Foreword

The IUI Conference Series

The annual ACM International Conference on Intelligent User Interfaces (IUI) is a unique meeting at the intersection of the fields of artificial intelligence and human-computer interaction. The ideas and methods from these two disciplines are applied together to create innovations that promise to improve the usability and capabilities of our interactive computer tools. The goal is to enhance the performance of the human intellect through powerful computer interfaces that are a joy to use.

Every year the submitted papers span a wide range of topics, mostly concerning intelligent techniques for input interpretation, output generation, assistance, personalization, and interface generation. Many papers describe the use and evaluation of these techniques in one or more specific application areas. During the review process, papers are carefully vetted for the extent to which they demonstrate progress on questions that substantially concern both artificial intelligence and user interfaces. Although reviewers may be sympathetic to papers of narrower scope, they often argue that such papers are better suited to a less interdisciplinary conference.

As intelligent user interfaces have proven themselves in practical applications, the IUI conference series has seen a dramatic increase in interest. This year, many more papers were submitted to the conference—and the reviewing process was more selective—than in any previous year.

The Reviewing Process

Fair and thorough reviewing is a challenging task for a multidisciplinary conference such as IUI, where no single person can be an expert in the areas of all submitted papers. The reviewing process this year comprised several stages: First, each submission was read by three reviewers—in most cases members of the IUI 2005 program committee, but in some cases similarly qualified special reviewers. Second, for each long paper submission, a *meta-review* was prepared by one of the especially experienced members of the program committee. The meta-reviews were not just additional reviews: They analyzed differences among the evaluations of the reviewers, and in many cases they were based on discussion with the reviewers. Third, the reviews and the recommendations of the meta-reviewers were discussed during a 14-hour on-line program committee meeting, as well as in telephone conversations with meta-reviewers. Fourth, the remaining borderline cases were further analyzed by the program and short paper chairs before they made the final selection of accepted papers.

Because of all of the effort that was invested in the reviewing process by so many people, we like to think that we have organized not one but two IUI 2005 "conferences": In the first one, conducted via electronic communication during the reviewing period, several hundred authors of more than 200 submitted papers received careful and often extensive feedback on their work from experienced peer reviewers. This feedback should help them to strengthen their research and to prepare high-quality submissions to upcoming conferences and to journals. The second conference is the one held in San Diego in January, 2005, whose proceedings you are now reading.

Acceptance Statistics

For IUI 2005, 135 long papers were submitted, an increase of 40% over the previous record year for an IUI conference. In order to maintain the IUI tradition of having each long paper presented in a plenary session, we had to limit the number of accepted papers to just 30, for an acceptance rate of 22.2%. As a result, we had to leave out quite a few promising papers whose acceptance had been

recommended by one or more reviewers. Each of the accepted long paper submissions is printed as an 8-page paper in this proceedings volume. In addition, 7 long paper submissions that seemed especially suitable for short paper presentation are presented in the short paper track. For the short paper track itself, 74 submissions were received (again, a 40% increase over the previous record year), of which 21 were accepted, for an acceptance rate of 28.4%. Each short paper is printed on 3 pages in this volume and is presented at the conference during an extended interactive poster and demonstration session.

A glance at the table of contents will reveal the extent to which IUI 2005 is a truly international conference. A statistical overview of the countries from which the papers were submitted would understate the diversity of the origins of the authors, many of whom come from countries different from those in which they are currently working. We hope that in the future more authors from Latin America and Africa will submit their best work to IUI conferences, so that the remaining gaps in representation can be filled.

Other Conference Events

Aside from the paper presentations, IUI 2005 includes a number of events that help to ensure a varied and stimulating conference experience. (See the table of contents for titles and names.)

Three half-day workshops and three half-day tutorials were selected from those submitted on the basis of reviews by members of the conference committee. Between them, the workshops and tutorials cover a broad range of topics of current interest in the IUI field. We encourage readers to consult the summaries of these events that are included in this volume and to explore the links that they contain to extensive material that is available on the world-wide web.

The program also includes invited talks by three distinguished thought leaders who were selected after extensive discussion within the conference committee: Stuart Card of the Palo Alto Research Center; Justine Cassell of Northwestern University; and Barry Smyth of University College Dublin and ChangingWorlds.

Another highlight is a panel discussion in which researchers and industry representatives meet to debate, together with the conference participants, about ways of dealing with the current usability crisis in high-tech home products.

Thanks and Welcome

The list of people who have made significant contributions to IUI 2005 is so long that we cannot even begin to mention them in this foreword. Please peruse the several pages that follow the table of contents, bearing in mind the remarkable fact that most of the individuals listed there invested days or weeks of work in the preparation of IUI 2005.

As the concentrated final product of all of these efforts, IUI 2005 seems likely to become a landmark in the historical time line of the IUI field. Whether or not you have been able to attend the conference in San Diego, we encourage you to explore and enjoy to the fullest the rich collection of ideas offered by this volume.

John Riedl and Anthony Jameson, *Program Chairs*Daniel Billsus and Tessa Lau, *Short Paper Chairs*Jihie Kim, *Workshop and Tutorial Chair*Robert St. Amant, *General Chair*