

## Preface

The 21st Benelux Conference on Artificial Intelligence (BNAIC) was held at the Eindhoven University of Technology on October 29 and 30, 2009, under the auspices of the Belgium-Netherlands Association for Artificial Intelligence (BNVKI) and the Dutch Research School for Information and Knowledge Systems (SIKS). The term “Artificial Intelligence” dates back to 1956 when John McCarthy defined it as “the science and engineering of making intelligent machines.” Even though nowadays we are still far from building machines that can pass the infamous Turing test (Turing, *Mind*, 59 (236), 1950), Artificial intelligence is a very lively research area in the Benelux, with a lot of internationally active and renown research groups in, among others, multi-agent systems and simulation, games, logics in AI, machine learning, data mining, natural language processing, semantic web, evolutionary computing.

The main goals of BNAIC are two-fold: on the one hand to bring together AI researchers in the Benelux to meet and present research activities with oral and poster presentations, and on the other hand to present high-quality research results, possibly already published in international conferences or journals, complemented with renown international keynote speakers. The format of BNAIC is therefore a mixture of a meeting place and a forum for high-quality research results, forming a balance that has proven to be a successful formula throughout the past 21 editions.

This year the program consisted of a research track, an industry track and three invited keynote talks; two in the research track and one in the industry track. Prof. Wolfram Burgard (University of Freiburg) gave the first invited talk in the research track on “Reliable Life-long Navigation for Mobile Robots.”, and prof. Peter Flach (University of Bristol) the second one on “Machine Learning: Unity in Diversity.” The invited talk in the industry track was given by Peter van der Putten on “AI in the Wild: Decisioning, Predictive Analytics and Simulation for Customer Experience Optimization.” Authors could submit in three paper categories: A-type papers presenting new original work, B-type papers summarizing the main results of papers accepted after June 1st, 2008 for AI-related refereed conferences or journals, and C-type papers proposing for demonstrations. In total we received 117 submissions, of which 105 in the research track (45 of type A, 54 of type B and 6 Demos) and 12 in the industry track (6 of type A, 4 of type B and 2 Demos). Of all A-type submissions, 35% were accepted for oral presentation and 41% for poster presentation. For the B-type submissions, 74% were accepted for oral presentation and 26% for poster presentation. All submitted demos were accepted.

We wish to thank the invited speakers, all authors of submitted papers and the Program Committee members for their hard work. BNAIC 2009 was supported financially by the SIKS doctoral school, the Netherlands Organization for Scientific Research (NWO), Philips, and D-CIS labs. Last but not least we would also like to express our gratitude to our enthusiastic local team.

October 2009

Toon Calders  
Karl Tuyls  
Mykola Pechenizkiy