

KM Conference 2021

30 June - 2 July 2021, HfTL University, Leipzig, Germany

Themes: Knowledge Management, Cybersecurity, Learning, and Information Technology

<https://iiakm.org/conference/>

2nd Day Opening Keynote Lecture

Managing Industrial and Research Information using Knowledge Graphs

Professor Dr. Sören Auer

Director TIB, Head of research group Data Science and Digital Libraries, Leibniz Universität Hannover, Germany

Keynote Overview:

The availability of large-scale datasets has unleashed an enormous potential of making computers smarter and gave rise to cognitive computing. In order to realize the potential of Artificial Intelligence (AI) a common understanding of the structure and meaning of data (e.g. to be used as training or evaluation data) must be established. We can leverage vocabularies, Linked Data, knowledge graphs or Semantic Data Lakes for that purpose. In this talk we give an overview on recent approaches in the area of data spaces and knowledge graphs, which all help to realize the emerging concept of hybrid AI, where large-scale, rich semantic data and knowledge tightly interacts with machine learning and analytics. We discuss some enterprise applications and present with the Open Research Knowledge Graph a use case and approach for semantically describing and organizing scientific contributions to empower researchers to master the flood of static scientific publications.

Main Topics:

- Large-scale datasets
- Data spaces and knowledge graphs
- Hybrid Artificial Intelligence (AI)
- Open Research Knowledge Graph

About the Keynote Presenter:

Following stations at the universities of Dresden, Ekaterinburg, Leipzig, Pennsylvania, Bonn and the Fraunhofer Society, Prof. Auer was appointed Professor of Data Science and Digital Libraries at Leibniz Universität Hannover and Director of the TIB in 2017. Prof. Auer has made important contributions to semantic technologies, knowledge engineering and information systems. He is the author (resp. co-author) of over 100 peer-reviewed scientific publications. He has received several awards, including an ERC Consolidator Grant from the European Research Council, a SWSA ten-year award, the ESWC 7-year Best Paper Award, and the OpenCourseWare Innovation Award.



He has led several large collaborative research projects, such as the EU H2020 flagship project BigDataEurope. He is co-founder of high potential research and community projects such as the Wikipedia semantification project DBpedia, the OpenCourseWare authoring platform SlideWiki.org and the innovative technology start-up eccenca.com. Prof. Auer was founding director of the Big Data Value Association, led the semantic data representation in the Industrial/International Data Space, is an expert for industry, European Commission, W3C and member of the advisory board of the Open Knowledge Foundation.