



1ST INTERNATIONAL CONFERENCE ON THE FRONTIERS AND ADVANCES IN DATA SCIENCE (FADS) XIAN, 23-25 OCTOBER 2017

CALL FOR PAPERS

Our lives and society have been transformed by advances in modern information and communication technologies. Devices such as mobile phones and tablets and applications such as social networks have changed how we interact with the world around us and each other and the way we conduct business, government and science. With computational technologies permeating almost all aspects of human activity, the amount of data being generated is constantly increasing and we are surrounded by a wealth of new forms of data. We are at the cusp of a new data and information revolution.

This proliferation of data calls for novel, multi and interdisciplinary approaches in data science and analytics to tackle the problems that data pose. New approaches for harnessing data and drawing insights will bring huge benefits to fields as diverse as health, finance, running smarter cities, the environment, business and public policy.

The First International Conference on Frontiers and Advances in Data Science (FADS) will bring together scientists, professionals, industry practitioners and users from range of disciplinary backgrounds and application domains to share knowledge and the latest developments in data science and analytics.

We invite the submission of original and previously unpublished theoretical and practical work in all fields of data science and analytics including methodologies and techniques for big data. All submissions will be reviewed by at least two members of the Program Committee on the basis of novelty, technical quality, and relevance to the conference theme, significance, and clarity of presentation. Accepted papers will be submitted for inclusion into IEEE Xplore. The IEEE Xplore proceedings will be submitted for inclusion to Elsevier EI for indexing.

We are in the process of arranging special issues in the Journal of Future Generation Computer Systems and the Journal of Information Processing and Management. Selected papers from the conference and special sessions will be invited for submission for the special issues.

Further information is available from the FADS 2017 website <http://www.fads.org.uk/>

FADS welcomes submissions on (but not limited to) the following topics:

Data Science Foundations

- Machine Learning
- Mathematical and statistical models
- Novel theoretical models
- Computational Models
- Preprocessing and dimensionality reduction
- Efficiency and complexity
- Optimization

Analytics

- Multi-stream reasoning and analytics
- Text analysis and mining

- Causal inference
- Visualisations
- Modelling complex and big data
- Personalization analytics and recommender systems
- Social network analytics
- Multimedia/image processing and analytics
- Information retrieval and search
- Semantic information extraction and reasoning

Data Infrastructure and Management

- New data standards
- Data cleansing
- Data integration
- Data sharing
- Data linkage
- Data curation and publishing
- Cloud/Grid/Stream Computing architectures
- Distributed and parallel/high performance processing
- Data warehouses
- Open platforms for analytics
- Big data architectures and platforms

Security, governance and privacy

- Governance
- Intrusion, anomaly and threat detection
- Data integrity
- Data security and risk
- Trust and trust management
- Privacy preserving techniques and anonymization
- Privacy protection standards and policies
- Legal aspects of analytics and big data

Social and economic aspects

- Ethical considerations in the era of analytics and big data
- New business models
- Sociological aspects of analytics and big data
- Analytics and big data for sustainable development
- Analytics and big data for the social good

Applications

- Scientific applications of analytics and big data
- Internet of Things
- Internet of Persons
- Smart Cities and Transport
- Business and Finance Analytics
- Healthcare analytics and decision support
- Decision making and support systems
- Analytics and big data for policy making and the public sector
- Social networks and applications
- Industrial applications of analytics and big data
- Analytics for telecommunications and networks applications

We also invite papers for the following special sessions (please note different deadline; for further information please refer to the FADS website). Papers accepted under the special sessions will be included in the conference proceedings and submitted for inclusion into IEEE Xplore.

Special Sessions

- Blockchain technology
- Task Scheduling in Cloud Computing
- Cloud Data Governance
- Internet of Things
- Manufacturing Informatics
- Data Science and Cloud Computing

IMPORTANT DATES

Paper Submission deadline: 10th August 2017

Special Sessions deadline: 20th August 2017

Notification of acceptance: 5th September 2017

Camera-ready Manuscript: 15th September 2017

Registration deadline: (for accepted papers): 15th September 2017

For more information, please visit the FADS webpage: <http://www.fads.org.uk/>

CONFERENCE ORGANISATION

General Chairs

- Prof Maria Fasli, UNESCO Chair in Analytics and Data Science, University of Essex
- Prof Peng Jinye, Dean of School of Information Science and Technology, Northwest University

Program Chairs

- Prof Hangzai Luo, Northwest University, China
- Prof Frank Wang, University of Kent, UK
- Prof Mohammad Essaaidi, ENSYAS, Morocco
- Prof Bruce Bassett, University of Cape Town; AIMS, South Africa

Publicity and Publication Chairs

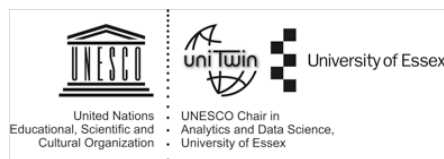
- Dr Daniel Karapetyan, University of Essex, UK
- Dr Laith Al-Jobouri, University of Essex, UK

Special Sessions Chair

- Dr Elhadj Benkhelifa, Staffordshire University

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