Preface: International Workshop on Data Analytics

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Abstract

This document is the preface of the International Workshop on Data Analytics (WDA), January 6, 2025, held at State University "Kyiv Aviation Institute", Kyiv, Ukraine.

Keywords

data analytics, data processing, computer science, big data, software

1. Preface

The international workshop on Data Analytics (WDA'25) took place on January 6, 2025, at the State University "Kyiv Aviation Institute" (Kyiv, Ukraine). Data is the primary source of information used in various scientific studies. Modern information technologies are grounded on lots of data to get reliable results. Modern systems and applications are grounded on collecting data from various sensors to provide fusion and collaborative decision-making. Decision support in medicine, transportation, agriculture, economics, finance, and sociology grounded on deep data analytics. Workshop is aimed to collaborate scientists in data analytics to represent their scholarly results and share their knowledge with workshop participants.

Special attention is given to practical aspects of specialized software development oriented on data analytics. Workshop covers software conceptualization, database structure for Big Data support, code optimization to improve the efficiency of software-database exchange, efficient visualization of data sets, and front-end user interface in data analysis software.

WDA was mainly organized by professors of the Laboratory of Computerized Systems for the solution of general navigation problems (GenNavLab) Ivan Ostroumov and Maksym Zaliskyi at the State University "Kyiv Aviation Institute".

Members of research teams working on data processing algorithms for aviation industry, in particular for communication, navigation, and surveillance systems, share their knowledge and skills, disseminate obtained scientific results in machine learning, deep learning, artificial intelligence, decision-making, algorithmic support systems during air traffic control, equipment operation and maintenance, and other interest problems of data processing methods application.

The main conference topics include:

- Data collection;
- Outliers detection in data;
- Algorithms of data processing and analysis;
- Exploratory data analysis;
- Data modeling;
- Data mining;
- Big data processing;

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- Data fusion;
- Artificial intelligence;
- Software for data analytic;
- Data visualization.

The WDA'25 was in a virtual format with a Google Meet platform. WDA'25 collaborate scientist from Ukraine, Germany, France, Canada, Indonesia, and China. The workshop took the form of oral presentations of peer-reviewed regular papers.

WDA'25 received 7 submissions in total. All papers were reviewed by two reviewers. Out of these, 6 papers were accepted for this volume, all as regular papers.

All our team invites you to visit the WDA'25 workshop website https://www.ans.nau.edu.ua/WDA where you can find all the relevant information about this event.

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