

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). In 2014 the KESE10 workshops was collocated with the 21st European Conference on Artificial Intelligence (ECAI 2014) in Prague, Czech Republic on August 19. This year we solicited contributions having the following topics:

- Knowledge and software engineering for the Semantic Web,
- Knowledge and software engineering for Linked Data,
- Ontologies in practical knowledge and software engineering,
- Business systems modeling, design and analysis using KE and SE,
- Practical knowledge representation and discovery techniques in 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,
- Software quality assessment through formal KE models, and
- 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 six regular, and two short papers were accepted to the workshop. Moreover, two tool presentations were also included. We decided to organize the presentations during the workshop into three topical sessions.

The first session, entitled *Knowledge Modeling* (Chair: Grzegorz J. Nalepa) included two papers and one tool presentation. Freiberg and Puppe discuss the

use of patterns in engineering of knowledge-based systems. In their tool presentation Furth and Baumeister demonstrate an ontology debugger integrated in a semantic wiki. Hatko et al. apply behaviour-driven development for medical applications.

The second session, entitled *Business Processes in KE&SE* (Chair: *Thomas Roth-Berghofer*) included three papers. Nguyen and Le-Thanh discuss semantic aspects of workflows. Bobek et al. present a recommender system for business process design using a Bayesian network. In their paper Sanfilippo et al. provide remarks on an ontological analysis of BPMN.

The third session *Systems and Tools* (Chair: *Martina Freiberg*) included four papers. Ostermayer et al. presented a custom connector architecture for Prolog and Java. Then Ślęzyński et al. shared their experiences in migrating rule inference engines to mobile platforms. In their paper Bach et al. discussed knowledge modeling aspects with the open source tool myCBR. Finally, Kluza et al. presented a new wiki-based tool for SBVR.

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 for reviewing and collaboratively discussing the submissions. We would like to thank the Chairmans that supported the KESE Chairs during the event. For the submission and reviewing process we used the EasyChair system, for which the organizers would like to thank all the developers of the system. Last but not least, we would like to thank the organizers of the ECAI2014 conference for hosting the KESE10 workshop.

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Workshop Organization

The 10th Workshop on Knowledge Engineering and Software Engineering
(KESE10)
was held as a one-day event at the
21st European Conference on Artificial Intelligence
(ECAI 2014)
on August 19 2014 in Prague, Czech Republic

Workshop Chairs and Organizers

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