

# International Journal of Machine Learning and Cybernetics

(<http://www.springer.com/engineering/computational+intelligence+and+complexity/journal/13042>)



## Special Issue on Machine Learning Approaches and Challenges of Missing Data in the Era of Big Data

### Special issue Guest Editors

Dr. Anand Paul, **(Managing Guest Editor)**  
Kyungpook National University, South Korea  
Email: [paul.editor@gmail.com](mailto:paul.editor@gmail.com)

Dr. Arun Kumar Sangaiah,  
VIT University, Vellore, Tamil Nadu, India  
Email: [arunkumarsangaiah@gmail.com](mailto:arunkumarsangaiah@gmail.com)

Dr. Gwanggil Jeon  
Incheon National University, Incheon, South Korea  
Email: [gjeon@inu.ac.kr](mailto:gjeon@inu.ac.kr)

Dr. You-Shyang Chen  
Hwa Hsia University of Technology, New Taipei City, Taiwan  
Email: [ys\\_chen@cc.hwh.edu.tw](mailto:ys_chen@cc.hwh.edu.tw)

### Aim and Scope

With the proliferation of mobile computing technology in the rapidly growing IoT community we are bombarded with wide variety of data. As information and technology era is gone and now it's for Big Data era were the questions arise about the veracity of the data that are generated. Thus these data are said to be 'missing at random' if the fact that they are missing is unrelated to actual values of the missing data. Missing at Random: There is a pattern in the missing data but not on your primary dependent variables such as likelihood to recommend, Once the data is missed it is vital to recover it by means of various machine learning methods and techniques as we have the historic data and its pattern. Missing

Completely at Random: There is no pattern in the missing data on any variables. Many new techniques have offered very robust and hi-tech solutions for missing data and information analysis, collection, storage. Things get complicated with enormous amounts of valuable data in various formats. Since data are missed completely at random various data mining scheme and technique can be used to perform the task of data recovery. But still there is a challenge of fidelity of the data, how accurate are the data and how to verify its truthfulness and conformity of the facts. So data mining and AI based systems shall be used to evaluate the system. Today's scientists are trying to solve this issue with variety of new techniques and to analyze this data to help them understand their operations and management of data.

This special issue aims to bring together researchers, practitioners, system developers, and all those working in different areas related to Big Data for its sustainability and stability in today world with fast growing technologies, applications. We invite authors to submit original research articles that will enhance our understanding of emerging and innovative technologies and the strategies and methods that contribute to the Machine learning applied to sustainability of Big Data, and data mining in the assessment and management of missing data. We welcome both theoretical contributions as well as papers describing interesting applications. Topics include, but are not limited to:

## Potential topics include

- [Methods to Evaluate and Understand the Missing Data](#)
- [Machine Learning Methods to Duplicate Data](#)
- [Interpolation, Extrapolation, Approximation and other approaches to analyze Missing data](#)
- [Innovative Learning Techniques](#) to handle Missing Data
- [Data Imputation and Pairwise deletion and other Techniques of missing data](#)
- [Historic Learning](#) of Environment and Data Mining for Weather Data
- Mobile and Remote Sensing **Big Data** Evaluation and assessment using Machine Learning
- Infrastructure, organizational issues of Machine Learning for **Big Data** Analytics
- [Reinforcement Learning](#) for Sustainable and reliable **Big Data** analytics
- AI based Cloud for **Big data** architectures and real world applications;
- Case study , Models, methods, and tools for testing for Missing data

## Important Dates

Full paper submission due: **December 31, 2017**

First-round review: **March 15, 2018**

Revised submission due: **May 15, 2018**

Second-round review: **July 30, 2018**

Final paper due: **August 30, 2018**

Publication: **October 1, 2018**

## Submission Guidelines

Paper Submission Authors should follow the instructions given at the International Journal of Machine Learning and Cybernetics website:

<http://www.springer.com/engineering/computational+intelligence+and+complexity/journal/13042>.

All the papers should be submitted via editorial system:

<https://www.editorialmanager.com/jmlc/default.aspx>

Please select the special issue “**ML-Big Data Era**” for your submission. All submissions will undergo initial screening by the guest editors for fit to the theme of the Special Issue and prospects for successfully negotiating the review process.



<http://www.springer.com/journal/13042>

International Journal of Machine Learning and  
Cybernetics

Editors-in-Chief: Wang, X.-Z.; Yeung, D.S.

ISSN: 1868-8071 (print version)

ISSN: 1868-808X (electronic version)

Journal no. 13042