#### Call for Contributions

- 1. Inform the Chair
- 2. Submission URL:

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=eKNOW+2024+Special

Please select Track Preference as KG-XAI

**3. Note:** For 2024, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.

## Special track

# KG-XAI: Knowledge Graphs and Explainable AI

#### Chair

Assoc. Prof. Dr. Enayat Rajabi, Cape Breton University, NS, Canada Senior Researcher in Machine Learning, Halmstad University, Sweden <a href="mailto:enayat\_rajabi@cbu.ca">enayat\_rajabi@cbu.ca</a>

### Co-Chair

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along with

eKNOW 2024, The Sixteenth International Conference on Information, Process, and Knowledge Management <a href="https://www.iaria.org/conferences2024/eKNOW24.html">https://www.iaria.org/conferences2024/eKNOW24.html</a> May 26, 2024 to May 30, 2024 - Barcelona, Spain

The Semantic Web technologies structure data, extract features, and identify relationships in a system. Knowledge graphs are among the more attractive concepts associated with the Semantic Web. This huge semantic net integrates heterogeneous information sources to represent knowledge about specific domains of discourse. Knowledge in knowledge graphs is described in a graph and allows a machine to provide meaningful answers to queries ("questions") via reasoning and inference. The combined use of knowledge graphs and AI can make systems more transparent and interpretable, as machine learning models can help extract relations, features, and entities and infer new concepts. Knowledge graphs can be used to answer questions, understand images, and retrieve information, all relevant aspects of many types of research. Recently, knowledge graphs have been used with explainable AI.

Explainability in AI typically refers to any technique that helps the user of a machine learning model understand the model's behaviour and performance. Explainability makes an AI system more understandable, transparent, interpretable, auditable, and responsible while reducing risks. Many researchers have developed several eXplainable AI (XAI) systems capable of generating explainable models or predictions, thus enabling users to understand the AI system and its decisions better. Knowledge graphs can be leveraged at different stages in the AI development pipeline for explainability. They can be used before (pre-modelling explainability), during (explainable modelling), or after (post-modelling explainability) AI modelling. In this special track, although we look forward to studies leveraging knowledge graphs for explainability, the focused topics can be any of the following.

### Topics include, but not limited to

- Explainable AI and knowledge graphs
- Semantic Web technologies for explainability
- Ontologies and Explainable AI
- Interpretability, trust, and knowledge graphs
- Explaining AI models using knowledge graphs construction
- Knowledge graph applications in AI
- Knowledge graphs and NLP for explainability

## **Contribution Types**

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

## **Important Datelines**

Inform the Chairs: As soon as you decide to contribute

Submission: April 10 Notification: April 28 Registration: May 8 Camera-ready: May 8

Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the

chair.

### **Paper Format**

- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules: http://www.iaria.org/editorialrules.html

#### **Publications**

- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: http://www.thinkmind.org

### **Paper Submission**

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=eKNOW+2024+Special

Please select Track Preference as KG-XAI

### Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

#### **Contacts**

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