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Proceedings

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Preface

The 9th International Conference on Intelligent Tutoring Systems (ITS 2008) was held June 23–27, 2008 in Montreal. This year we celebrated the 20th anniversary of the conference founded in 1988 in Montreal. We have had biennial conferences for most of the past 10 years around the world, including in Brazil, Taiwan, France, Canada, and the USA. These ITS conferences provide a forum for the interchange of ideas in all areas of computer science and human learning, a unique environment to exchange ideas and support new developments relevant for the future. The 2008 conference was a symbolic milestone that enabled us to look back at what has been achieved and what is currently being done, in order to face the challenges of tomorrow.

Much has changed in the last 20 years in terms of hardware, software, programmers, and education stakeholders. Technology is now networked, pervasive, and available anywhere and anytime. The potential exists to provide customized, ubiquitous guidance and instruction. However, much has remained the same and the need is just as great to model the learner, teaching strategies and domain knowledge. This year we saw an increase in research into student affect (motivation, boredom, and frustration), specifically attempts to detect student affect, while feedback studies considered which responses to provide given both student cognition and affect. Studies also looked at the impact on learning of positive feedback and politeness in feedback. New research was seen in data mining based on larger studies that use data from real students to diagnose effective learning and teaching. So much interest has been generated in this area that the first International Conference on Educational Data Mining was co-located with ITS 2008.

This year we received 207 submissions from six continents and accepted 63 full papers (30.4 %) and 61 short papers. Presented papers came from 20 countries, several of which have not been represented in previous ITS conferences. All accepted papers are published in this proceedings volume long papers are allotted ten pages and short papers three pages. We also present brief abstracts of the talks of our five invited speakers: Alan Collins, Julita Vassileva, Kurt VanLehn, Judy Kay, and Alan Lesgold. The conference also included seven workshops, interactive events, two tutorials, and a Young Researcher's Track.

The conference provided opportunities for the cross-fertilization of information and ideas from researchers working on interactive and adaptive learning environments for learners of all ages, for subject matter that spans the school curriculum (e.g., math, science, language learning), and for professional applications in industry, military, and medicine. Presented papers offered a rare professional opportunity for researchers to present cutting-edge research from a wide range of topics, including the fields of artificial intelligence, computer science, cognitive and learning sciences, psychology, and educational technology.

This year we instituted a meta-review process in which Senior Program Committee (PC) members managed three reviewers for each submitted paper and were able to engage in an e-mail discussion with reviewers for each paper. This resulted in more detailed reviews and enabled reviewers to consider and explore more deeply the reactions of other reviewers to each paper.

We thank the many, many people who helped make this conference possible. We especially thank our energetic PC, with over 100 members, including Senior PC, PC members and external reviewers who read numerous papers, managed other reviewers, and generally submitted their reviews on time. We thank the external reviewers who were recruited by PC members to assist us when we exhausted our initial cadre of reviewers. We thank the individual committees, including an Organizing, Program and Conference Committee along with the Chairs for Tutorial, Young Researchers, Demonstration, Poster, and Workshop activities. We are grateful to our longstanding International Steering Committee (14 members) who helped and guided us when decisions were needed. We are especially grateful to the General Chairs, Claude Frasson and Gilles Gauthier, who kept us on schedule and provided supportive advice. All these people are acknowledged in the next few pages and at <http://gdac.dinfo.uqam.ca/its2008/>.

Finally, we gratefully acknowledge Springer for its continuing support in publishing the proceedings of ITS 2008 and the generous support of our sponsors including University of Quebec at Montreal, McGill University, and the University of Montreal.

April 2008

Beverly Park Woolf
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