



CALL FOR PAPER **CHALLENGES, TOOLS, AND APPLICATIONS IN INDUSTRIAL ARTIFICIAL INTELLIGENCE**

IN FRONTIERS IN ARTIFICIAL INTELLIGENCE-
AI IN BUSSINESS

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Abstract

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Artificial intelligence (AI) technologies are rapidly evolving to address the industrial and manufacturing markets for a more reliable and sustainable future. Industrial AI has been applied to enhance performance, reduce energy consumption, optimize manufacturing and operations processes, mitigate business risk, and create more efficient products. Industrial AI can be integrated with existing digital technologies, to create a revolution in industrial intelligent solutions. Moreover, AI technologies can be effectively embedded in industrial products or business services to achieve faster service, lower cost, more reliable products, and profit. Thus, investment in industrial AI technologies and tools can save businesses lead to millions of dollars in savings.

This special issue aims to share innovative theories, practices, and approaches, and integrate digital technologies with industrial AI techniques to reveal the issues associated with AI-driven industrial applications.

The background image shows a modern industrial facility with various structures and pipes. Overlaid on this is a complex network of blue lines and nodes, representing data flow or a digital infrastructure. The title text is centered over this image in a large, bold, dark red font.

CHALLENGES, TOOLS, AND APPLICATIONS IN INDUSTRIAL ARTIFICIAL INTELLIGENCE

KEYWORDS

Computational intelligence, artificial intelligence, machine learning, optimization, IoT, deep neural network, real applications in engineering,

POTENTIAL TOPICS INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

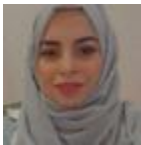
- Artificial intelligence and machine learning in industrial applications
- Emerging computational intelligence for complex industrial systems
- Methods and approaches to implement real-time soft computing for industrial AI applications
- Industrial AI-driven big-data analysis
- Hybrid methods, including evolutionary computation, optimization, machine learning, and AI algorithms
- IoT, blockchain, and networking in industrial AI
- Ethical computational intelligence for industrial automation (e.g., e-factories, smart production lines, and robotics)
- Smart industrial rule-based applications;
- Industrial AI-driven vision, inference, asset identification, audio, and natural language processing
- Modelling of large-scale systems and cyber-manufacturing systems with machine learning and optimization algorithms.

SUBMISSION

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