Table of Contents

Full Papers

Acquiring User Models from Multi-modal User Input
Harnessing Models of Users’ Goals to Mediate Clarification Dialog in Spoken Language Systems .................................................. 3
Eric Horvitz, Tim Paek

Modeling the Acquisition of English: An Intelligent CALL Approach (*) 14
Lisa N. Michaud, Kathleen F. McCoy, Litza A. Stark

Recognizing Time Pressure and Cognitive Load on the Basis of Speech: An Experimental Study (*) ........................................... 24
Christian Müller, Barbara Großmann-Hutter, Anthony Jameson, Ralf Rummer, Frank Wittig

Learning Interaction Models
The Learning Shell: Automated Macro Construction (*) .................. 34
Nico Jacobs, Hendrik Blockeel

Learning Interaction Models in a Digital Library Service .................. 44
Giovanni Semeraro, Stefano Ferilli, Nicola Fanizzi, Fabio Abbattista

User Models for Natural Language Interpretation, Processing and Generation
A User Modeling Approach to Determining System Initiative in Mixed-Initiative AI Systems .................................................. 54
Michael Fleming, Robin Cohen

Collaborating with Focused and Unfocused Users under Imperfect Communication (*) .................................................. 64
Neal Lesh, Charles Rich, Candace L. Sidner

Improving User Modeling with Content-Based Techniques (*) ............ 74
Bernardo Magnini, Carlo Strapparava

An Integrated Approach for Generating Arguments and Rebuttals and Understanding Rejoinders (*) ........................................... 84
Ingrid Zukerman
Adaptive Interviewing for Acquiring User Preferences/Product Customization

Acquiring User Preferences for Product Customization............... 95
David N. Chin, Asanga Porage

Utility-Based Decision Tree Optimization:
A Framework for Adaptive Interviewing (*). .............................. 105
Markus Stolze, Michael Ströbel

Supporting User Collaboration through Adaptive Agents

Susan Bull, Jim Greer, Gordon McCalla, Lori Kettel, Jeff Bowes

An Adaptive User-Interface-Agent Modeling Communication Availability . 127
Silke Höppner

Student Modeling

Cognitive Computer Tutors: Solving the Two-Sigma Problem ........... 137
Albert Corbett

Applying Interactive Open Learner Models
to Learning Technical Terminology (*). ................................. 148
Vania Dimitrova, John Self, Paul Brna

Student and Instructor Models: Two Kinds of User Model
and Their Interaction in an ITS Authoring Tool ....................... 158
Maria Virvou, Maria Moundridou

Adaptive Information Filtering, Retrieval and Browsing

METIORE: A Personalized Information Retrieval System ........... 168
David Bueno, Amos A. David

Personalizing Delivered Information in a Software Reuse Environment . . . 178
Gerhard Fischer, Yunwen Ye

Automating Personal Categorization Using Artificial Neural Networks . . . 188
Dina Goren-Bar, Tsvi Kuflik, Dror Lee, Peretz Shoval

Posters

User Modeling as an Aid for Human Web Assistants.................... 201
Johan Aberg, Nahid Shahmehri

Modeling the Interests of a News Service User ....................... 204
Fredrik Åhman, Annika Warn
Category Based Customization Approach for Information Retrieval ........... 207
Kenro Aihara, Atsuhiro Takasu

Using Rollouts to Induce a Policy from a User Model ....................... 210
Joseph E. Beck, Beverly Park Woolf

Tailoring the Content of Dynamically Generated Explanations ............ 213
Kalina Bontcheva

A User Model Based on Content Analysis for the Intelligent Personalization of a News Service .................. 216
Manuel de Buenaga Rodríguez, Manuel J. Maña López, Alberto Díaz Esteban, Pablo Gervás Gómez-Navarro

Modeling Exploratory Behaviour ................................................. 219
Andrea Bunt, Cristina Conati

Ascribing and Weighting Beliefs in Deceptive Information Exchanges .... 222
Valeria Carofiglio, Fiorella de Rosi, Cristiano Castelfranchi

Visual Search and Background Complexity:
Does the Forest Hide the Trees? .................................................. 225
Martha E. Crosby, Marie K. Iding, David N. Chin

Characterizing Sequences of User Actions for Access Logs Analysis ...... 228
Thomas Draier, Patrick Gallinari

Modeling Literary Style for Semi-automatic Generation of Poetry ....... 231
Pablo Gervás

Perceptual Considerations for Quality of Service Management:
An Integrated Architecture ......................................................... 234
George Ghinea, George D. Magoulas

Emotions and Personality in Agent Design and Modeling .................... 237
Piotr J. Gmytrasiewicz, Christine L. Lisetti

Using Document Structures for Personal Ontologies and User Modeling ... 240
Sanghee Kim, Wendy Hall, Andy Keane

User-Tailored Plan Presentation .................................................... 243
Detlef Küpper, Alfred Kobsa

Investigating Students’ Self-Assessment Skills ................................ 247
Antonija Mitrovic

Generating Personal Travel Guides – And Who Wants Them? ............. 251
Cécile Paris, Stephen Wan, Ross Wilkinson, Mingfang Wu
Inspectability and User Controlled Revision on Long Term User Models
António Silva, Zita A. Vale, Carlos Ramos

Getting the Right Information to the Right Person
Gloria Teo

Goals, Tasks and Application Domains
as the Guidelines for Defining a Framework for User Modeling
Ilaria Torre

**Doctoral Consortium**

Improving Student Models by Reasoning about Cognitive Ability, Emotions and Gender
Ivon Arroyo, Beverly Park Woolf

Integrating Multilingual Text Classification Tasks and User Modeling in Personalized Newspaper Services
Alberto Díaz Esteban

Enhancing Embodied Intelligent Agents with Affective User Modeling
Patrick Gebhard

Designing TV Viewer Stereotypes for an Electronic Program Guide
Cristina Gena

AGENDA CULTUREL: An Adaptive Cultural Information Service
Jessica Givone

Ubiquitous User Modeling for Situated Interaction
Dominik Heckmann

An Intelligent Pedagogical Agent in CALL
Ognian Kalaydjiev

How to Learn More about Users from Implicit Observations
Ingo Schwab

Student Modeling for CALL Based on Pedagogical Standards
Monika Tarantowicz-Gasiewicz

Evaluation of Adaptive Systems
Stephan Weibelzahl

Supporting Negotiated Assessment Using Open Student Models
Juan-Diego Zapata-Rivera
Using Markov Chains for Structural Link Prediction
in Adaptive Web Sites .............................................. 298
  Jianhan Zhu

Invited Talks

Tailoring Privacy to User’s Needs ................................. 303
  Alfred Kobsa

Heavyweight Applications of Lightweight User Models:
A Look at Collaborative Filtering, Recommender Systems,
and Real-Time Personalization ........................................ 314
  Joseph A. Konstan

Eye Tracking: A Rich Source of Information for User Modeling ........ 315
  Sandra P. Marshall

Author Index .............................................................. 317
User Modeling 2001
8th International Conference, UM 2001, Sonthofen,
Germany, July 13-17, 2001. Proceedings
Bauer, M.; Gmytrasiewicz, P.J.; Vassileva, J. (Eds.)
2001, XIV, 326 p., Softcover
ISBN: 978-3-540-42325-6