

Call for Papers 8th AI4KM (Artificial Intelligence for Knowledge Management), supported by IFIP WG 12.6. **Co-located with IJCAI 20, Yokohama,** <https://www.ijcai20.org/>

Covid update - the most likely scenario for this event would be in Kyoto from January 5-10, 2021

The first AI4KM was organized on ECAI 2012 and the second on Fedcsis 2014 in Warsaw. From 2015 AI4KM has become collocated event with IJCAI: the third AI4KM took place @IJCAI 2015 in Buenos Aires, Argentina, 4th on IJCAI 16 in New York, 5th on IJCAI 17, Melbourne, 6th on IJCAI 18 in Stockholm and the last on IJCAI 19, Macao.

Format: One day. Program includes invited talk, presentations, discussion, final discussion and plans for future.

Scope and Objectives

Knowledge management is a large multidisciplinary field having its roots in Management and Artificial Intelligence. AI brought the way of thinking, knowledge modelling, knowledge processing, problem solving and decision support techniques. It is vital for successful innovation, environmental challenges, smart cities, industry 4.0 etc.

Knowledge is one of intangible capitals that influence the performance of organizations and their capacity to innovate. Since the beginning of the KM movement in the early nineties, companies and non-profit organizations have been experimented various approaches, often without using AI. On the contrary, the new generation of KM applications are implementing multi agent systems, hybrid simulations, meta-heuristic quantifiers, fuzzy logics, Bayesian networks, meta heuristic algorithms, unsupervised learning, case based or model based scheduling, cognitive modelling, graphical models, automated reasoning and solutions under uncertainty.

The objective of this multidisciplinary session is to gather both researchers and practitioners to discuss methodological, technical and organizational aspects of AI used for knowledge management and to share the feedback on KM applications using AI. Knowledge management models used in Business Intelligence, expert systems as management advisors, virtual training for knowledge sharing, all applications of machine learning to support innovation and eco-innovation, knowledge visualization for improving the creativity and human-machine interfaces, image mining making links between data and images ex bio-detection are good examples of multidisciplinary applications.

Researches and practitioners are invited to submit their recent advances in methodologies, models and tools for managing knowledge in organizations and to discuss experiences in knowledge management and innovation. Let it be the development of non-convex, nonlinear problem solutions or a painting game played to find out gaps in global security used for knowledge management.

The conference topics include (but are not limited to):

conceptual modelling, reasoning methods, knowledge capitalization, knowledge discovery in data and multimedia documents, effective information and knowledge search, decision support systems, problem solving, optimisation of human capital and other resources, managing of best practice, risk management, simulation, learning systems including serious

games, human-machine interfaces, Knowledge in social networks, distributed knowledge, Knowledge Management for design, creativity enhancing systems, support of innovation and eco-innovation process innovation and eco-innovation process, intelligent assistant of knowledge cultivators. The applications to innovation and eco-activities, AI applications supporting sustainable development are very welcome.

This conference form will be:

- Presentations of peer-reviewed papers, including discussions
- Final discussion on needs and challenges for the future

Paper Submission and Publication

- Authors should submit papers in Springer format as PDF on easychair 7th AI4KM

<https://easychair.org/conferences/?conf=8thai4km>

or send to eunika@innovation3d.fr

Accepted and presented papers will be published in electronic proceedings on <http://ifipgroup.com/> linked to IJCAI website.

- Extended versions of selected papers presented during the conference will be published in Springer AICT series.

Important Dates

- Paper submission **deadline July 31, 2020**
- Notification of acceptance/rejection: September 15, 2020
- Camera-ready version deadline: September 30, 2020
- Conference January 5-10, 2021 <https://www.ijcai20.org/workshops.html>

Organizing Committee:

Eunika Mercier-Laurent email: eunika.mercier-laurent@univ-reims.fr

Mieczyslaw Lech Owoc email Mieczyslaw.Owoc@ue.wroc.pl

Local members (TBD)

Members of program committee:

Danielle Boulanger, Lyon3 University, France

Anne Dourgnon, EDF, France

Knut Hinkelmann, Univ of Applied Sciences, Switzerland

Otthein Herzog, TZI - Universitaet Bremen, Germany

Antoni Ligeza, AGH, University of Science and Technology, Poland

Helena Lindskog, University of Linkoping, Sweden

Nada Matta, UTT, France

Mieczyslaw L. Owoc, Wroclaw University of Economics, Poland

Vincent Ribiere, IKI, Thailand

Abdul Sattar (Griffith University, Australia)

Frederique Segond, INRIA, France

Michael Stankosky, George Washington University, USA

Guillermo R. Simari (Universidad Nacional del Sur, Argentina)

Hirochi Takeda TBC

Mario Tokoro (Sony CSL, Japan)

Eric Tsui (Polytechnic University HK)

Janusz Wojtusiak (George Mason University, Fairfax, USA)