Conference Report

The Fourth International Conference on User Modeling

Brad Goodman, Alfred Kobsa, and Diane Litman

■ The goal of the Fourth International Conference on User Modeling (UM94) was to bring together user-modeling researchers from different parts of the field to discuss and learn about each other's research, contrast approaches, and develop a basis for future research and collaboration. A broad international audience of more than 110 people attended the conference, which featured system demonstrations, paper and poster sessions, three tutorials, and a set of special interest group meetings.

The user-modeling community is made up of a multidisciplinary group of researchers from such diverse disciplines as AI, education, linguistics, human-computer interaction, and psychology who study how computers can be made to adapt to their individual users by using models of these users. Because of this diversity, it has been difficult for researchers to keep up to date with novel research in different parts of the field. The Fourth International Conference on User Modeling (UM94) was founded to address this difficulty.

UM94 was the outgrowth of three previous international workshops. The first, UM86, took place in Germany. A group of 24 international researchers from interdisciplinary fields assembled with the goal of learning about research related to their own in user modeling. The second workshop, UM90, was in Hawaii and attracted 35 researchers from around the world. The third workshop, UM92, took place in Germany with 45 international participants. At the close of UM92, the participants decided that the user-modeling community had outgrown the invitational workshop venue, and plans for UM94 as a full-scale conference with open participation were launched.

The goal of this first open conference, as was the goal of the preceding workshops, was to bring together user-modeling researchers from different parts of the field to discuss and learn about each other's research, contrast approaches, and develop a basis for future research and collaboration. A broad international audience of more than 110 people attended the conference in Hyannis, Massachusetts, from 15 to 19 August 1994. Seventy-four papers were submitted: 33 papers came from Western Europe, 27 from North America, 7 from Eastern Europe and the Commonwealth of Independent States, 5 from Australia, and 2 from Japan. Twenty-nine papers were accepted for presentation, and 13 papers were accepted as posters. A best-paper prize donated by Kluwer Academic Publishers was awarded to Julita Vassileva, Universität der Bundeswehr, Munich, for "A Practical Architecture for User Modeling in a Hypermedia-Based Information System."

In addition to the paper and poster sessions, UM94 featured system demonstrations, a New England clambake banquet, and several special events. In particular, there was an afternoon of three free tutorials: "User Modeling and User-Adapted Interaction—An Introduction" (Alfred Kobsa, University of Konstanz, and Sandra Carberry, University of Delaware), "Student Modeling" (Peter Brusilovsky, ICSTI, Moscow), and "Exploiting User Models in Natural Language Generation" (Cecile Paris, University of Brighton). There were also three keynote addresses: (1) "Toward Personalized Multimedia" (Wolfgang Wahlster, German Research Center for AI); (2) "Cognitive Tutors: Lessons Learned" (John Anderson, Carnegie Mellon University); and (3) "Lies, Damned Lies, and Stereotypes: Pragmatic Approximations of Users" (Judy Kay, University of Sydney). Finally, an afternoon was devoted to a set of special interest group meetings: "Adaptive Hypertext and Hypermedia," "Applied Planning and Plan Recognition," "Doctoral Consortium," "The Empirical Evaluation of User Models and Adaptive Systems," "The Relationship between User and Task Models," "Standardization of User Modeling Shell and Systems," and "User Modeling in Information Retrieval Systems."

Despite the larger size and scope of UM94, much of the original character of the previous meetings was preserved. UM94 was held in a workshoplike setting, with a program consisting of a single track of lengthy presentations as well as informal workshops. Based on the feedback we have received, UM94 was viewed as a great success by all.

Additional information about UM94 and future user-modeling conferences is available on the World Wide Web on the Internet at uniform resource locator (URL) http://www.cs.brandeis.edu/~bgoodman/um.html.

Brad Goodman is principal staff in the Advanced Information Systems Center at the MITRE Corporation in Bedford, Massachusetts. Goodman is also a part-time visiting scholar in the Department of Computer Science at Brandeis University. He serves as the clerk of User Modeling Inc.

Alfred Kobsa is an institute director in the German National Research Center for Information Technology and the head of its Human-Computer Interaction Division in Sankt Augustin, Germany. He is also professor of computer science at the University of Essen. Kobsa is the editor in chief of the international journal *User Modeling and User-Adapted Interaction*. He is president of User Modeling Inc.

Diane Litman is a member of Technical Staff in the Artificial Intelligence Principles Research Department at AT&T Bell Laboratories in Murray Hill, New Jersey. Litman serves as book review editor of *User Modeling and User-Adapted Interaction*. She is treasurer of User Modeling Inc.