

Call for Contributions

Note: Onsite and Online Options

In order to accommodate a large number of situations, we are offering the option for either physical presence or virtual participation. We would be delighted if all authors manage to attend in person, but are aware that special circumstances are best handled by having flexible options.

Submission:

1. Inform the Chair: with the Title of your Contribution

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=INTELLI+2020+Special>

Please select Track Preference as **InManEnv**

Special track

InManEnv: Intelligent Manufacturing Environments

Chair and Coordinator

Gil Gonçalves, University of Porto, Portugal gil@fe.up.pt

along with

INTELLI 2020, The Ninth International Conference on Intelligent Systems and Applications

October 18 - 22, 2020 - Porto, Portugal

<https://www.iaia.org/conferences2020/INTELLI20.html>

Manufacturing companies are subject to constant changes in their operational environment, influenced by innovation, government, the economic and the environment. Being capable to respond to these changes demands for re-configurability, flexibility, adaptability and agility. Maximizing the benefit is no longer just about maximizing the performance, but needs to guarantee the sustainability of the system throughout its entire lifecycle. In order to respond to this context, modern manufacturing environments are driven by paradigms of computer science, which are not only present at design, planning and management levels but have already been transferred to the production systems and integrated into production lines. This includes agent-based paradigms or encapsulation of knowledge into sensors and machines turning them into smart components. The use of smart components at the production level generates huge amounts of data (big data) that needs to be processed into valuable information for the management levels. At the same time, new approaches try to use this "intelligence" available at the shop floor to make production more flexible, adaptive and resource-efficient.

The InManEnv 2020 symposium will be the stage where new production paradigms and concepts, new knowledge-based approaches and lifecycle sustainability of production systems can be presented and discussed.

Prospective authors are invited to submit original papers on topics including, but not limited to:

- New production paradigms and concepts
- 3D/4D printing production-oriented
- Life cycle sustainability of production systems
- Cooperation and communication in manufacturing environments
- Industry 4.0 and Internet of Things (IoT) approaches
- Smart factory and Industry 4.0
- Industry 4.0 Data analytics

- Cyber-manufacturing systems
- Industry 4.0 in a global context
- New computing and knowledge paradigms in manufacturing environments
- Manufacturing-oriented Big Data
- Flexible manufacturing systems
- Industrial robotics and intelligent manufacturing
- Collaborative robotics and human-robot collaboration
- Adaptive production
- Self-adapting production lines
- Situation-awareness and self-awareness
- Planning and optimization of production systems and lines
- Knowledge acquisition and exploitation in manufacturing environments
- Optimization and control of production systems and lines

Program Committee

Lars Braubach, Hochschule Bremen, Germany
 Dilip Kumar Pratihar, IIT Kharagpur, India
 Prabhat Mahanti, University of New Brunswick, Canada
 Jose M. Molina, Universidad Carlos III de Madrid, Spain
 Juha Röning, University of Oulu, Finland
 Fariba Sadri, Imperial College London, UK
 Ingo Schwab, Karlsruhe University of Applied Science, Germany

Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: August 24, 2020
- Notification: September 13, 2020
- Registration: September 23, 2020
- Camera-ready: September 23, 2020

Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: <http://www.iaria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=INTELLI+2020+Special>

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at <http://www.iaria.org/registration.html>

Contacts

Chair:

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