Special Issue

Data Quality and Big Data Analytics for Smart Manufacturing

Message from the Guest Editors

Big data analytics, together with emerging technologies such as cyberphysical systems (CPS), the Internet of Things (IoT), and artificial intelligence (AI), are core elements of smart manufacturing (SM). However, due to severe data quality issues, manufacturing firms worldwide are facing substantial challenges and difficulties when developing, implementing, and utilizing big data and AI tools in their smart manufacturing initiatives. This phenomenon has become a major obstacle slowing down the progress of enterprise digital transformation in the Industry 4.0 era. This Special Issue provides a platform for researchers to share their latest research that investigates data quality issues in the SM context, as well as to propose and validate adequate technologies and solutions to deal with these data quality issues, and so ultimately facilitating the utilization of big data analytics and AI in smart manufacturing. We also welcome contributions and applied solutions using innovative algorithms, models, and methods to develop big data analytics and AI applications for smart factories.

Guest Editors

Prof. Dr. Guochao Peng

School of Information Management, Sun Yat-sen University, Guangzhou 510006, China

Dr. Caihua Liu

School of Information Management, Sun Yat-Sen University, No.135, Road Xingang West, Haizhu District, Guangdong Province, Guangzhou 510275, China

Deadline for manuscript submissions

closed (31 December 2021)

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/si/85332

Symmetry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
symmetry@mdpi.com

mdpi.com/journal/symmetry

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/journal/symmetry

About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

Prof. Dr. Sergei Odintsov
1. ICREA, 08010 Barcelona, Spain
2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)

MDPI