

## Annals of Emerging Technologies in Computing (AETiC)

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# <u>AETiC</u> Special Issue on "<u>Intelligent Computing for</u> <u>Next-Generation Mobile Sensors and Embedded IoT</u>"

#### **Special Issue Editors:**

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#### Special Issue Aims and Scopes:

People's lives are increasingly controlled by technology, and intelligent technology has absorbed the bulk of people's labour and efficiency improvements in recent years. Artificial Intelligence (AI), Deep Learning (DL), and Machine Learning (ML), among other advances in computing technology and trends, opened the way for the development of intelligent computing. Future technological requirements use the approaches listed above to improve the efficiency of the systems needed to improve processes such as predictive analysis, decision-making, and reasoning. Moreover, the above advancements for sensors could be implemented by coupling embedded sensors and IoT devices. The coupling is infused with the creation of intelligent solutions characterised by the high connectivity of devices. The coupling process is done at the edge devices, analysis of real-time information, and embedded intelligence at smart wearables.

The compelling use for data processing and predictive analysis on resource constraint edge devices would be problematic due to the advent of massive IoT, 6 G and beyond 6 G technologies. Moreover, the satisfaction given to the users with intelligent technology and security is considered a crucial task. Hence, the challenges like fast analysis and data prediction and sharing the data with different users operating in other platforms must be considered. Another primary concern faced by the embedded and the next generation mobile sensors is the timely delivery of data coupled with information reliability. The above issues could be sorted out using Intelligent computing technologies with the next-generation sensors and embedded controllers.



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Intelligent computing effectively solves complex problems by utilising smart technologies such as artificial intelligence, machine learning, and deep learning methods. The algorithms used in intelligent systems like fuzzy logic, deep convolution, regression, clustering, and vector machine algorithms are used in prediction and analysis. The pattern recognition technology and the perspective analysis pave the way to develop intelligent applications that could be used along with next-generation sensors and embedded IoT. Recent trends in the implementation of intelligent systems include hospital management for monitoring patients, financial applications for predictive analysis, smart agriculture in monitoring weather conditions, and analytic data applications. This article aims to study the utilisation of intelligent computing like Artificial intelligence, machine learning and deep learning in the embedded IoT and next-generation mobile sensor optimisation. The above method could be done by the object characterisation and implementation of smart computing depending on the needs and processing capabilities of the sensors and IoT devices.

Topics may include, but are not limited to:

- Cross-layer protocol utilisation in next-generation computing and Edge computing technology
- Novel methods in spectral sharing devices using Embedded IoT and intelligent computing in 6G and beyond 6G
- Next-generation mobile and IoT sensors for medical application using deep convolution and fuzzy methods
- Robust algorithms of AI and machine learning for developing new paradigms in embedded technology
- Implementation of Smart transportation with next-generation mobile sensors and intelligent computing using neural networks and fuzzy algorithms
- Smart hospital management using embedded IoT and pattern recognition technology
- Ubiquitous computing coupled with embedded IoT for implementation of industry 4.0
- Resource optimisation and sustainable development for the cloud using vector machine algorithms
- Embedded IoT coupled with vector machine algorithm: applications, challenges and recent developments relating to intelligent computing



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• Next-generation computing with embedded IoT for smart agriculture with neural and fuzzy method implementation

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Review Notification: Continuous process

Publication Date: 15<sup>th</sup> August 2023 (tentative)

#### **Submission Procedure:**

Authors can submit Full papers, with a length between eight to eighteen pages, using <u>AETiC's Submission and Review Platform</u>. While submitting, authors need to select "Special Issue on MSnEIoT" as the section to indicate the submission is for this special issue. Please make sure that the manuscript has been prepared using <u>AETiC</u> <u>MS Word Template</u> and it adheres to the author <u>guidelines</u>. Additionally, authors need refer to the detailed <u>instructions</u> on preparing the manuscript.

If you require any further assistance or information, feel free to email us at <u>aetic@theiaer.org</u>.

We look forward to receiving your contributions.

Very best Regards

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