

Preface

This book contains the proceedings of the 20th edition of the Belgian-Netherlands Conference on Artificial Intelligence. The conference was organized by the Human Media Interaction group of the University of Twente. As usual, the conference was under the auspices of the Belgian-Dutch Association for Artificial Intelligence (BNVKI) and the Dutch Research School for Information and Knowledge Systems (SIKS). The conference aims at presenting an overview of state-of-the-art research in artificial intelligence in Belgium and the Netherlands, but does not exclude contributions from other countries. The received submissions show that AI researchers in Belgium and the Netherlands continue to work actively in many different areas of artificial intelligence and are open for new developments in technology and society.

The annual BNAIC conference is the main meeting place for artificial intelligence researchers and practitioners in Belgium and the Netherlands. Therefore we did not change the tradition that beside the sessions with accepted regular papers describing original work, there are also short papers describing work published elsewhere and papers describing demonstrations. We received 108 submissions consisting of 44 regular full papers, 53 short papers, and 11 system demonstrations. We are grateful to the programme committee members who carefully reviewed all submissions. A small committee chaired by the conference chairs made the final decisions. The acceptance rate of the regular papers was 80%. Of the short papers 75% was presented in oral sessions, the others were presented in poster sessions.

As mentioned, this is the twentieth BNAIC. This is not completely true. The series started as the Dutch Artificial Intelligence Conferences (NAIC: Nederlandse Artificiële Intelligentie Conferentie) and in 1999 the first BNAIC was organized. So, we can decide to celebrate the twentieth (B)NAIC or the tenth BNAIC this year. Previous (B)NAICS were organized in Amsterdam (1988), Enschede (1989), Kerkrade (1990), Amsterdam (1991), Delft (1992), Enschede (1993), Rotterdam (1995), Utrecht (1996), Antwerpen (1997), Amsterdam (1998), Maastricht (1999), Kaatsheuvel (2000), Amsterdam (2001), Leuven (2002), Nijmegen (2003), Groningen (2004), Brussels (2005), Namur (2006), and Utrecht (2007).

Obviously, a twentieth edition asks for a special location. We found it at Resort Bad Boekelo, a hotel and conference centre near Enschede with beautiful facilities and in beautiful surroundings, giving participants the opportunity to merge scientific and recreational activities such as walking in the woods, diving in the (indoor) swimming pool and visiting the sauna. Most of the participants stayed at least one night in this resort, making it possible to have lively discussions accompanied by, among other things, live music and local beer specialities.

The conference was sponsored by Koninklijke Nederlandse Akademie van Wetenschappen (KNAW), Vereniging Werkge-meenschap Informatiewetenschap, Delft Cooperation on Intelligent Systems (D-CIS), Dutch Research School for Information and Knowledge Systems (SIKS), Netherlands Organisation for Scientific Research (NWO), Stichting Knowledge-Based Systems (SKBS), SKF Benelux, Belgium-Netherlands Association for Artificial Intelligence, Centre of Telematics and Information Technology (CTIT), and the Human Media Interaction (HMI) research group of the University of Twente.

There were many people involved in the organization of this conference and we cannot mention them all. We gratefully acknowledge help from BNVKI board members and previous organizers. Mannes Poel took responsibility for the review process; Hendri Hondorp took care of the website and, as usual, did a perfect job compiling the proceedings. Cover design by Ronald Poppe and Alice Vissers. Paul van der Vet for awards, general advice and, together with Lynn Packwood and Theo Huibers, sponsor acquisition. Lynn also took care of financial administration. Social events were the responsibility of Betsy van Dijk and Wim Fikkert, posters and demonstrations were organized by Thijs Verschoor and Ronald Poppe. Administration, registration and overall organisation were done by Charlotte Bijron and Alice Vissers.

Finally, we thank our invited speakers, Wolfgang Wahlster (DFKI, Saarbrücken, Germany) with a talk on “Anthropomorphic Interfaces for the Internet of Things” and Ruth Aylett (Heriot-Watt University, Edinburgh, UK) with a talk on “Planning stories - emergent narrative or universal plans?”