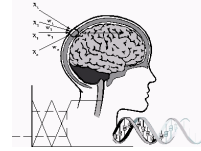




# International

*Innovation in Knowledge Based and Intelligent  
Engineering Systems*



## INVITED SESSION SUMMARY

### Title of Session:

**Outlier detection in real data**

### Name, Title and Affiliation of Chair:

Assoc. Prof. **Agnieszka Nowak-Brzezińska**, Institute of Computer Science, Faculty of Science and Technology, University of Silesia, Poland

Assoc. Prof. **Agnieszka Duraj**, Institute of Information Technology, Faculty of Technical Physics, Information Technology and Applied Mathematics, Lodz University of Technology, Poland

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

Detection of outliers is the basis for decision-making processes, classification, grouping, and methods of intelligence. The problem of anomaly detection encompasses a wide spectrum of applied methods.

Outlier detection in real data is a topic that includes algorithms for Outlier detection in medical, economic, textual, and many other fields.

The detection of outliers applies to such issues as identifying unusual financial operations, atypical disease symptoms, or unique messages (e.g., unsolicited spam in e-mail boxes, but also uncommon words/phrases in large text documents).

We are looking for papers with new proposals for outlier detection algorithms, modifications of existing algorithms, papers presenting new applications of deviation detection, and articles on creating systems/applications supporting the identification of unusual data.

It is also an opportunity for exchanging and diffusing innovative and practical experience in this field.

Recently, numerous Outlier detection is related to COVID-related data. We kindly encourage you to submit Works based on COVID 19 data and other real data sets.

The scope of the Session includes, but is not limited to, the following issues:

- Probabilistic and statistical models for outlier detection
- Grade correspondence analysis for outlier detection
- Outlier detection based on distance, density, depth, deviation, etc.
- Evolutionary algorithms for outlier detection
- Outlier detection in categorical, text, mixed attribute data, stream data, image sequences

- Outlier analysis in graphs, networks
- Outlier detection in big data
- Multi-label and fuzzy classification in Outlier detection
- Application of outlier analysis in biomedicine and healthcare
- Application of outlier analysis in economy

**IMPORTANT DATES:**

- Paper submission deadline: **23 April 2021**
- Notification of Acceptance: 10 May 2021
- Camera ready: 1 June 2021

**Publication:**

The conference proceedings will be published in Elsevier's Procedia Computer Science open access journal, available in ScienceDirect and submitted to be indexed/abstracted in CPCi (ISI conferences and part of Web of Science), Engineering Index, and Scopus.

**KES Conference is indexed in CORE (cat. B) and MNISW List in Poland (item 841, 70 points).**

<http://kes2021.kesinternational.org/>

25th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems  
Szczecin, September 2021

**Main Contributing Researchers / Research Centres (tentative, if known at this stage):**

**Website URL of Call for Papers (if any):**

**Email & Contact Details:**

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