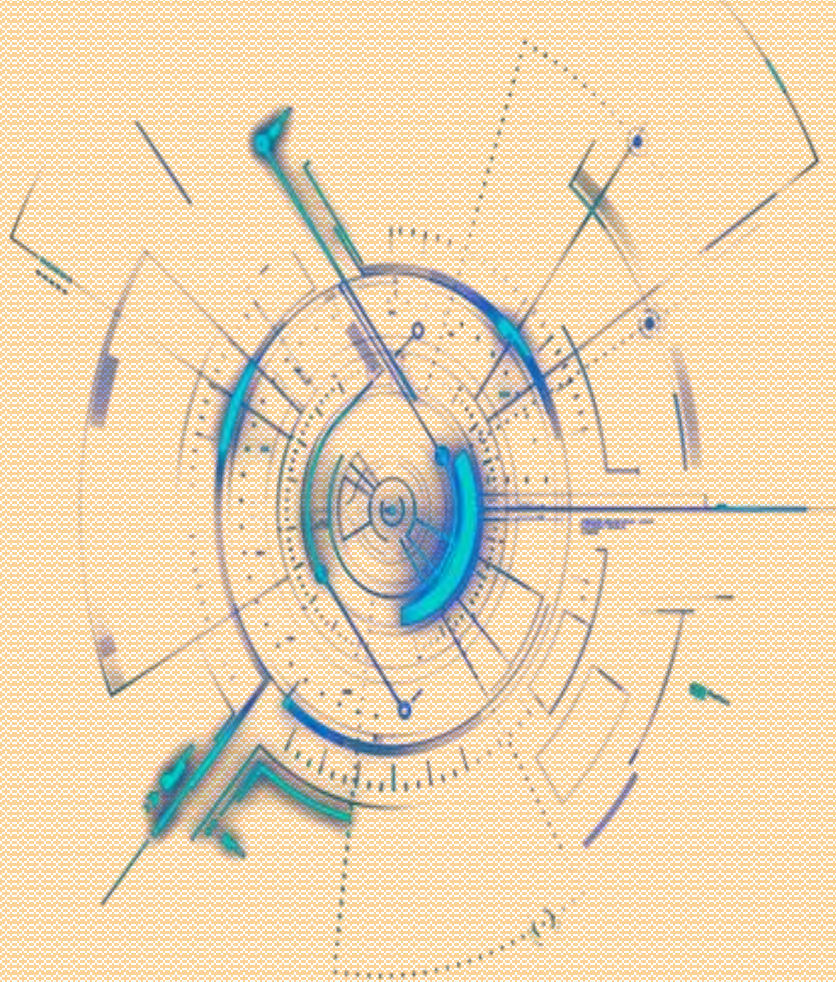




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About the Journal

The *Journal of Emerging Applied Sciences, Engineering, and Technology (JEASET)* is an interdisciplinary, peer-reviewed scholarly journal that publishes original research articles, review papers, and technical contributions in applied sciences, engineering, and emerging technologies. The journal aims to disseminate high-quality research that bridges theoretical advances and real-world applications, addressing contemporary scientific, technological, and societal challenges.

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Scope of the Journal

JEASET covers a broad spectrum of disciplines, including but not limited to:

- Emerging trends in mechanical, civil, electrical, electronics, and computer engineering
- Applied research in physics, chemistry, biology, and environmental sciences
- Artificial intelligence, machine learning, deep learning, blockchain, robotics, nanotechnology, and IoT



- Sustainable engineering solutions addressing climate change, energy efficiency, and resource management
- Cybersecurity, digital transformation, and secure computing systems
- Data science and AI applications in healthcare, finance, manufacturing, and smart cities
- Health technology innovations including biomedical engineering, telemedicine, bioinformatics, and medical devices

Vision

To be a globally recognized platform that integrates applied sciences, engineering innovation, and technological advancement to foster sustainable development through interdisciplinary research.

Mission

JEASET aims to:

- Promote the application of emerging technologies to solve real-world problems
- Encourage interdisciplinary and industry-oriented research
- Support innovations that contribute to sustainable development and societal well-being
- Facilitate collaboration among academia, industry, and government



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It is with great pride that I present **Vol. 1, Issue 1** of *The Journal of Emerging Applied Sciences, Engineering, and Technology (JEASET)*. This inaugural volume marks an important milestone in our mission to advance high-quality, interdisciplinary research that meaningfully contributes to innovation in applied sciences, engineering, and technology. JEASET is envisioned as a dynamic platform where theoretical insights are transformed into practical, real-world solutions capable of shaping industries, communities, and future scientific developments.

This issue brings together research spanning several cutting-edge domains that are central to the progression of modern technology and engineering. The contributions cover emerging areas in **network-on-chip architectures, artificial intelligence tools and research ecosystems, machine learning-driven IoT sensor optimization, deep learning applications for IoT security, and security frameworks for unmanned aerial vehicles (UAVs)**. These areas represent some of the most transformative fields influencing today's technological landscape, from intelligent manufacturing and smart systems to autonomous technologies and secure digital infrastructures.

As global challenges continue to evolve, the integration of AI, machine learning, IoT advancements, cybersecurity mechanisms, and next-generation embedded systems becomes increasingly essential. The works featured in this volume reflect the journal's commitment to promoting research that addresses these challenges through innovative methodologies, comprehensive surveys, and forward-looking technological perspectives. Our goal is to ensure that JEASET remains a trusted source of knowledge for researchers, practitioners, and industry experts seeking impactful and application-driven solutions.

Each manuscript included in this issue has undergone rigorous peer review to ensure scientific rigor, originality, and relevance. I extend my heartfelt appreciation to the authors for their valuable contributions, to the reviewers for their meticulous evaluations, and to the editorial team for their dedication in shaping this inaugural issue.

As we embark on this journey, I invite scholars and professionals from around the world to contribute their pioneering work to JEASET. Together, we aim to build a publication that not only documents advancements but also inspires new research directions and technological breakthroughs.

Dr. Lordwin Cecil Prabhaker Micheal

Editor-in-Chief

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