

Tentative Outline

Special Thematic Issue for the journal Recent Advances in Computer Science and Communications

Title of the Thematic Issue: “Autonomic Computing in Industry 4.0 Issues, Challenges and Applications”

Guest Editor: Dr. Bhupesh Kumar Dewangan

- **Abstract:** Most of the industries are moving towards less human interactions solution towards achieving better productivity in less time and budget. One of the most common approach to achieve these goal is to automate the tools. To continue to this, Autonomic computing is one of the most emerging technology, which is using by many researchers. Our next generation of an industry—Industry 4.0—holds the promise of increased flexibility in manufacturing, along with automation, better quality, and improved productivity. It thus enables companies to cope with the challenges of producing increasingly individualized products with a short lead-time to market and higher quality.
- **Objective:** The objective of this special issue is to produce the different issues and challenges in Autonomic computing techniques with proper solution for IT and other organizations as well. The recent research in Autonomic computing is the evidence of better productivity in Industry 4.0.
- **Scope of the Thematic Issue:** Autonomic computing in Cloud/Fog/Edge High performance Computing, IoT, Block chain, Healthcare informatics, Image processing, Cybernetics, Computer applications, Systemic and other computer science area. Autonomic computing in resource optimization, Civil construction, Power Backup, Energy optimization, Space research, Geo-physical and Geo-spatial research and other industrial research areas.

Keywords: Self-optimization, Self-healing, Self-protection, Self-configuration, Machine Learning, Artificial Intelligence, IoT, Health Informatics, etc.

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- Autonomic computing in:
 - Cloud resource management,
 - Energy Efficiency
 - Healthcare Informatics
 - Civil Constructions
 - Robotics
 - Space Research
 - Geo-physical and Geo-spatial research

Tentative titles of the articles:

- Botnet Detection in Internet of Things using Deep Neural Networks
- Challenges and Application of Cloud and Web-based Applications in Industry 4.0
- Challenges of Autonomic Computing in Industry 4.0
- Energy efficient VM management in Cloud Computing
- Performance Evaluation of Cloudlets based on Energy Parameters

Schedule:

- Thematic issue submission deadline: **31/10/2022**

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