

Special Issue

AI-Driven Automation for Industrial Transformation: Innovations in Smart Systems, Machine Learning and Sustainable Processes

Message from the Guest Editor

The applications for AI-driven automation are almost limitless. They range from medical technology and industrial manufacturing to agriculture and the production of food and beverages. The AI landscape encompasses a range of technologies including computer vision, machine learning, natural language processing, and cognitive computing. This Special Issue invites high-quality, original research and review articles that advance methods and real-world applications of AI in automation. Contributions should address how AI technologies can drive process optimization, sustainability, and resilience in industrial and business contexts. Topics include, but are not limited to, the following:

- Design, analysis, control, optimization, operation, planning, or scheduling of a production, medical, or transportation system using an advanced AI technology such as neural networks, deep learning, or reinforcement learning, amongst others.
- Development of novel algorithms, tools, or frameworks for AI-driven process modeling, predictive maintenance, and adaptive control.
- Novel application studies in AI-driven manufacturing, production, logistics, medical technology, precision agriculture, etc.

Guest Editor

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Editor-in-Chief

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