

Preface

Representing and solving configuration problems have always been subjects of interest for applying and developing artificial intelligence (AI) techniques. Powerful knowledge-representation formalisms are necessary to capture the great variety and complexity of configurable product models. Furthermore, efficient reasoning methods are required to provide intelligent interactive behavior in configurator software, such as solution search, satisfaction of user preferences, personalization, optimization, diagnosis, etc.

Nowadays, different AI approaches are well established as central technologies in many industrial configuration systems. This widespread industrial use of AI-based configurators makes the field more challenging than ever: the complexity of configurable products still increases, the mass-customization paradigm is extended to fields like service and software configuration, personalized (web-based) user interaction and user preference elicitation are of increasing importance, and finally, the integration of configurators into surrounding information technology infrastructures, such as business information systems or web applications, has become a critical issue.

This workshop continued the series of successful configuration workshops started at the AAAI 1996 Fall Symposium and continued on IJCAI, AAAI, and ECAI since 1999.

Beside researchers from a variety of different fields, past events also attracted a significant number of industrial participants from major configurator vendors like Tacton, SAP, Oracle, and ILOG, as well as from end-users like Siemens, HP, or DaimlerChrysler.

The main goal of the workshop was to promote high-quality research in all technical areas related to configuration. As such, the workshop was of interest to researchers working in the various fields within the wide range of applicable AI technologies (e.g. Constraint Programming, Description Logics, Non-monotonic Reasoning, Case-Based Reasoning, etc.). It served as a platform for researchers and industrial participants to exchange needs, ideas, benchmarks, and use cases. Collocated with AAAI 2007 the Workshop on Configuration provided an ideal forum to attract high-quality submissions.

We would like to extend our thanks to the members of the workshop's Program Committee, the authors of the papers that were submitted, and, in particular, the staff of AAAI, whose assistance has been invaluable in preparing for the workshop.

– *Barry O'Sullivan (University College Cork, Ireland)*
– *Klas Orsvarn (Tacton System AB, Sweden)*