



**INTERNATIONAL**

**INVITED SESSION SUMMARY—KES-IDT 2018**

**Title of Session:**

Advances in Knowledge-based Statistical Data Analysis

**Name, Title and Affiliation of Chair:**

Mika Sato-Ilic, Professor, University of Tsukuba, Japan  
Vice President, National Statistics Center, Japan

**Name of Co-Chair:**

Lakhmi C. Jain, Founder KES International  
Visiting Professor, Bournemouth University, UK  
Adjunct Professor, University of Canberra, Australia

**Details of Session (including aim and scope):**

Papers are invited on all aspects of statistical data analysis. Intelligent decision technologies comprise a wide range of topics in the field of data analysis development directed at today's constantly-expanding size and complexity of data. Innovative statistical data analysis based on knowledge discovery is also flourishing by building on the foundation of conventional statistical data analysis. Alternatively, computational intelligence has gained recognition for developing innovative methods such as data mining and machine learning techniques for supporting new intelligent based systems.

This session will focus on an examination of current topics dealing with this large and complex data from both the viewpoint of engineering and statistics. We will explore new approaches of fusing innovative statistical analysis with machine learning techniques to work towards a new paradigm of knowledge discovery in data analysis.

The Topics include but are not limited to:

- statistical analysis
- fuzzy logic and fuzzy data analysis
- clustering and classification
- high dimensional data analysis
- multivariate analysis
- hybrid techniques for data analysis

Important dates

Submission of papers: 10 January 2018  
Notification of acceptance: 10 February 2018  
Final paper publication files to be received: TBA

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