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Knowledge Graphs

14th International Joint Conference, IJCKG 2025
Heraklion, Crete, Greece, October 15–17, 2025
Proceedings

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Tokyo, Japan

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Heraklion, Greece

Shizhu He
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TIB - Leibniz Information Centre for Science
and Technology
Hanover, Germany

Ernesto Jiménez-Ruiz 
University of London
London, UK

Xin Wang 
Tianjin University
Tianjin, China

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Preface

The 14th International Joint Conference on Knowledge Graphs (IJCKG 2025) was a premium academic forum on Knowledge Graphs. The mission of IJCKG 2025 was to bring together researchers in the international Knowledge Graph community and other related areas to present their innovative research results or novel applications of Knowledge Graphs. IJCKG 2025 took place for the first time in Europe, hosted by the Institute of Computer Science at the Foundation for Research and Technology - Hellas (FORTH) in Heraklion, Crete, Greece.

The IJCKG 2025 conference featured a rich program, spanning 3 full days.

The program included 3 keynote presentations, namely:

- Pascal Hitzler (Kansas State University, USA): “Knowledge Graphs in the Neurosymbolic AI Age”
- Katja Hose (TU Wien, Austria): “Sharp Edges in a Fuzzy World: Knowledge Graphs and LLMs”
- Kang Liu (Institute of Automation, Chinese Academy of Sciences, China): “Shuttle between Symbolic Knowledge and Neural Parameters”

Two additional invited talks were included in the program, by

Manolis Koubarakis (National and Kapodistrian University of Athens, Greece) and Dimitris Angelakis (Technical University of Crete, Greece). The program also featured 3 tutorials, namely the following:

- Yannis Marketakis (Foundation for Research and Technology - Hellas, Greece): “Building Interoperable Knowledge Graphs with X3ML Framework”
- Paolo Pareti (University of Southampton, UK): “The Shapes Constraint Language (SHACL): an Overview and its Future Directions”
- George Stamatiou (Foundation for Research and Technology - Hellas, Greece): “Introduction to Quantum Computing”

A novelty of IJCKG 2025 was the evaluation challenge track, which featured different evaluation challenges. An evaluation challenge consists of a platform, dataset, and/or evaluation plan and solicits submissions that solve this challenge. In IJCKG 2025, there was one evaluation challenge titled “Archer: Bilingual Reasoning-aware Text-to-SQL Evaluation”, organized by Jeff Pan (University of Edinburgh, UK), Zhichao Yan (Shanxi University, China), and Wenyu Huang (University of Edinburgh, UK).

The conference provided various networking opportunities for our community, through the young scholar forum, the industry forum, the PhD and PostDoc symposium, the poster and demo session, and the social dinner. IJCKG 2025 also hosted two workshops:

- Knowledge Graphs in Cultural Heritage, organized by Dimitris Kotzinos (CY Cergy Paris University, France), Sorin Hermon (The Cyprus Institute, Cyprus), and Maria Theodoridou (Foundation for Research and Technology – Hellas, Greece)

- Quantum Computing and Data and Knowledge Management, organized by Yannis Tzitzikas (University of Crete and Foundation for Research and Technology – Hellas, Greece), Haridimos Kondylakis (University of Crete and Foundation for Research and Technology – Hellas, Greece), and José Manuel García Alonso (University of Extremadura, Spain)

We received 74 submissions in total. From these, 17 papers were accepted for the research track, 5 papers for the education track (2 of which were short papers), 5 papers for the in-use track, 7 for the poster and demo track (all of which were short papers), 3 workshop papers, and 2 short papers for the evaluation challenge track. All these papers appear in the current volume, which was edited by the PC chairs and the respective track chairs, and its production orchestrated by the publication chair and the general chairs.

We took all reasonable measures to ensure a fair and efficient review process, using the Easychair conference management system. We opted for a single-blind peer-review process, employing 94 reviewers for all tracks, as well as 9 external reviewers (103 in total). Each reviewer was assigned 1.94 reviews on average, whereas each paper received an average of 3.24 reviews.

To ensure unbiased reviews, the reviewers were asked to provide conflicts of interest, and additional conflicts were put in place by the PC Chairs to ensure that no missing conflicts could cause bias in the reviewing process. We also used the restrictions imposed by Easychair, e.g., that PC members had no access to the reviews of their own papers. The final assignments were checked by the PC Chairs to ensure a fair reviewing process.

IJCKG 2025 would like to thank our sponsors and supporters for their generous contributions. We would also like to acknowledge the help of the local chairs and the website chair for their invaluable support in many practical matters pertaining to the conference including help with the Easychair platform, and, of course, all the members of the organizing committee and the reviewers who contributed their precious time to support the organization of this conference.

September 2025

Hideaki Takeda
 Yannis Tzitzikas
 Giorgos Flouris
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