As computers become pervasive in our environment, the challenges of user interface design and human-computer interaction become ubiquitous. Since computers and the issues they raise are everywhere, the HCI field is moving towards even more diversity in its interests and greater inclusion of different user communities. CHI conferences provide a unique forum in which to bring together people from all areas of the field. "We are in the process of inventing the future," note General Co-Chairs Thea Turner and Gerd Szwilus "and we welcome all of you to CHI 2000 to predict the future by creating it." Individuals from academia and industry, working in disciplines as diverse as psychology, computer science, design, and anthropology will gather 1-6 April 2000 at The Hague, in The Netherlands, to learn from each other about the latest work in the HCI field. The CHI conference is sponsored by ACM's Special Interest Group on Computer-Human Interaction.

The location of CHI 2000 in The Netherlands provides a unique opportunity to interact with a significant number of professionals from the European HCI community. Lest North American attendees be concerned by the location, it should be noted that air fare to The Netherlands can be had for little more than cross-country flights in the US and Canada, given some advance planning. Take advantage of the opportunity to take tutorials from international experts, benefit from a leading-edge technical program, and network with over two thousand other professionals in the HCI business.

The Technical Program

Throughout the conference, CHI 2000 will be highlighting the various aspects of the Conference theme, The Future is Here: Beyond the Desktop, Future HCI, European HCI and Interaction. Beyond the Desktop addresses the movement of computers away from work environments into a mobile community doing a broad number of activities. As part of Beyond the Desktop, CHI 2000 will host an interview session, similar to the interviews conducted at CHI 99. John Thackara, in addition to presenting the opening plenary talk, will interview several noted people in the field, including Tim Brown, Director of IDEO, and Christian Lindholm, User Interface Manager, Nokia Mobile Phones. This event is expected to generate many opinions, some controversy, and much discussion.

In celebration of its European location, CHI 2000 will highlight European HCI through special Euro-centric events, such as the European HCI Village, and invited presentations from eminent Europeans in the field. An invited session on European HCI entitled "European HCI: Roots for the Future of Human-Computer Interaction", chaired by Manfred Tschechligi, (Center for Usability Research & Engineering & University of Vienna, Austria), includes Gerrit C. van der Veer (Computer Science Department, Vrije Universiteit, The Netherlands), Jurek Kirakowski (Human Factors Research Group, University College Cork, Ireland), Jakub Wejchert (European Commission, Future and Emerging Technologies, Belgium), and David Gilmore (IDEO Product Development, USA). This will be a wide-ranging discussion on the European perspective of HCI research and practice, with representatives from academia, business, and government.

There will be new events for 2000: Organization Overviews return, as well as Short Talks and Interactive Posters. Preceding the conference are two and-a-half days of classes and work-
shops: a comprehensive tutorial schedule (highlights below), a Development Consortium, Doctoral Consortium and Workshops. The Development Consortium is a forum for examining issues and determining directions for the HCI community as a whole. The Doctoral Consortium facilitates groups of doctoral students meeting to share their work and interests with other students and HCI researchers. Workshops provide opportunities for groups with common interests to engage in vigorous discussion.

During the main technical program, participants will find a rich mix of panels and presentations, papers, demonstrations, short talks, posters, and more. Panels focus on controversial issues, stimulate intense discussion, and result in intense exploration of ideas. Papers present much more finished work, significant contributions in the field by both researchers and practitioners. Demonstrations show innovative user interface concepts in action, and can be either live or video. Short talks provide opportunities to see new findings and preliminary results not suitable for papers. Interactive posters provide visual representations of ongoing work, and are available for viewing throughout the conference.

Highlights of the main technical program include several panel sessions and invited speakers. Jared Spool, founder of User Interface Engineering, will host a panel discussion Scaling for the Masses: Usability Practices of the Web's Most Popular Sites. Participants will include representatives from eBay, Yahoo!, Intuit, CNET, and Fidelity Investments. Another panel, Smart Toys: Brave New World will feature representatives from Zowie Entertaiment, LEGO MINDSTORMS, and Intel/Mattel Smart Toy Lab. Children will be the focus of Story Spaces: Interface for Children's Voice, organized by Justine Cassell, MIT Media Lab.

For a full listing of CHI 2000's exciting technical program, consult the web at WWW.ACM.ORG/CHI2000.

Plenary Presentations

John Thackara, Director of Doors of Perception, Amsterdam, will open the conference with a talk entitled "Edge Effects: The Design Challenge Of Pervasive Interface". He will discuss the opportunities in pervasive computing, and the challenges of understanding both what people want to do with such an environment and the risks inherent when everything is intelligent and communicative. Thackara points out that "as software and communications connect up with each other, and envelop participants like a cloud, researchers, designers, production engineers, logistics experts, and consumers [will] find it easier to communicate with each other." However, he notes a need for much more user interface design: "the design of interfaces to this innovation becomes a priority. There are currently fewer than 5,000 human-computer interaction designers in the whole world, and many of them have engineering or computer science backgrounds. If innovation is as important as policy makers aver, then interaction design needs to be made more of a priority." Computing has become ubiquitous: there are now multiple processors in modern automobiles, running everything from the engine to brakes to the electric windows. Mobile phones, palm sized computers, tools and appliances are everywhere.

As computing becomes pervasive, objects in our environment will have the ability to communicate with every other object. Interaction with computers will transform from something specific we do, to an environment we inhabit. As Thackara notes, "Almost everything man-made will soon combine hardware and software. The world is already filled with twelve computer chips for every man, woman and child on the planet; within ten years, if you include smart tags on products in shops, there will be millions of them, everywhere - all talking to each other. In this context 'beyond the desktop' grossly understates the consequences of ubiquitous computing that spreads new forms of intelligence and connectivity everywhere." Companies will face difficult problems in this new environment, and some vexing questions and policy issues will have to be answered by society as a whole. Thackara suggests that just knowing the technology will not be sufficient: "Many companies know how to make amazing things, technically - but are at a loss to understand what to make. Companies that became successful through technological leadership realize better than most that such leadership is expensive to achieve, and is short-lived. Something extra is needed to achieve sustainable competitive
advantage. That something is an understanding of the social contexts in which products and services are used."

Kim Binsted, a researcher in the Interaction Lab of Sony CSL in Tokyo, will close the conference with a talk entitled "Sufficiently Advanced Technology: Using Magic to Control The World." Binsted took her Ph.D. in Artificial Intelligence at the University of Edinburgh, on the computer generation of punning riddles. She has presented her computer-generated riddles as part of a panel on humor with Douglas Hofstadter (author of Gödel, Escher, Bach: an Eternal Golden Braid), Marvin Minsky (MIT Media Lab, author of The Society of Mind) and Steve Martin (well-known comedian and actor), at Stanford University. Her current work involves computer aided entertainment with potential far beyond today's games.

She will argue that the point of technology is to have "power over the world around us, and that typical forms of imagined magic reflect the powers we would wish to have." According to Binsted, examples of magical powers "include farsensing, shapeshifting, teleportation, prediction, and mind-reading." Translating these ideas into innovative products is a significant task, one that is suited to the HCI community in all its diversity. "Mundane interfaces are fine for mundane applications. The desktop metaphor is great if you want to do desk-work. However, a lot of the things we do with computers now are, in a strong sense, magic." We can learn from the mythologies we have, and the stories we tell, what it is we really want to do: and thus what it is we want from technological innovation.

Tutorials

Preceding the CHI 2000 technical program will be a diverse series of full-day and evening tutorials. These courses range from basic classes, such as "Human-Computer Interaction: Introduction and Overview" to narrow advanced topics, such as "Cognitive Factors in Design: Basic Phenomena in Human Memory and Problem Solving". Other examples of the wide range of offerings include "Usability Techniques for Web-based Services: Diversity and Technology"; "Enabling Technology for Users with Special Needs"; and "Drawing on the Right Side of the Brain", a one-day version of Betty Edwards' famous drawing course (a favorite from previous CHI conferences).

Tutorials concentrating on the Web abound at CHI 2000, reflecting the tremendous interest in the Web, and the idea that most people interact with computers by using the Web. Examples include "Styling the New Web: Web Usability with Style Sheets", "Web Sites that Work: Designing with your Eyes Open", and "Design and Rapid Evaluation of Usable Web Sites". In all, 31 tutorials presented by experts in a wide variety of fields will be available at CHI 2000. Tutorials are eligible for Continuing Education Credit. Full descriptions of the tutorials can be found on-line at the CHI 2000 web site.

Workshops

CHI 2000 offers sixteen workshops covering a broad range of computer-human interaction issues. These small groups (usually eight to twenty participants) will meet for one to two days to exchange views on topics of common concern. Participants are chosen ahead of time on the basis of position papers submitted to the workshop organizers. Position papers are due on 28 January 2000. Consult the CHI 2000 workshops section of this issue of the SIGCHI Bulletin for details.

Networking

Those attending the conference will find it a congenial event. Recognizing the importance of developing new relationships at the conference and finding opportunities to have stimulating conversations about HCI, CHI 2000's special area Interaction is concerned with providing sessions that encourage participants to have provocative discussions. We will provide several discussion areas in the Commons in support of these interactions. An example of a special session is Interactionary, which will feature teams of designers tackling a design problem in real-time, allowing the audience to contrast design approaches and activities. Robin Jeffries (Sun Microsystems, USA), the Interactions Chair, has been working to ensure that there will
be thought provoking sessions. Jeffries also plans "to arrange situations and venues where people can go to discuss topics raised at the conference or just to find people interested in some of the same HCI issues as they are." The conference will have several social events, including an evening reception at a five star hotel on the shore of the North Sea.

The annual CHI conference is the premier worldwide forum for the exchange of information on all aspects of how people interact with computers. Predict the future by helping to create it. Plan to attend CHI 2000.