Description

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Focal points of the journal include, but are not limited to innovative applications of:

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- Architectures, algorithms and techniques for distributed AI systems, including multi-agent based control and holonic control,
- Decision-support systems,
- Aspects of reasoning: abductive, case-based, model-based, non-monotonic, incomplete, progressive and approximate reasoning,
- Applications of chaos theory and fractals,
- Metaheuristics and their applications in intelligent automation and global optimization: Evolutionary Algorithms, swarm intelligence, nature and biologically inspired metaheuristics, etc.,
- Knowledge processing, knowledge elicitation and acquisition, knowledge representation, knowledge compaction, knowledge bases, expert systems,
- Neural networks, fuzzy systems, neuro-fuzzy systems,
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- Perception, e.g. image processing, pattern recognition, vision systems, tactile systems, speech recognition and synthesis,
- Aspects of software engineering, e.g. intelligent programming environments, verification and validation of AI-based software, software and hardware architectures for the real-time use of AI techniques, safety and reliability,
- Intelligent fault detection, fault analysis, diagnostics and monitoring,
- Self-organizing, emerging or bio-inspired system,
- Big data analytics, Understanding complex networks, Internet-of-things and cyber-physical systems, Intelligent transportation systems & smart vehicles
- Industrial experiences in the application of the above techniques, e.g. case studies or benchmarking exercises.

Engineering Applications of Artificial Intelligence publishes:
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• IFAC EAAI Forum — problems arising from engineering practice, needing to be solved by somebody; solutions to problems discussed in this forum or elsewhere; critiques of a position or claim found in the literature.

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- Case studies or software reviews - evaluative and descriptive reviews of existing available AI software systems, discussing the experience gained and lessons learnt from using or developing AI systems for engineering applications.
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