Preface

Message from the RAGE-KG Chairs

With the rise of LLMs and GenAI, KGs have taken center stage as the technology enabling production-ready GenAI applications, with Gartner placing them beside GenAI at the center of its Impact Radar. The trend has also been reflected in academic publications: notably, of all contributions accepted at ISWC 2024 [1] (excluding the special LLM track), 41% of papers discussed LLM and 15% RAG use. In this context, RAGE-KG is the academic venue specifically focusing on RAG with Knowledge Graphs, the underlying architectures, their interplay with Semantic Web standards and applications in the field. In 2024, the workshop received 14 submissions in total, from which 8 were finally accepted as publications included in the proceedings. During the peer review process, each contribution received 3/4 reviews.

While the workshop was initially motivated by the ability of RAG pipelines to address shortcomings of LLMs (e.g., hallucinations, knowledge cut-off), the prominence of the underlying subject has proven long-lived. Increasingly more contributions in the field of Semantic Web make use of the technology for knowledge and information extraction, entity disambiguation, knowledge graph construction and completion, SPARQL query generation, ontology learning and other domain-specific applications [1]. Today, new developments in Agentic RAG, GraphRAG, knowledge-supported reasoning and the broad adoption of knowledge extraction with RAG also show the evolution of the research field beyond its initial scope. Following its successful inaugural edition, the workshop now aims to establish itself as a permanent venue for facilitating cutting-edge research and innovation in the field. Most importantly, its success is a direct achievement of the outstanding programme committee members and their dedicated, thorough and timely work.

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References

[1] G. Demartini, K. Hose, M. Acosta, M. Palmonari, G. Cheng, H. Skaf-Molli, N. Ferranti, D. Hernández, A. Hogan (Eds.), The Semantic Web – ISWC 2024: 23rd International Semantic Web Conference, Baltimore, MD, USA, November 11–15, 2024, Proceedings, Part I, volume 15231 of *Lecture Notes in Computer Science*, Springer Nature Switzerland, Cham, 2025. URL: https://link.springer.com/10. 1007/978-3-031-77844-5. doi:10.1007/978-3-031-77844-5.

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See: https://www.gartner.com/en/articles/understand-and-exploit-gen-ai-with-gartner-s-new-impact-radar

 $^2 Workshop\ website:\ https://2024.rage-kg.org/$

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