Aims and Scope

Knowledge Based Systems (KBS) have been successfully developed in various domains based on techniques and tools from Knowledge Engineering (KE). The classic KE approach to system modelling uses mostly symbolic logic-based symbolic knowledge representation methods, which are more specific from Artificial Intelligence (AI) in a broad sense, that has recently included computational intelligence techniques. Since most of the implementations of today KBS are software based, Software Engineering (SE) methods and tools play an important role in their development. Moreover, recent developments in SE emphasize the importance of the use of formalized symbolic representations in the software development process.

This stimulates the synergy between KE methods and SE methods and tools. Thus, declarative software engineering techniques have been established in many areas, such as knowledge systems, logic programming, constraint programming, and lately in the context of the Semantic Web, business rules as well as business processes.

The primary objective of the workshop is to bring together researchers and practitioners from fields of KE and SE. Moreover the workshop endeavors to promote the use of KE techniques in SE problems; on the other hand, the influence of SE methods and tools on the practical design of KBS within KE.

The principal focus of the Workshop is on methods of Knowledge Engineering rooted in the symbolic logic-based representations and their novel applications in Software Engineering. Moreover, a synergistic use and development of these KE methods together with recent formalized and declarative SE methods, including Model-Driven Architecture and Development, ontological modelling as well as Business Process modelling is emphasized. Finally, the studies of the impact of these SE methods on the classic KE development processes are welcomed. The intention is to give ample space for exchanging latest research results as well as knowledge about practical experience.

The previous KESE Workshops have been annually organized at the German Conference on Artificial Intelligence (KI) since 2005, and in 2011 at the Conference of the Spanish Association for Artificial Intelligence (CAEPIA 2011).

Topics of Interest

Topics of the workshop are generally related to the applications of symbolic KE techniques in SE as well as the use of KE in the SE practice.

Specific topic the areas include but are not limited to:
• Knowledge and software engineering for the Semantic Web
• Ontologies in practical knowledge and software engineering
• Business Rules design, management and analysis
• Business Processes modelling in KE and SE
• Practical knowledge representation and discovery techniques in software engineering
• Agent-oriented software engineering
• Knowledge base management in KE systems
• Evaluation and verification of KBS
• Practical tools for KBS engineering
• Process models in KE applications
• Software requirements and design for KBS applications
• Declarative, logic-based, including constraint programming approaches in SE

Intended Audience

We expect researchers and practitioners from the areas of KE and SE. The focus is on KE methods using symbolic logic-based representations, and a synergy between them and formalized and declarative SE methods. Novel, innovative approaches and applications are appreciated. No limitation on the number of participants is planned.

Submission Details

Papers should be formatted according to the ECAI format. The length of each paper should not exceed 8 pages (including figures and references), see: http://people.cs.kuleuven.be/~luc.deraedt/ecaai2012-style.zip

All papers must be submitted in PDF via EasyChair: http://www.easychair.org/conferences/?conf=kese8

Important dates will be announced on the website.

Call for Tool Presentations!

This year we also strongly encourage the submission of tool presentation papers, i.e., system descriptions that clearly show the interaction between research and practice.

Organization

The one-day workshop will be held with presentations of accepted papers. The submitted papers will be reviewed by three members of the program committee. At least one author of each accepted paper must register and present the contribution. A comfortable time slot for discussions will be given. Accepted contributions will appear as CEUR Workshop Proceedings (CEUR-WS.org)

Workshop organizers

G. J. Nalepa, AGH UST Krakow, gjn@agh.edu.pl
Joaquin Cañadas, University of Almeria, fjcanada@ual.es
J. Baumeister, University Würzburg, joba@uni-wuerzburg.de
Program Committee
Isabel María del Águila, University of Almeria, Spain
Klaus-Dieter Althoff, University Hildesheim, Germany
Joachim Baumeister, University Würzburg, Germany
Joaquín Cañadas, University of Almeria, Spain
Jesualdo Tomás Fernández-Breis, Univ. of Murcia, Spain
Adrian Giurca, BTU Cottbus, Germany
José M. Juarez, University of Murcia, Spain
Jason Jung, Yeungnam University, Korea
Rainer Knauf, TU Ilmenau, Germany
Pascal Molli, University of Nantes - LINA, France
Grzegorz J. Nalepa, AGH UST, Krakow, Poland
José Palma, University of Murcia, Spain
Alvaro E. Prieto, University of Extremadura, Spain
José del Sagrado, University of Almeria, Spain
Dietmar Seipel, University Würzburg, Germany
Rafael Valencia-Garcia, University of Murcia, Spain