

IFKAD
International Forum on Knowledge Asset Dynamics

28 - 30 JUNE 2027

IFKAD 2027

22nd International Forum on Knowedge Asset Dynamics

University of Basilicata, Matera, Italy

The Ecology of Knowledge in the AI Era

CALL FOR EXTENDED ABSTRACTS - IFKAD 2027
www.ifkad.org

Special Track n.: 40

Language Precision in Mission-Critical Systems

Description

In the era of pervasive artificial intelligence, the integration of language and precision into Mission-critical systems is becoming a decisive factor for organisational value creation. This special track proposes to explore the problem of constructing robust, determinist and quality-oriented linguistic AI systems, for applications where the precision of results is critical. Such problems are at the heart of the emerging field of linguistic operating systems—software platforms that embed controlled natural language, semantic AI, and normative Data standards to enable seamless Human-machine dialogue, Data governance, and real-time decision support.

The special track will address the following scholarly and managerial challenges:

- Designing linguistic processing systems that aim at supporting multilingual, domain-specific controlled natural language interfaces for Data governance.
- Integrating semantic AI models with ISO/IEC 8000 Data quality standards to guarantee consistency and traceability across distributed Data ecosystems.
- Preserving auditability and regulatory compliance (GDPR, FINMA, etc.) for Mission-critical systems.
- Evaluating the impact of linguistic precision on decision quality, risk mitigation, and organisational resilience in high-stakes environments such as finance, healthcare, and critical infrastructure.
- Exploring governance models that balance Human oversight with automated linguistic reasoning, thereby safeguarding Human judgment and dignity.

By bringing together linguists, data scientists, AI ethicists, and industry practitioners, the track will foster interdisciplinary dialogue that advances both theory and practice.

Indicative Topics

- Controlled natural language design for Data governance
- Semantic interoperability between linguistic OS and ISO/IEC 8000
- Real-time natural language inference in Mission-critical workflows
- Audit trails and traceability in linguistic AI systems
- Human-centered governance of linguistic operating systems
- Multilingual support and cultural adaptation in Data Excellence
- Regulatory compliance and ethical considerations in linguistic AI
- Performance evaluation of linguistic OS in high-stakes domains
- Usage of linguistic knowledge systems, or of system embedded linguistic assets, in organisations, networks and teams

Keywords

Data Excellence, Mission-Critical Systems, Precision-oriented methods, Linguistic Knowledge, Semantic AI

Organizers

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Iana Atanassova – Université Marie et Louis Pasteur, France
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Follow this link to see the Special Track details on IFKAD website ››

Guidelines and Requirements

Researchers wishing to contribute are invited to submit an EXTENDED ABSTRACT (in MS Word format) of min 500 and max 1000 words, not later than **22 JANUARY 2027**. All submission must be done via dedicated form on our website. The abstract should address theoretical background, research objective, methodology, and results in terms of expected contribution to Knowledge Management theory and practice.
Authors are required to follow the guidelines and templates available on IFKAD website: www.ifkad.org

Important Dates

22 January 2027 – Extended Abstract Submission Deadline
19 February 2027 – Acceptance Notification to Authors
16 April 2027 – Early-Bird Registration & Payment Deadline
23 April 2027 – Full Paper Submission Deadline
28 May 2027 – Regular and PhD Students Registration & Payment Deadline
12 June 2027 – Conference Program Release
28-30 June 2027 – Conference sessions *(to be considered as 3 full working days)*

Please note that all above indicated dates are **CUT-OFF** deadlines. There will not be an extention to any of these.

Further Information

For any information related to the conference and/or any special track, please see the event website at www.ifkad.org or contact the conference manager at **info@ifkad.org**