

As the oldest journal of Data Science

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Behaviormetrika, named from a specially coined word, has long provided an international forum for new theoretical and empirical quantitative approaches to human behavior. In *Behaviormetrika*, “behavior” has been used in its broadest sense to encompass all aspects of quantitative methods and their applications to human behavior.

Particularly when *Behaviormetrika* was launched in 1974, the journal advocated “*Data Science*,” an interdisciplinary field that includes the use of statistical methods to extract meaningful knowledge from data in its various forms: either structured or unstructured. To my knowledge, *Behaviormetrika* is the oldest journal addressing the topic of Data Science.

In 1996, the first Editor in Chief of *Behaviormetrika*, Dr. Hayashi, held the International Federation of Classification Societies (IFCS) in Kobe. There, for the first time, the term “data science” was included in a conference title: “Data Science, classification, and related methods”).

Hayashi (1996) described the proceedings as presented below.

“Data Science is not only a synthetic concept to unify statistics, data analysis and their related methods; it also comprises its results. Data Science is intended to analyze and understand actual phenomena with “data.” In other words, the aim of data science is to reveal the features or the hidden structure of complicated natural, human, and social phenomena using data from a different perspective from the established or traditional theory and method.”

Furthermore, since the 1990s, the fields of *Behaviormetrika* have been extended to include artificial intelligence, machine learning, data mining, graphical models, information theoretic approaches, and Knowledge Discovery in Databases (KDD).

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Behaviormetrika also has published many excellent articles related to data science. The top cited five articles as shown by *Google Scholar* are the following.

1. 748 citations: Muthén (2002).
2. 138 citations: Yuan et al. (1997).
3. 126 citations: Efron and Tibshirani (1985).
4. 116 citations: Leray and Gallinari (1999).
5. 69 citations: Chan (2004).

Consequently, *Behaviormetrika* has exerted a strong impact on the Data Science area as an international journal. However, its presence has decreased during the past decade because many new journals of Data Science have been launched, all treating new topics.

To revitalize *Behaviormetrika*, we shall renew and expand the journal subject areas and the editorial board organization from this volume. In addition, two special issues have been included: “Recent Developments in Causal Discovery and Inference” and “Probabilistic Graphical Models and its Applications to Biomedical Informatics.” Both issues specifically address state-of-the-art methods of statistics, machine learning, and data science.

We hope that the new *Behaviormetrika* will provide even more impact than its earlier version has over these many years.

References

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