## Preface

In the four years since the Object Management Group adopted the Unified Modeling Language (UML) in 1997, it has become widely accepted throughout the software industry and successfully applied to diverse domains. During this time it has become the de facto standard for specifying software blueprints, which continue to increase in value as we evolve from analysis and design models to multi-view architectures. Indeed, it is becoming difficult to find a software project with more than ten developers who don't use UML in some way to specify part of their architecture.

Despite its rapid and widespread acceptance, however, the UML 1.x series of revisions has not been without its problems. Some of the major issues commonly cited include: excessive size, gratuitous complexity, limited customizability, nonstandard implementations, and lack of support for diagram interchange. Such substantive problems can only be addressed by major revisions to UML. Fortunately, the Object Management Group realizes this and has issued four Requests for Proposals for UML 2.0.

UML 2.0 represents both a wonderful opportunity and a serious responsibility for the UML community. It is an opportunity to resolve the serious shortcomings listed above; it is also a responsibility to ensure that the second version of the language does not suffer from "second system syndrome." This conference, whose objective is to bring together researchers and practitioners to share their visions for the future of UML, is an ideal place to explore how we can exploit the opportunity and share the responsibility for UML 2.0. Now in its fourth year, the «UML» conference series remains the premier forum for presenting and discussing innovative ideas that will make UML easier to learn, apply, and implement.

In total 122 abstracts and 102 papers were submitted to this year's conference, of which 32 were selected by the program committee for presentation. As in 2000, this year's conference included a two-day tutorial and workshop session, in which nine tutorials and five workshops were scheduled. The primary purpose of these sessions was to provide a more informal forum for discussing state-of-the-art research in UML. Topics included: Agile modeling, teaching UML, concurrency, rigorous development methods, OCL, software architecture, concurrent, distributed, and real-time applications, tools, requirements, time-critical systems, meta-modeling, quality assurance, effective diagrammatic languages and executable UML. A short description of the workshops and tutorials can be found in these proceedings and details at the conference web site: http://www.cs.toronto.edu/uml2001/.

We would like to express our deepest appreciation to the authors of submitted papers, tutorials, workshops, and panels, and the program committee members and the additional referees. Jaelson Castro together with Manuel Kolp did an excellent job of managing all matters of the conference organization. Heinrich Hußmann chaired the workshop and tutorial submissions. We would also like to thank Werner Damm, John Mylopoulos and James Rumbaugh for agreeing to present invited talks at the conference. Mark Richters and Oliver Radfelder at the University of Bremen are thanked for their contribution to setting up the conference web site and in organizing and handling the electronic submission process. The ConfMan program (http://confman.unik.no/~confman/ConfMan/) was used to gather and organize submitted papers and reviews, and Mark Richters extended it to deal with an online preference selection process for the PC members. Ralf Kollmann at the University of Bremen organized the preparation of the final version of the conference proceedings. We would also like to thank the  $\ll$ UML $\gg$  steering committee for their advice, Jean-Michel Bruel and Robert France for maintaining the mailing list, and last year's program chair, Andy Evans, for lots of helpful emails and hints.

July 2001

Martin Gogolla Cris Kobryn

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