

## Special Issue of the



# Journal of Ambient Intelligence and Humanized Computing

"Intelligent Computing and System towards Smart Manufacturing"

## **Description**

With the integration and extensive applications of the new generation of information technologies (such as cloud computing, internet of things, big data, mobile internet, artificial intelligence) in manufacturing industry, a number of countries have put forward their national advanced manufacturing development strategies, such as Industry 4.0 in Germany, Industrial Internet and manufacturing system based on CPS (Cyber-Physical Systems) in the USA, as well as Made in China 2025 and Internet Plus Manufacturing in China. Although each of these strategies was proposed under different circumstances, one of the common aims is to achieve smart manufacturing. However, without the intelligent system support, and without the support of data intelligent technology, "smart" cannot be achieved.

The objective of this Special Issue on "Intelligent Computing and System towards Smart Manufacturing" is to present the latest advances and developments of methods, techniques, systems, and tools dedicated to the applications of Intelligent Computing Science and technology toward smart manufacturing.

## **Subject Coverage**

Topics include, but are not limited to, the following:

- Computational intelligence in smart manufacturing
- Deep learning for smart manufacturing
- Big data driven smart manufacturing system
- Data-driven smart factory and smart production
- Digital twin driven product design, manufacturing and service
- Smart manufacturing service
- CPS (Cyber-Physical Systems)-based manufacturing system
- Internet-of-Things based data collection
- Cloud-based design and manufacturing
- Data-driven robotic in smart factory
- Industrial big data mining algorithms
- Industrial application of big data technology
- Soft computing towards smart manufacturing

## **Important Date**

Submission Due Date: Dec 31, 2017

Fist acceptance Notification: March 1, 2018 Revised manuscript due: April 1, 2018 Final acceptance Notification: June 1, 2018

Final version due: July 1, 2018

Intended publication date: Third Quarter of 2018

#### **Manuscript submission**

Submission of a manuscript implies: that the work described has not been published before. That it is not under consideration for publication anywhere else; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities – tacitly or explicitly at the Institute where the work has been carried out. The Publisher will not be held legally responsible should there be any claims for compensation. Authors are encouraged to highlight the links of their work to the AIHC community, for example, by explicitly mentioning some previously published papers on the AIHC journal.

#### **Permissions**

Authors wishing to include figures, tables, or text passages that have already been published elsewhere are required to obtain permission from the copyright owner(s) for both the print and online format and to include evidence that such permission has been granted when submitting their papers. Any material received without such evidence will be assumed to originate from the authors.

### **Online Submission**

Authors should submit their manuscripts online. Electronic submission substantially reduces the editorial processing and reviewing times and shortens overall publication times. Please follow the hyperlink "Submit online" on the right and upload all of your manuscript files following the instructions given on the screen. During the online submission phase, as the first step, authors have to choose as "Article Type" the entry "S.I. Intelligent Computing and System towards Smart Manufacturing".

## **Journal Information**

Journal of Ambient Intelligent and Humanized Computing (Springer)

Editor-in-Chief: **Prof. Vincenzo Loia** ISSN: 1868-5137 (print version) ISSN: 1868-5145 (electronic version)

Web Site: http://www.springer.com/engineering/journal/12652

## **Guest Editors Details**

#### **Prof. Stefan Wolfgang Pickl**

Department of Computer Science, University der Bundeswehr Munchen, Germany

Email: stefan.pickl@unibw.de

**Prof. Bo Tao**, School of Mechanical Science & Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Email: taobo@hust.edu.cn

**Prof. T. W. Liao**, Department of Mechanical & Industrial Engineering, Louisiana State University, Baton Rouge, LA, 70803 United States

Email: ieliao@lsu.edu

Prof. Fei Tao (Corresponding Guest Editor)

School of Automation Science and Electrical Engineering, Beihang University, Beijing 10091, China

Email: ftao@buaa.edu.cn