



INVITED SESSION SUMMARY

Title of Session:

Interdisciplinary Approaches in Data Science Practice (IADSP 2024)

Name, Title and Affiliation of Chairs:

Prof. Ivan Luković, University of Belgrade, Serbia Prof. Ralf-Christian Härting, University of Aalen, Germany,

Details of Session:

One of the hot issues in many organization systems is how to transform large amounts of daily collected operational data into the useful knowledge from the perspective of declared company goals and expected business values. The main concerns of this invited session are Data Science paradigms, as a set of theories, methodologies, processes, architectures, and technologies that transform raw data into meaningful and useful information, knowledge, and value. Various interdisciplinary oriented Data Science approaches may



provide organizations the ability to use their data to improve quality of business, increase financial efficiency and operational effectiveness, conduct innovative research and satisfy regulatory requirements. Applications of appropriate Data Science implementation methodologies together with outcomes related to collaborative and interdisciplinary approaches are inevitable when applying Data Science approaches to large and complex organization systems. For many years, such interdisciplinary approaches were used in analyzing big data gathered from not only business sectors, but also public, non-profit, and government sectors.

The main goal of the session is to attract researchers from all over the world who will present their contributions, interdisciplinary approaches or case studies in the area of Data Science. The focus in Data Science may be set to various aspects, such as: data warehousing, reporting, online analytical processing, data analytics, data mining, process mining, text mining, predictive analytics and prescriptive analytics, as well as various aspects of machine learning, big data and time series analysis. We express an interest in gathering scientists and practitioners interested in



applying Data Science approaches in public and government sectors, such as healthcare, education, or security services, as well as in industry sectors and Industry 4.0 approaches. Experts from all other sectors are also welcomed.

Submissions are expected from, but not limited to the following topics:

- Artificial Intelligence, Machine Learning, Deep Learning Theoretical and practical aspects
- Data quality assessment and improvement: preprocessing, cleaning, and missing data
- Data Science and Analytics for Healthcare and other Public Sectors
- Educational Data Science
- Impacts of Business Analytics for the performance of profit or non-profit organizations
- Implications of Blockchain for Data Science
- Information Visualization and Visual Analytics
- Process Mining, Pattern Mining, and Swarm Intelligence
- Semi-structured or unstructured data in Business Intelligence systems
- Social network Data Analysis

- Statistical analysis and characterization, predictive analytics and prescriptive analytics
- Teaching new approaches of Data Science in academic and industrial environments
- Theoretical and practical aspects, Applications and Industry Experience in Data Science
- Web survey methods in Business Intelligence and Data Science

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

University of Belgrade, Faculty of Organizational Sciences Aalen University, Faculty of Management and Business Sciences

Website URL of Call for Papers (if any):

http://kes2024.kesinternational.org/cmsISdisplay.php

Email & Contact Details:

| Ivan Luković | ivan.lukovic@fon.bg.ac.rs |
|--------------|---|
| | https://fon.bg.ac.rs/nastavnici/ivan-lukovic/ |

Ralf-Christian Härting: Ralf.Haerting@hs-aalen.de https://www.hs-aalen.de/en/users/173