### Preface

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Intelligent systems have been successfully developed in various domains based on techniques and tools from the fields of knowledge engineering and software engineering. 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 and business rules.

The fifth workshop on Knowledge Engineering and Software Engineering (KESE 2009) was held at the KI-2009 in Paderborn, Germany, and brought together researchers and practitioners from both fields of software engineering and artificial intelligence. The intention was to give ample space for exchanging latest research results as well as knowledge about practical experience. Topics of interest includes but were not limited to:

- Knowledge and software engineering for the Semantic Web
- Ontologies in practical knowledge and software engineering
- Business rules design and management
- Knowledge representation, reasoning and management
- Practical knowledge representation and discovery techniques in software engineering
- Agent-oriented software engineering
- Database and knowledge base management in AI systems
- Evaluation and verification of intelligent systems
- Practical tools for intelligent systems
- Process models in AI applications
- Declarative, logic-based approaches
- Constraint programming approaches

This year, we mainly received contributions focusing on the "intelligent web": Pascalau and Giurca introduce a rule engine for web browsers, that is capable to handle DOM (Document Object Model) events within the browser. Cañadas et al. describe an approach for the automatic generation of rule-based web applications, that is based on ideas of the Model Driven Development (MDD). Nalepa and Furmańska propose an ontology that maps the design process of an intelligent application and thus promises efficient development. Reutelshoefer et al. show, how multimodal knowledge appears in knowledge engineering projects and show how such knowledge can be refactored within a Semantic

Wiki. The intelligibility of medical ontological terms is discussed and evaluated by Forcher et al. This year we also encouraged to submit tool presentations, i.e., system descriptions that clearly show the interaction between knowledge engineering and software engineering research and practice. At the workshop, two presentations about current tools were given: Kaczor and Nalepa introduced the toolset HaDEs, i.e., the design environment of the HeKatE methodology. Pascalau and Giurca show-cased the JavaScript rule engine JSON Rules.

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 Klaus-Dieter Althoff (U. Hildesheim) as the workshop chair and Bärbel Mertsching (U. Paderborn) as the KI09 conference chair for their efforts and support.

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# Workshop Organization

The 5th Workshop on Knowledge Engineering and Software Engineering (KESE2009)

was held as a one-day event at the 32nd German Conference on Artificial Intelligence (KI2009) on September 15, 2009 in Paderborn, Germany.

#### Workshop Chairs and Organizers

Joachim Baumeister, University Würzburg, Germany Grzegorz J. Nalepa, AGH UST, Kraków, Poland

## Programme Committee

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