



Dear Reader,

about 30 years after its introduction by Roger Schank and others, Case-Based Reasoning (CBR) is a well-established research field in Artificial Intelligence and Cognitive Science. As the last special issue on CBR in the German Journal on Artificial Intelligence ("KI") is 12 years ago, CBR is the main focus of the current issue at hand. It is compiled at the occasion of the 9th European Conference on Case-Based Reasoning (ECCBR 2008), which took place at the University of Trier from September 1-4, 2008 (www.wi2.uni-trier.de/eccbr08). ECCBR 2008 was following a series of successful European conferences and workshops. As the first European CBR workshop (EWCBR 1993) took place in 1993 at the European Academy of Otzenhausen, which actually is very close to Trier, ECCBR 2008 also represented some kind of a 15-years-milestone. As a consequence, the conference was especially devoted to the past, present, and future of CBR.

This special issue on CBR reflects the main roads of recent research topics that were present at ECCBR 2008. It also includes contributions which relate to the future (contribution by Enric Plaza on the potential future role of CBR in the Internet) as well as to the past of CBR (interview with Pádraig Cunningham and Barry Smyth who carried out an analysis of research themes in the CBR conference literature). These two keynote presentations at ECCBR 2008 were completed by a third one reflecting on the current status of CBR in the health sciences (by Isabelle Bichindaritz). We also selected the paper that won the ECCBR 2008 best paper award: Supporting case-based retrieval by similarity skylines, by Eyke Hüllermeier et al.

A new element of the ECCBR programme was the Computer Cooking Contest, a CBR system competition demonstrating the application of case retrieval, adaptation, and combination methods for cooking recipes. Here, we selected a contribution by the team that won the most complicated challenge of the competition, namely the menu challenge where - based on some given ingredients - a complete menu had to be suggested.

This special issue is completed by a contribution on an open-source CBR tool, a review of a recently published book on case-based approximate reasoning, a summary paper on a PhD thesis on reasoning with generalized cases, and an introductory paper on CBR including a survey on recent CBR developments.

We want to thank all authors who contributed to this special issue for giving exciting insights into recent developments and future trends. We wish all readers a pleasant reading.

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