Preface

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Research questions and practical exchange between Knowledge Engineering for intelligent systems and Software Engineering of advanced software programs have been fruitfully discussed over the last years. Many successful examples demonstrate the clear symbiosis between these two research areas.

In 2005 the KESE workshops took place for the first time in Koblenz at the 28th German Conference on Artificial Intelligence (KI-2005). Nine years later the KESE9 workshops return to Koblenz, where it is collocated with the 36th Annual Conference on Artificial Intelligence in Koblenz (September 16-20, 2013). This year we solicited contributions having the following topics:

- Knowledge and software engineering for the Semantic Web
- Ontologies in practical knowledge and software engineering
- Business Rules design, management and analysis
- Business Processes modeling in KE and SE
- Practical knowledge representation and discovery techniques in software engineering
- Agent-oriented software engineering
- Context and explanation in intelligent systems
- 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

As from the beginning the workshop series shows a healthy mixture of advanced research papers showing the direction to the next years and practical papers demonstrating the actual applicability of approaches in (industrial) projects and concrete systems. This year five regular, and two short papers were accepted to the workshop. Moreover, one tool presentation was also included.

In their paper "Integrating Semantic Knowledge in Data Stream Processing" the authors Beckstein et al. describe different approaches on integrating stream data and semantic domain knowledge. In particular, as accessing methods the continuous query language CQL is compared with the SPARQL extension C-SPARQL.

Kramer et al. describe new possibilities for explanation generation. Their paper "Towards Explanation Generation using Feature Models in Software Product Lines" investigate how the approach can be applied in dynamic software product lines (DSPL).

In the paper "A Prolog Framework for Integrating Business Rules into Java Applications" the authors Ostermayer and Seipel show an approach to connect the data structures of the logic-based language Prolog with the wide-spread programing language Java.

Baumeister et al. report in their paper "Continuous Knowledge Representations in Episodic and Collaborative Decision Making" on a new type of decision support systems and demonstrate its application in an industrial case study for managing the knowledge about chemical substances.

Pascalau introduces guidelines for designing and engineering advanced software systems to be used by end-users. The paper "Identifying Guidelines for Designing and Engineering Human-Centered Context-Aware Systems" proposes a declarative level to hide the technical level of systems engineering from the end-users.

Kluza et al. tackle business process modeling and give an overview of recommendation possibilities. Their paper "Overview of Recommendation Techniques in Business Process Modeling" describes a categorization of recommendation approaches.

Newo and Althoff report in their paper "Knowledge Acquisition for Life Counseling" on a concrete project that uses case-based techniques and information extraction methods in the life counseling domain.

Kaczor et al. give a tool presentation and show in "HaDEsclipse - Integrated Environment for Rules" an environment for engineering rule-based systems. The tool is based in the well-established software tool Eclipse.

The organizers would like to thank all who contributed to the success of the workshop. We thank all authors for submitting papers to the workshop, and we thank the members of the program committee as well as the external reviewers for reviewing and collaboratively discussing the submissions. For the submission and reviewing process we used the EasyChair system, for which the organizers would like to thank Andrei Voronkov, the developer of the system. Last but not least, we would like to thank the organizers of the KI 2013 conference for hosting the KESE9 workshop.

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Workshop Organization

The 9th Workshop on Knowledge Engineering and Software Engineering (KESE9) was held as a one-day event at the 36th German Conference on Artificial Intelligence (KI2013) on September 17 2013, in Koblenz, Germany

Workshop Chairs and Organizers

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Programme Committee

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