentation and attained impressive outcomes. This study presents a Multimodal Deep Feature Fusion Framework for Automated Brain Tumor Detection and Segmentation (MDFF-ABTDS) model. This objective is to develop a multimodal DL that integrates feature fusion and transformer networks for the precise detection and segmentation of BTs from medical images. Initially, image pre-processing is performed using Contrast Limited Adaptive Histogram Equalization (CLAHE) and image normalization. Feature extraction is carried out through fusion models such as CapsNet, ResNet-50, and AlexNet. These extracted features are then passed to a bi-directional convolutional long short-term memory combined with transformer (TBConvL-Net) models to classify tumors and non-tumors effectively. Finally, the tumor is classified to identify its location using the nnUNet model for a precise segmentation process. A series of experimental analyses of the MDFF-ABTDS method portrayed a superior accuracy value of 98.91% over existing models under the BT MRI dataset.

URL: https://www.nature.com/articles/s41598-026-44957-9

SCHOLARLY PUBLICATIONS
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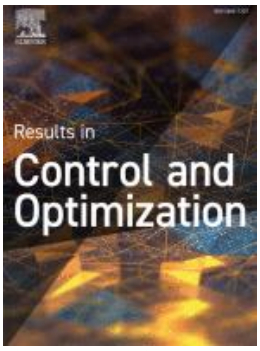
Journal Name: Results in Control and Optimization **IF: 3.8**

Title: Retraction notice to "Customer Satisfaction in Peer-to-Peer Lending Platforms: A Text Mining and Sentiment Analysis Approach" [RICO (2025) 100598] (Results in Control and Optimization (2025) 20, (S2666720725000840), (10.1016/j.rico.2025.100598))

Author: Kumari S.P.; Ali A.B.M.; Mohanty M.; Dash B.B.; Rafiq M.; Mohanty S.N.; Shernazarov I.; Othman N.A.; Batool N.

Details: Volume 23, June 2026

Abstract: This article has been retracted: please see Elsevier Policy on Article Withdrawal (https://www.elsevier.com/about/policies/article-withdrawal). This article has been retracted at the request of the Editor-in-Chief. Post-publication, the journal was alerted by Dr. Nadia Batool and the University of Potsdam, Germany, that her name was added to the authorship list without her knowledge or involvement in the research. Additionally, her institutional email address was improperly used during the submission process. An investigation conducted by Elsevier's Research Integrity & Publishing Ethics team on behalf of the journal confirmed that Dr. Nadia Batool had been impersonated. The journal contacted the authors for an explanation and the authors claimed that they were not involved in or aware of such misconduct. As such, this article represents a severe abuse of the scientific publishing system. The scientific community takes a very strong view on this matter and apologies are offered to readers of the journal that this was not detected during the submission process.



URL: https://www.sciencedirect.com/science/article/pii/S2666720726000329?via%3Dihub