



# Knowledge Graph 4S Semantics-driven Systems Engineering



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 **Submission Deadline**  
 18. March 2024 **EXTENDED**

 **Decision Notification**  
 01. April 2024

 **Limassol, Cyprus**  
 03./04. June 2024

## Workshop Chairs:

Robert Buchmann, Babeş-Bolyai University, Romania  
 Dimitris Karagiannis, University of Vienna, Austria  
 Dimitris Plexousakis, Institute of Computer Science (FORTH), University of Crete, Greece

## Workshop Program Committee

To be announced soon.

## Relevant Topics:

- Systems Engineering benefits of the interplay between KG and Large Language Models
- KG for enhancing Large Language Models or their prompting
- Large Language Models for populating or refining KG
- Information Systems engineering methods based on KG
- Application scenarios for KG
- KG as mediators between data, stakeholders and software
- KG for model-driven engineering
- Linking, transforming or augmenting domain-specific models with KG
- KG informed by system theories and system engineering conceptualizations
- KG embeddings and graph neural networks
- Requirements engineering based on KG
- System design and analysis augmented by KG
- KG for Digital Twins and digital-first artifacts
- Human-oriented low-code KG building
- Empirical studies and experience reports on KG-based information systems

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**GOAL:** to stimulate research and experience reports on how Knowledge Graphs can add context and flexibility to information systems, compensating for the semantic loss of system design methods or for the logical flaws of large language models, ultimately enabling semantic enrichment and reasoning capabilities in information systems operation or engineering processes.

**FOCUS:** how Knowledge Graphs can be relevant to Information Systems engineering.

## OBJECTIVES:

- Investigate the place of Knowledge Graphs in the Conceptual Modeling paradigm and how they can enable new flavors of model-driven engineering.
- Discuss application scenarios and engineering methods benefitting from Knowledge Graphs.
- Explore the interplay between Knowledge Graphs, Large Language Models and other AI ingredients.

## Submission via EasyChair (in Springer's LNCS/LNBIP format) of

- **FULL PAPERS** which can be regular research or experience papers (10-12 pages) or
- **SHORT PAPERS** which can be position or vision papers (6-9 pages)



## Contact Us

[kgworkshop@omilab.org](mailto:kgworkshop@omilab.org)



## Web Presence Chair

Iulia Vaidian, OMiLAB/Uni. Vienna, Austria