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Preface

ITS 2000 is the fifth international conference on Intelligent Tutoring Systems. The preceding conferences were organized in Montreal in 1988, 1992, and 1996. These conferences were so strongly supported by the international community that it was decided to hold them every two years. ITS'98 was organized by Carol Redfield and Valerie Shute and held in San Antonio, Texas.

The program committee included members from 13 countries. They received **140 papers** (110 full papers and 30 young researchers papers) from 21 countries. As with any international conference whose proceedings serve as a reference for the field, the program committee faced the demanding task of selecting papers from a particularly high quality set of submissions.

This proceedings volume contains **61 papers** selected by the program committee from the 110 papers submitted. They were presented at the conference, along with **six invited lectures** from well-known speakers. The papers cover a wide range of subjects including architectures for ITS, teaching and learning strategies, authoring systems, learning environments, instructional designs, cognitive approaches, student modeling, distributed learning environments, evaluation of instructional systems, cooperative systems, Web-based training systems, intelligent agents, agent-based tutoring systems, intelligent multimedia and hypermedia systems, interface design, and intelligent distance learning. The conference itself was preceded by **seven workshops** on modeling human teaching tactics and strategies, adaptive and intelligent Web-based education systems, applying machine learning to ITS/design construction, collaborative discovery learning in the context of simulations, case-based reasoning in intelligent training systems, learning algebra with the computer (a transdisciplinary workshop), and advanced instructional design for complex safety critical and emergency training. **Three tutorials** highlighted important domains in ITS: ontological engineering and its implication for AIED research, adaptive Web-based educational systems, and animated pedagogical agents.. Finally, **25 papers** from the Young Researcher Track were selected, and **22 posters**.

We would like to thank all the members of the program committee who reviewed conscientiously all the papers which were sent so as to obtain a distributed and equilibrated point of view. We also thank the external reviewers who added their effort to complement the evaluations. A subset of the program committee met in February in Montreal to set up the final list of accepted papers.

The conference was scientifically supported by several prestigious associations. This represents an acknowledgment of the high level of the conference which is now well established. We thank the **American Association for Artificial Intelligence** (**AAAI**), the **Association for Computing Machinery** (**ACM**), and the special interest groups **SIGART, SIGCUE,** and **SIGCHI**, the **IFIP TC3 Committee**, the **International Artificial Intelligence in Education** (**AIED**) **Society**, and the **Learning Technology Task Force** (**LTTF**) from **IEEE Computer Society**. They ensured a wide distribution of information regarding the announcement of the conference.

We would like to thank the Université de Montréal and the Université du Québec à Montréal for their support in the organization of the conference. We thank all those many people who gave their time and effort to make the conference a success, all the members of the organizing committee, a fantastic team who regularly spent numerous hours on all the details of the conference, and all the students of the HERON laboratory in Montreal who helped with the practical organization of the conference. Finally, we appreciate the cooperation received from Springer-Verlag during the publication of this volume.

June 2000

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