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Differential Evolution for Manufacturing and Production Engineering Applications

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Message from the Guest Editors

Dear Colleagues,

Several approximation optimization algorithms have been proposed in manufacturing and production engineering applications so far. These approaches have been instrumental in solving several complex interdisciplinary problems; one such popular evolutionary methodology is the Differential Evolution (DE) algorithm. The DE has several advantages: it is derivative-free, resorts to directional searches and, importantly, can efficiently handle continuous, discrete and combinatorial problems. So far, several variations of the DE have been proposed and applied to a variety of problems across several domains; however, its application in manufacturing and production is less explored. his Special Issue calls for contributions focusing on the various related aspects of the Differential Evolution (DE) algorithm as well as its hybrid, including (but not limited to) the following areas:

- Manufacturing processes;
- Design of machine elements;
- Productivity of the machining processes;
- Production planning and scheduling;
- Flexible manufacturing;
- Supply chain management;
- Robotics and automation.







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Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from guite different perspectives, having led to the development of many subcommunities: Complexity theory (limitations). approximation or parameterized algorithms (types of geometric algorithms problems). (subject area). metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities

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