

TUESDAY AT A GLANCE

	Hall F	Hall E1	Hall E2	Hall G	Hall H	Hall D
09:00 - 10:30	Opening Plenary – Hall D Next Reality: The Future of Connected Everyday – Jun Rekimoto					
11:30 - 13:00	DESIGN EXPO Getting Down to Business	PAPERS Keeping Safe	PAPERS Managing Multiple Tasks	PAPERS Ambient Intelligence	TO BE ANNOUNCED	SPECIAL AREA What's My Method? A Game Show
14:30 - 16:00	PAPERS/SHORT TALKS Robots I	PAPERS 3D-2D	PAPERS Information Management	PAPERS Universal Usability	DEMOS Computer-Supported Interactions	PANEL Video Visions of the Future: A Review
16:30 - 18:00	PAPERS/SHORT TALKS Robots II	PAPERS Speech and Sound	PAPERS Collaboration	PAPERS In the Classroom	DEMOS Engaging the Digital Environment	PANEL Connecting With Large Market Customers

WEDNESDAY AT A GLANCE

	Hall F	Hall E1	Hall E2	Hall G	Hall H	Hall D
09:00 - 10:30	DESIGN EXPO Designing the Humane Interface	PAPERS Teamwork	STUDENT COMPETITION Finalists Presentation	PAPERS Stylus, Tap and Text	PAPERS Can You Feel Me Now?	PANEL Enhancing Independence of Older People
11:30 - 13:00	DESIGN EXPO Stories on UX Design/Panel	PAPERS Interruptions, Interruptions, Interruptions	STUDENT COMPETITION Finalists Presentation	PAPERS Mobile Text Entry	PAPERS Can You See Me Now?	SPECIAL AREA Robotics & Transport
14:30 - 16:00	PAPERS Handhelds and Pervasive Computing	PANEL Trading Design Spaces	PAPERS Morphing, Blending and Pointing	PAPERS/SHORT TALKS Measuring Usability	DEMOS Finding Your Way	SPECIAL AREA Ambient Intelligence
16:30 - 18:00	PAPERS Games	CHI FRINGE Connect	PAPERS Search and You Will Find	PAPERS Design Methods	DEMOS Enabling Alternative Interactions	INVITED SESSION Emerging Initiatives in HCI

THURSDAY AT A GLANCE

	Hall F	Hall E1	Hall E2	Hall G	Hall H	Hall D
09:00 - 10:30	NO SESSION	PAPERS Modelling Human-Performance	PAPERS Online Trust	PAPERS Telephones, Sickness and Affect	SPECIAL AREA Mobile Communications	PANEL How to Trust Robots Further Than...
11:30 - 13:00	NO SESSION	PANEL Mobile Communications	CHI FRINGE 2 Bots Borgs	PAPERS Multi-Modal Creation	DEMOS Games and Virtual Environments	PANEL Interface and Interactions in Driving
14:30 - 16:00	NO SESSION	PAPERS Tangible Computing	SPECIAL AREA European HCI Research	PAPERS Sharing Your World	DEMOS Visualizing Information	TO BE ANNOUNCED
16:30 - 18:00	Closing Plenary – Hall D The Future of Designing Experiences – Tim Brown					

TUESDAY AT A GLANCE

Hall M	Hall N	Hall I	Hall K	Connectionary	Special Events
				HIGHLIGHT ON EXHIBITS 10:30 – 11:30	NEWCOMERS ORIENTATION 10:30 – 11:30 Hall H
SIG Tips & Tricks for Better Intern'l Usability Test	TO BE ANNOUNCED	SHORT TALKS Out-of-Pocket Experiences	SHORT TALKS Sharing for a Better Tomorrow	EXHIBITS OPEN 10:00 – 18:00	SIGCHI 101 FREE TUTORIAL 13:15 – 14:15 Hall E1
HCI OVERVIEWS User Centered Technologies and Society	SIG The Untapped World of Video Games	SHORT TALKS Tell Me How You Really Feel?	SHORT TALKS Feed-back and Other Haptic Happenings		
SIG End Users Creating Software	SIG elearning and Fun	SHORT TALKS Hail Ubiquity!	SHORT TALKS Mark My Memories		
					CONFERENCE RECEPTION 20:00 – 22:30 Town Hall Vienna

WEDNESDAY AT A GLANCE

Hall M	Hall N	Hall I	Hall K	The Commons	Special Events
SIG Safety-Critical Interaction	TO BE ANNOUNCED	PAPERS End-User Programming	SHORT TALKS Users Have Issues, Too	INTERACTIVE POSTER HIGHLIGHTS 10:30 – 11:30	ACM SIGCHI MEMBERSHIP MEETING 13:15 – 14:15 Hall E1
HCI OVERVIEWS Special Needs and Aging	SIG Design Techniques for Mobile Apps	PAPERS Visualizing Work	SHORT TALKS Eye Told You So		
HCI OVERVIEWS Global HCI	SIG Interactive Information Retrieval Systems	SHORT TALKS Social Dot Net	SHORT TALKS Web For All, and All For Web		
SIG Universal Remote Console Standard	SIG Accessibility as a Component of Web Research	SHORT TALKS Sharing and Caring	SHORT TALKS Are You My Type?		HOSPITALITY RECEPTIONS 18:30 – 20:30 Conference Center

THURSDAY AT A GLANCE

Hall M	Hall N	Hall I	Hall K	The Commons	Special Events
HCI OVERVIEWS Open Source, Patents, and Big Players	SIG Asynchronous Learning Networks	SHORT TALKS Sensor Sensibility	SHORT TALKS Come Play With Me	INTERACTIVE POSTER HIGHLIGHTS 10:30 – 11:30	NONE
HCI OVERVIEWS Methodologies, Toolkits, and Performance	SIG Context-Sensitive Design	PAPERS On-Line Communities	SHORT TALKS Hands and Tools		
SIG Personal Information Management	SIG Improving Information Usability	SHORT TALKS Truth, Lies, and Usability Tapes	SHORT TALKS We Do Windows		

From the Conference Co-chairs

Welcome to CHI2004 and to Vienna! The annual CHI conference is the leading international forum for the exchange of ideas and information about human-computer interaction (HCI). Vienna is an historical center of art, culture, and science. Our conference theme this year is CONNECT: to technology, to each other, to a broad and diverse array of perspectives, and to new fields and domains. Vienna provides the backdrop of a long cultural and artistic tradition to our explorations into the future of human-computer interaction.

Diverse members of the global HCI community meet at the CHI conference to share the excitement of discovery and invention, to make and strengthen professional relationships and friendships, and to tackle real world problems. We are pleased to welcome you to CHI2004 to take part in strengthening and extending the foundations of our discipline and identifying the challenges yet to be solved.

You are our user; you are our participants, our client, our motivation for creating a conference experience to remember. CHI2004 was approximately two years in the making, through the efforts of a truly international group of dedicated volunteers who worked hard to bring you a stimulating and thoughtful preprogram of tutorials and workshops and the CHI2004|ICSID FORUM, a great technical program, and a wide variety of local Experience Tours to make your conference experience thoroughly memorable.

We are delighted to offer you CHI2004 and we thank you for joining us to present ideas, discuss, debate, innovate, learn, and speculate. Our reward is your continued success in your education, your career, and your life-long learning goals - and the enrichment of our domain. Look for us and tell us what you think!

Elizabeth Dykstra-Erickson • *Kinoma Inc., USA*
Manfred Tscheligi • *CURE and University of Salzburg, AT*
CHI2004 Conference Co-chairs

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Champion Sponsors



Contributing Sponsors



The CHI2004 Conference is sponsored by ACM's Special Interest Group on Computer-Human Interaction (ACM SIGCHI). ACM, the Association for Computing Machinery, is a major force in advancing the skills and knowledge of Information Technology (IT) professionals and students throughout the world. ACM serves as an umbrella organization offering its 71,000 members a variety of forums in order to fulfill its members' needs, the delivery of cutting edge technical information, the transfer of ideas from theory to practice, and opportunities for information exchange. Providing high quality products and services, world-class journals and magazines; dynamic special interest groups; numerous "main event" conferences; tutorials; workshops; local special interest groups and chapters; and electronic forums, ACM is the resource for lifelong learning in the rapidly changing IT field.

SIGCHI is the premier international society for professionals, academics and students who are interested in human-technology and human-computer interaction (HCI). We provide a forum for the discussion of all aspects of HCI through our conferences—including our flagship CHI conference, publications, web sites, email discussion groups, and other services. We advance education in HCI through tutorials, workshops and outreach, and we promote informal access to a wide range of individuals and organizations involved in HCI. Members can be involved in HCI-related activities with others in their region through local SIGCHI chapters. Visit our booth at the conference; come to our membership meeting; or visit www.sigchi.org to learn more about SIGCHI.

Membership Information

Please contact ACM's Member Services Department online: www.acm.org

In USA & Canada	
Tel.:	800 342 6626
Or:	+1 212 626 0500
Fax:	+1 212 944 1318
Email:	acmhelp@acm.org
Write:	ACM Member Services PO Box 11414 NY, NY 10286-1414 USA

Cooperating Organizations:

Austrian Computer Society
British HCI Group (BCS)
European Association of Cognitive Ergonomics (EACE)
German Society for Informatics (GI)
Human Communication Group [HCG] of the IEICE of Japan
Swedish Interdisciplinary Interest Group for Human-Computer Interaction (STIMDI)

Italy: SIGCHI Italy
Netherlands: SIGCHI.NL
Norway: SIGCHI Norway
Poland: Poland SIGCHI
Portugal: Universidade Fernando, Pessoa SIGCHI
Romania: RoCHI
Russia: Russia SIGCHI
Spain: CHISPA
Sweden: STIMDI, West Sweden CHI
Switzerland: SwissCHI

Local SIGCHI Chapters

Africa

South Africa: CHI-SA

Americas (outside USA)

Brazil: Brazil CHI
Canada: CapCHI, ToRCHI, VanCHI, WatCHI
Chile: SIGCHI Chile
Mexico: CHI-MEXICO

Asia / Pacific

China: SIGCHI China
India: CHI Bombay, CHI-South India
Korea: SIGCHI Korea
New Zealand: SIGCHI_NZ
Singapore: SIGCHI Singapore

Europe

Austria: SIGCHI Austria
Belgium: BelCHI
Bulgaria: BulSIGCHI
Czech Republic: Czech SIGCHI
Denmark: SIGCHI.DK
Finland: SIGCHI Finland
France: Toulouse SIGCHI
Germany: German SIGCHI

Middle East

Israel: IsraCHI

United States

California: BayCHI, LA-SIGCHI, OCCHI, SanD CHI
Colorado: Rocky Mountain CHI
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District of Columbia: DC_CHI
Georgia: CHI-Atlanta
Illinois: CHI-Squared
Iowa: CHI ISU
Massachusetts: LowellCHI, GB/SIGCHI
Michigan: MOCHI
Minnesota: TwinCHI
Missouri: KC-CHI, GatewayCHI
New York: CornellCHI, NYC-CHI
North Carolina: TriCHI
Ohio: BuckCHI, MOCHI
Oregon: CHIFOO
Pennsylvania: PhiCHI, SIGCHI PGH
Texas: CHI-Austin, Lone Star CHI
Utah: NUCHI
Virginia: GMU SIGCHI
Washington: Puget Sound SIGCHI, University of Washington SIGCHI
Wisconsin: Milwau-CHI

Technical Program Overview

The CHI2004 technical program showcases presentations of outstanding Human-Computer Interaction (HCI) research, demonstrations of new and innovative technology, discussions of timely and controversial issues, and presentations of the latest developments in HCI design and practice.

Pre-conference

Development Consortium

The Development Consortium explores issues and directions that the HCI community and SIGCHI should develop in the coming years.

Doctoral Consortium

The Doctoral Consortium provides an opportunity for a group of invited doctoral students to explore their research interests in an inter-disciplinary workshop with other students and a group of experienced researchers.

Tutorials

If you have arrived before the main conference begins, and have any extra time on Saturday, Sunday or Monday, consider registering for one or more of the tutorials offered. Tutorials are courses designed to provide diversity and depth, and to appeal to novice and experienced participants.

Tutorial Notes

Each tutorial attendee receives one set of notes for each tutorial attended. Many of the tutorial notes are available for purchase at the CHI Store beginning Tuesday. Shop at the CHI store to purchase your own set of tutorial notes.

Workshops

Workshops provide a valuable opportunity for small communities of people with diverse perspectives to engage in rich one- and two-day discussions about a topic of common interest. Workshop participants are pre-selected based on submitted position papers.

CHI2004 ICSID FORUM

The FORUM is a special two-day event focusing on bringing together SIGCHI and ICSID members to discuss HCI and industrial design. It is open to all with limited seats available.

Conference

Sessions

Choosing Sessions

The CHI2004 Conference Proceedings CD-ROM and CHI2004 Extended Abstracts CD-ROM contain information about each presentation. You may wish to refer to these materials to help you choose which sessions to attend. You may also attend the Newcomers Orientation at 10:30 AM on Tuesday, where we offer suggestions on planning your conference experience. Conference volunteers will be available to answer questions.

Leaving Sessions

If you plan to leave during the middle of a session, please be considerate of the speakers and others around you by taking a seat near an exit.

Presentation/Session Length

Approximate lengths of each type of presentation are:

Demonstrations	30 minutes
Papers.....	30 minutes
Short Talks.....	15 minutes
Panels	90 minutes
Design Case Studies	15 minutes
SIGs	90 minutes
HCI Overviews	30 minutes

Expect about the last third of each presentation to be used for a question and answer session.

Design Expo

Using the Design Case Study format initiated in CHI2002 for the CHI2002/AIGA FORUM, and further developed at the CHI Conference, the Design Expo highlights the best practices of our community. The Design Expo showcases applied HCI, discussing the multi-disciplinary nature of our profession and the real world trade-offs those multi-disciplines require. This year's Design Expo features case studies from leading software companies as well as leading HCI practitioners.

CHI Fringe 1 and 2

CHI Fringe sessions allow the controversial, hard to publish, alternative perspectives on HCI to express themselves in a format that encourages lively audience participation.

Demonstrations

Demonstrations offer an opportunity to show an innovative interface concept, HCI system, technique, or methodology. Participants are able to view systems in action and discuss them with the people who created them.

Panels

Panels stimulate thought and discussion about ideas and issues of interest to the human-computer interaction community. Panels typically focus on controversial or emerging issues. The panels allow speakers and audience the opportunity to explore, debate, and reflect on these issues.

Papers and Late Breaking Results (Short Papers)

All CHI papers present contributions to research, development, and practice in all areas of HCI, and have a significant impact on the development of HCI principles, theories, and techniques. Papers are rigorously refereed and are published in the archival CHI Conference Proceedings as an issue of CHI Letters, and in the ACM Digital Library. Late Breaking Results are also rigorously refereed, are shorter in length, and are published in the Extended Abstracts volume of the Conference Disc and in the ACM Digital Library.

Special Interest Groups (SIGs)

Special Interest Groups (SIGs) enable conference attendees who share similar interests to meet informally for 90 minutes of facilitated discussion. CHI2004 provides meeting space and advertises SIG meetings to the rest of the conference in the Extended Abstracts and Conference Program.

Following the conference, SIG organizers are encouraged to continue their discussions on CHIplace.

Student Competition

CHI2004 Student Competition entries are posted on posters in The Connectionary. Be sure to review them and attend the Finalists Presentations, and see if you can guess the winners to be announced at the Closing Plenary.

Special Events

To enhance your conference experience, additional activities will be provided throughout the conference. All conference attendees are welcome to register and participate in these events.

Networking Reception

Monday, 18.30 – 20.00
Conference Center-Restaurant Area (Level O1)

Join your fellow CHI participants at a casual kick-off reception. Meet old friends, make new acquaintances, and plan your time at CHI. Light snacks and a cash bar will be provided. Relax, meet new friends and CONNECT!

Newcomers` Orientation

Tuesday, 10.30 – 11.30

Hall H

Please join us after the Opening Plenary and find out how to get the most from CHI2004. The Newcomers` Orientation is a special session that offers those attending CHI for the first time information on how to navigate the conference and make session choices in an environment with many options.

Conference Reception

Tuesday, 20:00 – 22:30

Town Hall of Vienna (Rathausplatz 1)

Join us for an evening in the fascinating (New) Town Hall of Vienna. The building was completed in 1883 and is based on Belgian Gothic. The huge complex became a magnificent neo-gothic edifice of superlatives, with open arcades, loggias, balconies, lancet windows, courtyards and a wealth of sculpted ornamentation. The ceremonial hall is the largest in Austria. At the top of the almost 100 meters high main tower stands the "Iron Man of the Town Hall" 6 meters high and weighting 1.8 tons with his standard, a landmark of Vienna. The Town Hall of Vienna is located on the famous Ringstrasse.

The Town Hall is easy to reach by public transport or by a pleasurable walk within the inner city of Vienna.

This event is included in the CHI2004 registration fee. Additional tickets for accompanying persons may be purchased at the registration desk.

SIGCHI 101. History, Overview, and Opportunities

Joseph A. Konstan,
President, ACM SIGCHI

Tuesday, 13:15 – 14:15
Hall E1

This free tutorial provides a brief look at the history of SIGCHI and an overview of its current structure and activities. It is designed to serve as an introduction for people new to the field, and a one-stop opportunity to learn how to get involved in or organize SIGCHI activities. Among the areas covered are: conferences, local chapters, publications, and special projects. In each case, in addition to reviewing current activities, I will present a case study of how a new activity was proposed and implemented.

ACM SIGCHI Membership Meeting

Wednesday, 13:15 – 14:15
Hall E1

The annual ACM SIGCHI Membership Meeting will be held during the lunch break Wednesday. At this meeting, officers of SIGCHI will present ongoing SIGCHI programs and activities followed by a question and answer session with the audience. Participants interested in participating in shaping SIGCHI's future are encouraged to attend.

Highlights on Exhibits

Tuesday, 10:30 – 11:30

The Connectionary-Exhibits Area

The Exhibits Area opens immediately after the Opening Plenary session on Tuesday morning.

Interactive Posters and Student Competition Highlights

Wednesday & Thursday,
10:30 – 11:30

Gallery-Level O1

Posters from Late Breaking Results and the Student Competition Finalists are on display throughout the conference. Visit the Posters authors and discuss their work with them directly. Authors may also be available for discussion during other breaks.

Hospitality Receptions

Wednesday
18:30 – 20:30

Microsoft (Champion Sponsor)
Google (Champion Sponsor)
Human Factors International
Noldus

Experience Visits

Special visits have been set up to experience different theme related locations and institutions in Vienna and nearby Linz and Salzburg.

Technisches Museum Wien Designing Visitor Experiences

Monday, 26 April
16:00 – 18:00

Friday, 30 April,
10:00 – 12:00

On the area of 22,000 square meters, the Technisches Museum Wien offers a wide range of fascinating insights into the world of technology. Unique exhibits from the past to the present make the house a venue for exploring exiting technological developments. Text, film, and experiments illustrate the mutual influence between technological achievements and society, economy and culture. Experiences with several themes have been set up, like the *medien.welten* (history and evolution of transmission media as well as storage media). The virtual reality theater allows visitors to dive into virtual worlds. See www.tmw.at to learn more about the Technisches Museum Wien.

Two special workshops will be offered for conference attendees towards designing visitor experiences. The workshop includes a guided tour through the museum (free of charge). The museum is easy to reach by public transport.

Reservations: Each visit is limited to 30 people. Reservations will be possible on site at the CHI2004 Information Booth.

In addition, the Technisches Museum Wien offers a 20% reduction (valid between April 24 and May 2 based on coupons given on site) on the entrance fee for all CHI2004 attendees.

Sigmund Freud Museum Wien Back to the Roots

Monday, 26 April
16:00 – 17:30

Friday, 30 April
13:00 – 14:30

In the former living quarters and office of Sigmund Freud in the house at Berggasse 19 in Vienna's ninth district, the Sigmund Freud Museum presents an exhibition documenting the life and work of the founder of psychoanalysis. Original furnishings, including the waiting room, a selection from Freud's collection of antiquities, and signed copies and first editions of his works provide a glimpse into Freud's life, his cultural environment and the development of psychoanalysis. Historical film clips assembled and commented by Anna Freud depict moments in the private life of Freud and his family and enhance the visitors' experiences of this unique museum. See www.freud-museum.at to learn more.

Two visits will be offered to conference attendees. Each visit includes a guided tour through the museum, access to the museum's media room where archive video and audio material can be experienced, and access to the museum's library. The museum is easy to reach by public transport.

Reservations: Each visit is limited to 20 people (admission free!). Reservations will be possible on site at the CHI2004 Information Booth.

**Tech Gate Vienna
Designing Advanced
Interaction**
Wednesday, 28 April
18:30 – 20:00

Meet Virtual Reality and Advanced Interaction research institutions and companies located in TechGate Vienna and see how newest VR-Technologies can be used in different areas. Selected example projects for medicine, archaeology, architecture, town and country planning and entertainment will be presented. "Mixed Reality User Interfaces" like the Personal Interaction Panel, the Texture Painter and Augmented Painting – all of them used in combination with a 3D stereo projection display – will be demonstrated. Other demonstrations include a Virtual Interactive Collaboration Tool and achievements in computer vision technology. The Tech Gate Vienna, 5 minutes from the conference center has been set up a Technology Park for Vienna. See www.techgate.at to learn more about it.

Reservations: The visit is limited to 30 people. Reservations will be possible on site at the CHI2004 Information Booth.

**Ars Electronica Center Linz
Looking into the Future**
Friday, 29 April
13:00 – 15:00, Linz

The "Homebase" of all Ars Electronica activities is the Ars Electronica Center – Museum of the Future. Opened in 1996, it is a permanent exhibition area of media art and visionary technology, and a center of procurement and information for the population. On five levels of the Ars Electronica Center have been showcasing creative technologies and the innovative ideas of the 21st century to enable visitors to get acquainted with the technology of the future, gain hands-on experience with it and customize it to their needs, and interactively learn in a way that is fun, user-friendly, and designed with all visitors in mind, no matter what their level of computer experience. Projects from artists Hiroshi Ishii, Masaki Fujihata, Hirokazu Kato, Joe Paradiso, Casey Reas, Tina Blaine, Motoshi Chikamori, Kyoko Kunoh, and more. See www.aec.at to learn more about it.

Reservations: The visit is limited to 35 people (admission free!). Reservation will be possible on site at the CHI2004 Information Booth. Linz is reachable by a two hour train ride.

**The Center for Information,
Communication, Society &
Technology**
New Dimensions in ICT
Friday, 29 April, 13 – 15:00,
Salzburg

The newly established Center at the University of Salzburg coordinates and implements studies in the vast field of new information and communication technologies and their interrelationship with society as a whole. The core orientation is the analysis of the social embeddedness of technologies, the development of valuable and socially responsible technical applications, and their social-scientific monitoring. The ICT&S-Center is located in the heart of Salzburg, opposite the famous Festspielhaus (www.salzburgfestival.at), at the Max-Reinhard-Platz. Only few meters away the dome of Salzburg, St. Peter and Castle Hohensalzburg.

Reservations: The visit is limited to 25 people. Reservations will be possible on site at the CHI2004 Information Booth. Salzburg is reachable by a 3 to 3 1/2 hour train ride.

More details are available at the CHI2004 Information Booth.

**ZOOM Children's Museum
Multimedia Experiences @
ZOOMlab**
Wednesday, 28 April
19:00 – 20:30

Located within the walls of one of the ten largest cultural centers of the world and one of Vienna's most pulsing centres of cultural life, the Vienna MuseumsQuartier, the ZOOM Children's Museum encourages active and self-determined experiences for its young visitors. At ZOOMlab, the museum's multimedia lab, children can approach new media in a playful way: they learn to deal creatively with new media production processes and achieve immediate results which can be tested and shown around. The products created by the kids are displayed online. See www.zoomlab.at/e/zoomlab/ to learn more about Austria's first hands-on museum. See www.mqw.at to learn more about the Vienna MuseumsQuartier.

"Play is the highest form of research"
(Albert Einstein)

One special workshop will be offered to conference attendees. The workshop starts with a guided tour through the ZOOMlab explaining how the lab supports the children's creativity in developing multimedia productions. Attendees will then get the singular chance to face new media challenges like children do by interactively playing with technology. The museum is easy to reach by public transport.

Reservations: The visit is limited to 25 people (admission: 4 euros/ attendee). Reservations will be possible on site at the CHI2004 Information Booth.

Fun Run
Jogging through the
Vienna Prater
Wednesday, 28 April 2004,
07:00 (on time)

For those who love to get up early and do some sports, we offer this “compelling” opportunity to jog among like-minded people along one of the most beautiful running tracks in Vienna: the Prater Hauptallee (Prater’s main avenue). The Prater in Vienna is an expansive area where the Viennese go for recreation, offering a wide variety of open spaces that range from natural riparian landscape to city park. The jogging track, also part of the yearly marathon competition, will be about 6-7 kilometers long and also enables you to catch a glimpse of some of the city’s attractions like the Vienna Lusthaus, the Stadion and one of Vienna’s landmarks the Riesenrad (Giant Ferris Wheel). See www.touristnet.at/w_pr_1e.htm to learn more about the Vienna Prater.

Meeting Point: tram station of line 21 at the underground (metro) station U1-Praterstern. Be there in your jogging suit! Contact the CHI2004 Information Booth for further details.

SIGCHI AWARDS

SIGCHI is pleased to announce the following award recipients:

2004 SIGCHI LIFETIME ACHIEVEMENT AWARD

for outstanding contributions to the study of human-computer interaction

Tom Moran IBM Almaden Research Center, USA

Tom Moran is a Distinguished Engineer at the IBM Almaden Research Laboratory and previously was Principal Scientist and manager of the user interface area at Xerox PARC. Tom was founding director of Xerox EuroPARC. His early work with Allen Newell and Stu Card on the theoretical foundations of human-computer interaction culminated in the seminal text, *The Psychology of Human-Computer Interaction*. Their model human processor, keystroke-level model, and GOMS model have influenced a generation of HCI researchers. Moran founded and continues as editor of the influential journal *Human Computer Interaction*. His analytic research, in addition to the psychology of HCI, includes a command language grammar, task mapping and mental models, a workaday world paradigm for CSCW, design rationale, and embodied user interfaces. His systems design work includes the Note Cards idea-processing hypertext system, the user-tailorable Buttons system, the RAVE media space, the Tivoli electronic whiteboard, multimedia meeting capture and “salvaging” tools, whiteboard-embedded meeting tools, and camera-captured walls.

2004 SIGCHI LIFETIME SERVICE AWARDS

for contributions to the growth of SIGCHI in a variety of capacities

Robin Jeffries Sun Microsystems, USA

Robin Jeffries has been involved in SIGCHI since 1985. Robin has taken on a variety of roles in SIGCHI, including serving as Adjunct Chair for Special Needs, Adjunct Chair for Mentoring, and a member of SIGCHI’s Advisory Board. Through these roles Robin has been responsible for many SIGCHI initiatives. Robin has also held several CHI conference positions, including Papers Co-Chair, and led the CHI Kids effort in its early days.

Robin is a Sun Microsystems Distinguished Engineer and is currently the User Experience Architect in Sun’s Chief Technologist’s Office, where she works on company-wide issues in product design and usability. Robin spent 15 years as a researcher at the University of Colorado, Carnegie-Mellon University, and Hewlett-Packard Laboratories before coming to Sun. She is also Sun’s representative to the Institute for Women and Technology, with the goal of bringing more women into computing and keeping them in the field.

Gene Lynch**Design Technologies, USA**

Gene's passion and direction have long shaped the SIGCHI community and the CHI conference. He chaired the ANSI/HFS 100 Committee, co-Chaired CHI'90, and has been a frequent technical contributor to the CHI conferences as author, presenter, panelist, tutorial instructor, workshop leader and participant. He was a technical co-chair for CHI'92, and was ACM/SIGCHI's Vice-Chair for Conferences from 1993-1998.

Gene has 14 years of experience consulting on usability and product design and an additional 15 years industry experience in interactive product development. Prior to founding Design Technologies, he was the Director of the Tektronix Design Technology Laboratory, where he was responsible for Corporate Customer-Centered Research & Design, Software Tools, Software Process Improvement Program, and Corporate Industrial Design.

2004 INDUCTEES TO THE CHI ACADEMY

(for substantial contributions to the field of human-computer interaction)

George Furnas**University of Michigan, USA**

George Furnas is a Professor at the University of Michigan in the School of Information and the Department of Computer Science and Engineering. He came to academia from Bellcore and Bell Labs where he was a researcher, manager and director. A principal focus of his research is in advanced information access and visualization. George's contributions include Generalized Fisheye Views, Space-Scale Diagrams that support effective navigation in the Pad++ Zoomable User Interface, Multitrees that expanded the types of hierarchical structures that we can visualize, developments in Statistical Semantics, Adaptive Indexing, Latent Semantic Indexing, Graphical Deduction Systems, Prosection (a hi-dimensional visualization technique) and Collaborative Filtering. Recently he has been working on consolidating theories of design and use at multiple levels of aggregation.

Jonathan Grudin**Microsoft Research, USA**

Jonathan Grudin is at Microsoft Research in the Adaptive Systems and Interaction Group. He was earlier Professor of Information and Computer Science at University of California, Irvine and has taught at Aarhus University, Keio University and the University of Oslo. He has also worked at the MRC Applied Psychology Unit, Wang Laboratories, and MCC. He is best known for his work on Computer-Supported Cooperative Work and the social context of HCI. He is prolific and influential, authoring papers on topics such as typing errors; definitional studies of consistency, context and interfaces; organizational issues in HCI work; surveys of CSCW; collaborative information retrieval; and information displays. His methods include thought pieces, careful ethnography, and quantitative evaluations. His article on motivation and incentives in collaborative applications has led many people to call this problem the "Grudin Paradox" or the "Grudin Problem." He is the co-editor of the standard readings book for CSCW, and was recently editor of TOCHI.

William Newman**University College London, UK**

William Newman is currently an independent consultant on interaction and usability, and previously had academic appointments at the University of Utah. He worked at Xerox PARC and after some years of consulting, at EuroPARC. His 1968 paper "A System for Interactive Graphical Programming," set the stage for two major intellectual threads – input device independence (logical input devices) and user interface management systems. His early work at PARC on the Officetalk integrated office system helped develop some of today's common interaction techniques. His co-authored text *Principles of Interactive Computer Graphics* and second edition helped introduce HCI concepts to computer science students. His more recent co-authored text is *Interactive System Design*. At EuroPARC he managed the Collaborative and Multimedia Systems group, whose projects included the Pepys automatic diary systems and the digital desktop – thus influencing more recent work in ubiquitous computing.

Brad Myers**Carnegie Mellon University, USA**

Brad Myers is professor in CMU's Human-Computer Interaction Institute. He is our most prolific user interface software researcher, and is well-known for his influential work with programming by demonstration and UI development tools. His current work is the *Pebbles* PDA project to synchronously couple a PDA and PC, as well as a digital video authoring system. Earlier work included *Garnet* and *Amulet*, two widely-used interactive development environments for UIs, that introduced new concepts such as interactors and integrated support for constraints, command models, and animation. For his dissertation he built *Peridot*, a "programming by demonstration" user interface system that was the subject of his first book, *Creating User Interfaces by Demonstration*. Other software systems that Brad developed include *Incense*, *Silver*, *Lapidary* and *Sapphire*. He has also made contributions to window managers, program visualization and visual programming.

Dan Olsen**Brigham Young University, USA**

Dan Olsen Jr. is a Professor of Computer Science at Brigham Young University and was the first director of the CMU Human-Computer Interaction Institute at CMU. He is one of the very earliest and most influential researchers in the user interface software domain. His first contributions were in using formal language techniques (FSMs, BNF) to specify the syntactic structure of a user interface. He has also published two books on user interface software: *Developing User Interfaces* and *User Interface Management Systems: Models and Algorithms*. His MIKE system (1988) was an early and influential system for automatically generating a user interface from semantic specifications. Dan has shown great versatility in the past 10 years, creating novel systems in areas ranging from CSCW to Interactive Machine Learning, and developing metrics and principles for human-robot interaction. Dan was founding editor of TOCHI. He is a recipient of CHI's Lifetime Service Award.

Brian Shackel**Loughborough University, UK**

Brian Shackel is Professor Emeritus at Loughborough University. In 1959 he published about the ergonomics of display terminals, many years before HCI existed as a discipline. In 1970 he founded HUSAT, the human sciences research institute at Loughborough, which for many years was the largest HCI research center in Europe. He worked closely with government, industry and international bodies to make HCI an accepted part of political and commercial agendas, such as integrating usability methods and metrics into industry and defense standard engineering methods. In 1981 he became chair of IFIP WG6.3 on "Man-Computer Communication," and in 1984 was a founder of the Interact conference series and chair of the first conference. In 1989 he was the founding chair of IFIP technical committee 13. His contribution to international HCI was recognized in 1999 by the establishment of the Brian Shackel Award, presented at each succeeding Interact conference

Terry Winograd**Stanford University, USA**

Terry Winograd is a professor of computer science at Stanford University, where he founded and directs the program in human-computer interaction. Terry is a pioneer in cognitive science. His early work on natural language appeared in an entire issue of *Cognitive Psychology* and as two books: *Understanding Natural Language* and *Language as a Cognitive Process*. He shifted his interests to HCI with the co-authored book *Understanding Computers and Cognition: A New Foundation for Design*. His latest book *Bringing Design to Software* brought together thinkers from many design fields, pointing the way to integrating design thinking into HCI. Terry has explored other dimensions of the relationship between people and computers, receiving the Rigo Award for lifetime contributions to Computer Documentation (from ACM SIGDOC) and the Founders Award as founder of Computer Professionals for Social Responsibility. He has been a major influence in HCI through broadening its perspectives, demonstrating the relevance and importance of diverse schools of thought to understanding and designing interaction.

PAST HONOREES**SIGCHI LIFETIME ACHIEVEMENT AWARD**

1998 Douglas C. Engelbart
 2000 Stuart K. Card
 2001 Ben Shneiderman
 2002 Donald A. Norman
 2003 John M. Carroll

SIGCHI LIFETIME SERVICE AWARD

2001 Austin Henderson
 2002 Dan R. Olsen Jr.
 2003 Lorraine Borman

CHI ACADEMY MEMBERS

William A. S. Buxton
 Stuart K. Card
 John M. Carroll
 Douglas C. Engelbart
 James D. Foley
 Thomas Green
 James D. Hollan
 Sara Kiesler
 Robert E. Kraut
 Morten Kyng
 Thomas K. Landauer
 Thomas P. Moran
 Donald A. Norman
 Gary M. Olson
 Judith S. Olson
 Peter G. Polson
 Ben Shneiderman
 Lucy A. Suchman

Tutorials

Tutorials offer in depth coverage on topics relevant to continuing your professional development. Taught by recognized experts in their field, the courses at CHI2004 range from coverage of important fundamental aspects of disciplines that contribute to successful work in Human-Computer Interaction to application of those concepts in design, development or deployment. Topics range from theory to practice, from emerging to mature technologies, from design and development to usability and re-design.

Some tutorials offer the opportunity to sample new methods and ideas or to expand one's knowledge and skills in a variety of areas, including HCI business management skills. Some tutorials offer an updated look at core areas of Human Computer Interaction. Some offer an introduction to newly emerging areas that will continue to grow become more central to the field. Whether you are a CHI regular or a newcomer, a manager, a practitioner or a researcher you should be able to find one or more topics of interest that will enhance your background or contribute to your ability to do your professional work, either now or in the future.

Please note that Tutorials are subject to changes in room assignment, and there may be withdrawals or cancellations. Details are available at Registration.

Tutorials Schedule

Full-Day09:00 – 17:30
 Half-Day, Morning...09:00 – 12:30
 Evening18:00 – 21:30

Earning Continuing Education Units (CEUs)

SIGCHI offers CEUs in accordance with guidelines provided by the International Association for Continuing Education and Training (IACET).

The CEU is a recognized unit of measure for continuing education and professional training programs. Each CEU requires the successful completion of 10 hours of instruction. Successful completion of a CHI tutorial requires that you attend the entire session and participate fully in the learning activities.

You can earn 0.6 CEUs for each full-day tutorial (6 hours of instruction), and 0.3 CEUs for each half-day or evening tutorial (3 hours of instruction). To obtain CEU credit, you must register for CEUs at the same time you register for your tutorials. There is a small administrative charge.

After the conference, the ACE CEU Transcript Service will send you a letter confirming registration of your CEUs. In most cases, this letter is adequate proof that you have completed CEUs. In the rare case that it is not, the registry can issue an official transcript for a small fee.

Please note that the conference does not issue certificates of completion. For further inquiries about obtaining CEU transcripts, you may contact the ACE registry at:

Email: registries@ace.nche.edu
Tel: +1 202 939 9434
Fax: +1 202 833 3005

Transcripts may be ordered through this Web site: www.acenet.edu/calec/corporate/ceu_transcript.cfm

TUTORIALS AT A GLANCE			
TITLE	ORGANIZER(s)	DAY(s)	ROOM
1 Avoiding “We Can’t Change That!” Software Architecture & Usability	John, Bass, Juristo, Sanchez-Segura	Saturday	Hall M
2 Human-Computer Interaction: Introduction and Overview	Butler, Jacob, Kieras	Saturday	Hall N
3 Design Patterns for Customer-Centered Web Design	Landay, van Duyne	Sunday	Hall L
4 Cross-Cultural User-Interface Design: For Work, Home, and On the Way	Marcus	Sunday	Hall P
5 Understanding Users’ Work In Context: Practical Observation Skills	Dray	Sunday	Hall N
6 Introduction to Human-Robot Interaction	Yanco, Scholtz	Sunday	OE-8
7 Advanced Usability Testing Methodology	Molich	Sunday	Hall G
8 Cognitive Factors in Design: Basic Phenomena in Human Memory and Problem Solving	Hewett	Sunday	Hall H
9 Xforms: Improving the Web Forms Experience	Pemberton	Sunday	Hall K
10 Re-positioning User Experience as a Strategic Process	Innes, Friedland	Sunday	OE-6
11 Computer Supported Cooperative Work	Pollock, Grudin	Sunday	U2-11
12 User-Centered Design with Use Case and Agile Methods	Hudson	Sunday	U2-1
13 Evaluating Interactive Products for and with Children	MacFarlane, Read, Höysniemi, Markopoulos	Sunday	O1-5
14 Analyzing Social Interaction in CMC Systems	Herring, Smith	Sunday	OE-7
15 Designing Handheld Tools for Learning	Quintana, Soloway, Norris, Gale	Sunday	Hall O
16 Drawing on the Right Side of the Brain	Bomeisler	Sunday	Hall M

TUTORIALS AT A GLANCE			
TITLE	ORGANIZER(s)	DAY(s)	ROOM
17 Your Next Usability Lab: Tools for Data Collection and Analysis	Noldus, Heffelaar	Monday 09:00-12:30	Hall P
19 Mobile User-Interface Design: For Work, Home, and On the Way	Marcus	Monday	Hall M
20 An Introduction to Augmented Reality Interface Design	Billinghurst	Monday	Hall N
21 Usability Design - Integrating User-Centered Systems Design in the Software Development Process	Gulliksen, Göransson, Redina	Monday	Hall O
22 Web Bloopers: Avoiding Common Web Design Mistakes	Johnson	Monday	Hall G
23 Common Look & Feel: Cross-Product UI Design for Web Sites and Applications	Mullet, Solomon	Monday	Hall H
24 Product Usability: Survival Techniques	Spool, Perfetti	Monday	Hall K
25 Usability and Beyond! Understanding Usefulness, Usability & Use	Schiano	Monday	U2-11
26 Working with and Analyzing Qualitative Data	Siegel, Dray	Monday	OE-7
27 Interaction Design of Highly Automated Domain-specific Systems	Boy, Bradshaw	Monday	OE-6
28 Designing Usable Telephone Speech Interfaces	Lai, Suhm, Dobroth	Monday	U2-1
29 User Requirements: Collection, Data Interpretation and Presentation	Baxter, Courage	Monday	OE-8
30 High-Technology Innovation and Entrepreneurship: Principles and Pitfalls, with Case Studies of HCI Firms	Baecker	Monday	O1-5
31 A Cognitive Approach to Interactive System Design	Atwood, Hewett	Monday	Hall L

Tutorial 18 has been cancelled.

RECOMMENDED TUTORIAL GROUPINGS

Introduction to HCI

- 2** Human-Computer Interaction: Introduction and Overview

- 16** Drawing on the Right Side of the Brain

Cognition and its Application to Design

- 8** Cognitive Factors in Design:
Basic Phenomena in Human Memory and Problem Solving

- 31** A Cognitive Approach to Interactive System Design

User Interface Technologies

- 1** Avoiding "We can't change that!": Software Architecture & Usability

- 9** Xforms: Improving the Web Forms Experience

- 27** Interaction Design of Highly Automated Domain-specific Systems

User Centered Design and UCD Technologies

- 5** Understanding Users' Work in Context: Practical Observation Skills

- 6** Introduction to Human-Robot Interaction

- 7** Advanced Usability Testing Methodology

- 8** Cognitive Factors in Design:
Basic Phenomena in Human Memory and Problem Solving

- 13** Evaluating Interactive Products For and With Children

- 17** Your Next Usability Lab: Tools for Data Collection and Analysis

- 20** An Introduction to Augmented Reality Interface Design

- 26** Working with and Analyzing Qualitative Data

- 28** Designing Usable Telephone Speech Interfaces

User Interaction Design

- 3** Design Patterns for Customer-Centered Web Design

- 12** User-Centered Design with Use Case and Agile Methods

- 21** Usability Design
Integrating User-Centered Systems Design in the Software Development Process

- 23** Common Look & Feel: Cross-Product UI Design for Web Sites and Applications

- 24** Product Usability: Survival Techniques

- 25** Usability and Beyond! Understanding Usefulness, Usability & Use

- 29** User Requirements: Collection, Data Interpretation and Presentation

Mobile Technology

- 6** Introduction to Human-Robot Interaction

- 15** Designing Handheld Tool for Learning

- 19** Mobile User-Interface Design: For Work, Home, and On the Way

Social Interaction and Supporting Group Work

- 4** Cross-Cultural User-Interface Design: For Work, Home, and On the Way

- 11** Computer Supported Cooperative Work

- 14** Analyzing Social Interaction in CMC Systems

Business Aspects of HCI

- 10** Re-positioning User Experience as a Strategic Process

- 22** Web Bloopers: Avoiding Common Web Design Mistakes

- 30** High-Technology Innovation and Entrepreneurship:
Principles and Pitfalls, with Case Studies of HCI Firms

Saturday Evening Tutorials

1

Avoiding “We can’t change that!”: Software Architecture & Usability

Saturday, 18:00 – 21:30
Hall M

Bonnie John & Len Bass • *Carnegie Mellon University, USA*
Natalia Juristo • *Technical University of Madrid, Spain*
Maribel Sanchez-Segura • *Carlos III University of Madrid, Spain*

The usability analyses or user test data are in; the development team is poised to respond. The software had been carefully modularized so that modifications to the UI can be fast and easy. When the usability problems are presented, someone around the table exclaims, “Oh, no, we can’t change THAT!”

2

Human-Computer Interaction: Introduction and Overview

Saturday, 18:00 – 21:30
Hall N

Keith A. Butler • *Boeing Mathematics & Computing Technology, USA*
Robert J.K. Jacob • *Tufts University, USA*
David Kieras • *University of Michigan, USA*

This tutorial is a tried-and-true introduction to the field of human-computer interaction (HCI). It has become a CHI conference tradition.

If you are a newcomer to the CHI field, this tutorial will give you the background you need to get the most out of the CHI conference.

Sunday Tutorials

3

Design Patterns for Customer-Centered Web Design

Sunday, 09:00 – 17:30
Hall L

James Landay • *University of Washington, USA*
Douglas van Deyne • *NetRaker Corp., USA*

When it comes time to build a new web site, does your organization continue to reinvent the wheel? This tutorial provides a foundation to learn from past designs. You will learn the key design patterns that contribute to user success on web sites, as well as how to develop your own patterns to meet your organization’s needs.

4

Cross-Cultural User-Interface Design: For Work, Home, and On the Way

Sunday, 09:00 – 17:30
Hall P

Aaron Marcus • *President, Aaron Marcus and Associates, USA*

Learn

- Culture-dimension concepts
- How culture dimensions relate to UI design, persuasion, trust, intelligence, cognition
- Influence of culture on corporate UI standards

5

Understanding Users’ Work in Context: Practical Observation Skills

Sunday, 09:00 – 17:30
Hall N

Susan M. Dray, Ph.D. • *Dray & Associates, Inc., USA*

Observational studies of users in their work environments are a key element of user-centered design, but doing this kind of research requires new skills. This hands-on tutorial teaches practitioners how to plan and carry out observational studies of users. It focuses on practical solutions, skills and well-proven tools for participants to use in their own work. You will learn four types of observational techniques.

6

Introduction to Human-Robot Interaction

Sunday, 09:00 – 17:30
Room OE-8

Holly Yanco • *University of Massachusetts at Lowell, USA*
Jean Scholtz • *NIST, USA*

Participants will get an overview of the emerging field of Human-Robot Interaction (HRI) including a background in robotics, the state of the art in human-robot interaction, and hands-on interaction with robots.

7

Advanced Usability Testing Methodology

Sunday, 09:00 – 17:30
Hall G

Rolf Molich • *DialogDesign, Denmark*

Compare your own approach to usability testing with those used by professional labs during controlled usability tests in realistic, industrial settings. This tutorial gives a rare insight in the practical doings of usability professionals.

8

Cognitive Factors in Design: Basic Phenomena in Human Memory and Problem Solving

Sunday, 09:00 – 17:30
Hall H

Thomas T. Hewett • *Drexel University, USA*

You will learn some theoretical and practical aspects of how people remember information and how they solve problems. You will gain insights about how to take advantage of some of these capabilities in designing for your most important interaction component, the human mind.

9

Xforms: Improving the Web Forms Experience

Sunday, 09:00 – 17:30
Hall K

Steven Pemberton •
W3C and CWI, Amsterdam

This full-day tutorial introduces the new XForms technology for doing forms on the Web, and gives you the opportunity to build some working forms hands-on. XForms makes it easier to design and author complicated forms, and improves the user experience by allowing more to be checked in the browser. The tutorial will additionally describe usability, accessibility, device independence, internationalization, and how XForms integrates with XML.

10

Re-positioning User Experience as a Strategic Process

Sunday, 09:00 – 17:30
Room OE-6

Jon Innes • *Vitria Technology, USA*
Liam Friedland •
Westbridge Technology, USA

User Experience (UE) is often relegated to a service role within product development organizations, instead of being viewed as a strategic business asset with direct impact on the company's bottom line. This tutorial combines lecture and group exercises to demonstrate a framework for understanding UE as a strategic business process and positioning it within your company.

11

Computer Supported Cooperative Work

Sunday, 09:00 – 17:30
Room U2-11

Steven Poltrok •
Boeing Phantom Works, USA
Jonathan Grudin •
Microsoft Research, USA

Computer use today is about interacting, communicating, collaborating. Learn where we've been, where we are, where we're going. This tutorial considers technologies that support small groups, organizations, and communities. Our focus is on behavior: the activities that technologies support, experiences and challenges in adopting and using them. We discuss research, products, and trends.

12

User-Centered Design with Use Case and Agile Methods

Sunday, 09:00 – 17:30
U2-1

William Hudson • *Syntagm Ltd, UK*

You will learn how "just-in-time" design presents challenges to the development of usable systems and how to overcome them. The tutorial describes the case for early conceptual design of interactive systems, the practical use of metaphor and an approach to user interface development based on UML.

13

Evaluating Interactive Products for and with Children

Sunday, 09:00 – 17:30
Room O1-5

Stuart MacFarlane, Janet Read •
University of Central Lancashire, UK
Johanna Höysniemi • *University of Tampere, Finland and University of Art and Design Helsinki, Finland*
Panos Markopoulos • *Eindhoven University of Technology, The Netherlands*

Participants will become familiar with a number of evaluation methods that have proved useful with child users, appreciate how evaluation can address fun as well as usability, and appreciate the challenges and rewards of working with children as evaluators.

14

Analyzing Social Interaction in CMC Systems

Sunday, 09:00 – 17:30
Room OE-7

Susan Herring • *Indiana University, USA*
Marc Smith • *Microsoft Research, USA*

Learn about social software systems and communication in social cyberspaces. Learn conceptual frameworks from linguistics and sociology that provide insight into online social interaction. Select and apply tools for mining and visualizing social information from computer-mediated communication (CMC) databases.

15

Designing Handheld Tools for Learning

Sunday, 09:00 – 17:30
Hall O

Chris Quintana, Elliot Soloway •
University of Michigan, USA
Cathleen Norris •
University of North Texas, USA
Carolyn Gale • *Stanford University, USA*

You will explore how the growing family of handheld computing devices (e.g., Palms, Pocket PC's, etc.) can offer new opportunities to support learning activities "anytime, anywhere." Hands-on activities give you the opportunity to interact with handheld devices and understand how these mobile tools can support a variety of learning activities.

16

Drawing on the Right Side of the Brain

Sunday, 09:00 – 17:30
Hall M

Brian Bomeisler • *DRSBInc., USA*

There is a need in the computing world which is largely left-brained dominated, to access each individuals less dominant right brain not only for enlightenment but for creative problem solving. The course is specifically designed for those "left-brained" individuals.

Monday Tutorials

17

Your Next Usability Lab: Tools for Data Collection and Analysis

Monday, 09:00 – 12:30 (half-day)
Hall P

Lucas P.J.J. Noldus, Tobias Heffelaar •
Noldus Information Technology bv,
The Netherlands

In this tutorial, participants will learn:

- the state of the art in usability lab hardware and software technology
- the latest developments in relevant computer and video technology
- how software tools support the key data collection and analysis steps
- how to select the optimal tool for a given set of test requirements
- hands-on experience with tools for data collection and analysis

19

Mobile User-Interface Design: For Work, Home, and On the Way

Monday, 09:00 – 17:30
Hall M

Aaron Marcus • *President, Aaron Marcus and Associates, USA*

Learn:

- Key UI design issues for phones, PDAs, vehicles
- How to do user models, task analysis, heuristic evaluations, screen layout
- Influence of culture, emotion
- Successes/failures of product/service providers

20

An Introduction to Augmented Reality Interface Design

Monday, 09:00 – 17:30
Hall N

Mark Billingham •
University of Canterbury, New Zealand

Augmented Reality (AR) involves the overlay of virtual images on the real world. Participants will learn how to develop effective AR interfaces, techniques for interface evaluation and the tools necessary for application development.

21

Usability Design - Integrating User-Centered Systems Design in the Software Development Process

Monday, 09:00 – 17:30
Hall O

Jan Gulliksen •
Uppsala University, Sweden
Bengt Guransson, Enea Redina •
Sweden

The attendees will learn how the full scope of UCSD can be integrated in a software development process.

22

Web Bloopers: Avoiding Common Web Design Mistakes

Monday, 09:00 – 17:30
Hall G

Jeff Johnson • *UI Wizards, Inc., USA*

After completing this tutorial, participants will:

- Have seen the most common Web design errors and ways to avoid them.
- Be able to recognize those errors in websites and Web applications.
- Be better designers and customers of websites and online services.

23

Common Look & Feel: Cross-Product UI Design for Web Sites and Applications

Monday, 09:00 – 17:30
Hall H

Kevin Mullet •
Experience Design Reactor, USA
Eric Solomon • *Synopsys Inc., USA*

This tutorial describes the characteristics of effective software systems that form the basis for successful cross-product UI design. We illustrate proven techniques that you can use to design and build effective software systems within your own development team. By the end of the day, you will be able to produce a personal Look and Feel Convergence Plan for advancing the cause of cross-product UI design in your organization.

24

Product Usability: Survival Techniques

Monday, 09:00 – 17:30
Hall K

Jared M. Spool, Christine Perfetti •
User Interface Engineering, USA

To successfully compete in today's fast-paced environment, development organizations need quick ways to get feedback from their users and incorporate it in the product's design. This full-day tutorial shows participants how to produce a more usable product by prototyping and testing a design in a matter of hours, using readily available materials that require no specialized expertise.

25

Usability and Beyond! Understanding Usefulness, Usability & Use

Monday, 09:00 – 17:30
Room U2-11

Diane J. Schiano •
Stanford University, USA

Gain understanding of user research design principles and learn a toolkit of practical and effective methods useful throughout product design and deployment, even with limited resources.

26

Working with and Analyzing Qualitative Data

Monday, 09:00 – 17:30
Room OE-7

David A. Siegel, Ph.D. and
Susan M. Dray, Ph.D. •
Dray & Associates, Inc., USA

Qualitative user research is essential to user-centered design. Unfortunately, the data from these studies are often overwhelming, both in volume and in ambiguity. As a result, conclusions are often impressionistic or anecdotal, with vague or even misleading implications for design. This workshop will teach you practical strategies for study planning, data collection, and analysis to improve the credibility and validity of your findings, to keep them focused on design, and to help you avoid drowning in your data.

27

Interaction Design of Highly Automated Domain-specific Systems

Monday, 09:00 – 17:30
Room OE-6

Guy Boy • *European Institute of Cognitive Sciences and Engineering, France*
Jeffrey Bradshaw • *Institute for Human and Machine Cognition, USA*

This tutorial will introduce participants to emerging changes in the way people interact with machines, and they will be able to better understand and use more effectively current concepts in interaction design of highly automated domain-specific systems.

28

Designing Usable Telephone Speech Interfaces

Monday, 09:00 – 17:30
Room U2-1

Jennifer Lai • *IBM Research, USA*
Bernhard Suhm • *BBN Technologies, USA*
Kate Dobroth • *Mindframe Design, USA*

Learn how to design a telephone speech application along with techniques for analyzing existing applications and tools for effective speech usability testing.

29

User Requirements: Collection, Data Interpretation and Presentation

Monday, 09:00 – 17:30
Room OE-8

Kathy Baxter • *eBay, USA*
Catherine Courage • *Oracle Corp., USA*

This tutorial will provide attendees with the skills to conduct three effective and low cost user requirements techniques (Wants and Needs Analysis, Group Card Sort, and Group Task Analysis). Each method provides different information requirements information (functional requirements; information architecture and task flows, respectively).

30

High-Technology Innovation and Entrepreneurship: Principles and Pitfalls, with Case Studies of HCI Firms

Monday, 09:00 – 17:30
Room O1-5

Ron Baecker •
University of Toronto, Canada

You will learn principles for crafting a profitable growing business or line of business, better understand problems and pitfalls, and gain practice thinking about strategic issues.

31

A Cognitive Approach to Interactive System Design

Monday, 09:00 – 17:30
Hall L

Michael E. Atwood & Thomas T. Hewett
• *Drexel University, USA*

In this 1-day tutorial you will learn how to successfully design and improve useful and useable interactive systems by being able to answer the following questions.

- What is cognitive task analysis? Why do I want it and how can I do it?
- How do the users of the system think about their tasks and work they do?
- How can I tell how useful and useable a system is now or how useful it can be?
- How do I get started in designing a cognitively useful and useable system?
- How can I determine what parts of a system should be changed and how to change them?
- How can I communicate well with others on my design and development team?

WORKSHOPS AT A GLANCE			
TITLE	ORGANIZER(s)	DAY(s)	ROOM
1 Human-Computer-Human Interaction Patterns: Workshop on the Human Role in HCI Patterns	Schuemmer, Borchers, Thomas, Zdun	Sunday & Monday	U2-6
2 Identifying Gaps Between HCI, Software Engineering and Design, & Boundary Objects to Bridge Them	John, Bass, Kazman, Chen	Sunday & Monday	U2-7
3 Time Design	Hildebrandt, Dix, Meyer	Sunday	U2-2
4 User Profiling	Schuermans	Sunday	U2-3
5 Designing for Reflective Practitioners: Sharing and Assessing Progress by Diverse Communities	Redmiles, Fischer, Nakakoji, Mørch	Sunday	U2-4
6 Cross-Dressing and Border Crossing: Exploring Experience Methods Across Disciplines	Wakkary, Schiphorst, Budd	Sunday	U2-5
7 Shaping Human-Robot Interaction	Bartneck, Forlizzi	Sunday	U2-8
8 HCI and Homecare: Connecting Families and Clinicians	Mamykina, Bardram, Korhonen, Mynatt, Pratt	Sunday	U2-9
9 Lost in Ambient Intelligence	Nijholt, Rist, Tuijnenbreijer	Sunday	U2-10
10 Ambient Intelligence for Scientific Discovery	Cai, Klein-Seetharaman	Sunday	U2-12

WORKSHOPS AT A GLANCE			
TITLE	ORGANIZER(s)	DAY(s)	ROOM
11 Exploring the Relationship Between Design and HCI	Baumann, Evenson, Purgathofer, Zimmerman	Monday	O1-2
12 The Temporal Aspects of Work for HCI	Johnson, Roast, Czerwinski	Monday	U2-2
13 Home Technologies to Keep Elders Connected	Lundell, Morris, Intille	Monday	U2-3
14 Considering Trust in Ambient Societies	Marsh, Briggs, Wagealla	Monday	U2-4
15 "Scientists, Designers Seek Same for Good Conversation:" A Workshop on Online Dating	Fiore, Frost, Donath	Monday	U2-5
16 Helping Users to Use Help: Improving Interaction with Help Systems	Dworman, Rosenbaum	Monday	U2-8
17 Forecasting Presence and Availability	Tullio, Begole, Horvitz, Mynatt	Monday	U2-9
18 Reflective HCI: Towards a Critical Technical Practice	Dourish, Finlay, Sengers, Wright	Monday	U2-10
19 Social Learning Through Gaming	Raybourn, Waern	Monday	U2-12

Workshops

Workshops provide an extended forum for small groups (15-20 people) to exchange ideas on a specific topic of common interest. CHI2004 offers workshops covering a wide range of HCI topics.

Workshop participants were selected prior to CHI 2004 based on submitted position statements outlining participants' views on the workshop theme and reasons for interest in the workshop topic.

Sunday & Monday

1

Human-Computer-Human Interaction Patterns: Workshop on the Human Role in HCI Patterns

Sunday & Monday, 9:00 – 17:30
Room U2-6

Till Schuemmer •
FernUniversitaet in Hagen, Germany
Jan Borchers • *RWTH Aachen, Germany*
John C. Thomas •
IBM T.J. Watson Research Center, USA
Uwe Zdun •
Vienna Univ. of Economics, Austria

2

Identifying Gaps between HCI, Software Engineering and Design, and Boundary Objects to Bridge Them

Sunday & Monday, 9:00 – 17:30
Room U2-7

Bonnie E. John • *HCI Institute, Carnegie Mellon University, USA*
Len Bass and Rick Kazman • *Software Engineering Institute, Carnegie Mellon University, USA*
Eugene Chen • *Aaron Marcus and Associates, Inc. (AM+A), USA*

Sunday

3

Time Design

Sunday, 9:00 – 17:30
Room U2-2

Michael Hildebrandt • *York University, UK*
Alan Dix • *UK*
Herbert A. Meyer • *Germany*

4

User Profiling

Sunday, 9:00 – 17:30
Room U2-3

Johan Schuurmans •
IBM, The Netherlands
Boris de Ruyter • *Philips, The Netherlands*
Harry van Vliet •
Telematica Instituut, The Netherlands

5

Designing for Reflective Practitioners: Sharing and Assessing Progress by Diverse Communities

Sunday, 9:00 – 17:30
Room U2-4

David Redmiles •
University of California, Irvine, USA
Gerhard Fischer •
University of Colorado at Boulder, USA
Kumiyo Nakakoji •
University of Tokyo, Japan
Anders Mørch •
University of Oslo, Norway

6

Cross-Dressing and Border Crossing: Exploring Experience Methods Across Disciplines

Sunday, 9:00 – 17:30
Room U2-5

Ron Wakkary, Thecla Schiphorst, Jim Budd • *Simon Fraser University, Canada*

7

Shaping Human-Robot Interaction

Sunday, 9:00 – 17:30
Room U2-8

Christoph Bartneck • *Technical University of Eindhoven, The Netherlands*
Jodi Forlizzi •
Carnegie Mellon University, USA

8

HCI and Homecare: Connecting Families and Clinicians

Sunday, 9:00 – 17:30
Room U2-9

Lena Mamykina •
Siemens Corporate Research, Inc., USA
Jakob E. Bardram •
University of Aarhus, Denmark
Ilkka Korhonen •
VTT Information Technology, Finland
Elizabeth Mynatt •
Georgia Institute of Technology, USA
Wanda Pratt •
University of Washington, USA

9

Lost in Ambient Intelligence

Sunday, 9:00 – 17:30
Room U2-10

Anton Nijholt • *Technical University of Eindhoven, The Netherlands*
Thomas Rist • *DFKI, Germany*
Kees Tuinenbreijer •
Philips CDS, The Netherlands

10

Ambient Intelligence for Scientific Discovery

Sunday, 9:00 – 17:30
Room U2-12

Co-Chairs:

Yang Cai •
Carnegie Mellon University, USA
Judith Klein-Seetharaman •
Forschungszentrum Juelich, Germany

Workshop Program Committee:

Elena Zudilova •
University of Amsterdam, Netherlands
Gregory O'Hare •
University College Dublin, Ireland
Peter Jones •
Redesign Research, USA
Yongxiang Hu •
NASA Langley Research Center, USA
Binh Pham • *Queensland University of Technology, Australia*
Tony Adriaansen • *Telecommunications & Industrial Physics CSIRO, Australia*

Monday

11

Exploring the Relationship between Design and HCI

Sunday, 9:00 – 17:30
Room O1-2

John Zimmerman • *Shelley Evenson, Carnegie Mellon University, USA*
Konrad Baumann • *FH Joanneum, Austria*
Peter Purgathofer • *University of Technology, Design and Assessment, Austria*

12

The Temporal Aspects Of Work For HCI**Sunday, 9:00 – 17:30**
Room U2-2

Peter Wild, Peter Johnson •
University of Bath, UK
Christ Roast •
Sheffield Hallam University, UK
Mary Czerwinski •
Microsoft Research, USA

13

Home Technologies to Keep Elders Connected**Sunday, 9:00 – 17:30**
Room U2-3

Jay Lundell, Margaret Morris •
Intel Research, USA
Stephen Intille • *MIT, USA*

14

Considering Trust in Ambient Societies**Sunday, 9:00 – 17:30**
Room U2-4

Stephen Marsh •
National Research Council, Canada
Pamela Briggs •
University of Northumbria, UK
Waleed Wagealla •
University of Strathclyde, UK

15

“Scientists, designers seek same for good conversation”: A Workshop on Online Dating**Sunday, 9:00 – 17:30**
Room U2-5

Andrew T. Fiore, Jeana Frost, Judith S. Donath • *MIT Media Lab, USA*

16

Helping Users to Use Help: Improving Interaction with Help Systems**Sunday, 9:00 – 17:30**
Room U2-8

Garett Dworman,
Stephanie Rosenbaum •
Tec-Ed, Inc., USA

17

Forecasting Presence and Availability**Sunday, 9:00 – 17:30**
Room U2-9

Joe Tullio •
Georgia Institute of Technology, USA
James “Bo” Begole • *Sun Microsystems Laboratories Europe, France*
Eric Horvitz • *Microsoft Research, USA*
Elizabeth D. Mynatt •
Georgia Institute of Technology, USA

18

Reflective HCI: Towards a Critical Technical Practice**Sunday, 9:00 – 17:30**
Room U2-10

Paul Dourish •
University of California, Irvine, USA
Janet Finlay •
Leeds Metropolitan University, UK
Phoebe Sengers • *Cornell University, USA*
Peter Wright • *University of York, UK*

19

Social Learning through Gaming**Sunday, 9:00 – 17:30**
Room U2-12

Elaine Raybourn •
Sandia National Laboratories, USA
Annika Waern • *Swedish Institute of Computer Science, Sweden*

Development Consortium**Sunday, Room O1-2****Development Consortium Co-Chairs:**

Austin Henderson •
Pitney Bowes, USA

Gerrit van der Veer •
Vrije Universiteit, The Netherlands

Former and current political situations as well as monetary issues still do prevent full development of HCI in several parts of the world, e.g. the Eastern part of Europe and parts of the Middle East and of Asia. HCI activities there have been rather isolated from each other and from the rest of the world. CHI2004, taking place in Vienna, the very heart of Europe and close to the Middle East, focuses on the connection between the “traditional” SIGCHI community and HCI related groups and individuals in this part of the world. The Development Consortium supports development and connection, building on existing nuclei of HCI related people and projects in Industry and Academia, including individual efforts as well as established local groups.

Participants have been invited on the basis of position papers submitted to the Consortium’s organizer. This session is open to anyone attending CHI2004.

Development Consortium Participants

Ivan Burmistrov •
Moscow State University, Russia

Cristina Chisali • *Vrije Universiteit Amsterdam, The Netherlands*

Platon Dneprovsky •
UIDesign Group Moscow, Russia

Igor Garnik • *Gdansk University of Technology, Poland*

Kaushik Ghosh • *Computer Society of India, Mumbai, India*

Anirudha Joshi • *Indian Institute of Technology, Bombay, India*

Alexey Kopylov • *UIDesign Group Moscow, Russia*

Yaroslav Perevalov • *RTS Stock Exchange Moscow, Russia*

Costin Pribeanu • *National Institute R&D in Informatics, Bucharest, Romania*

Marcin Sikorski •
Gdansk University, Poland

Andy Smith • *University of Luton, UK*

Marcin Wichary • *Technical University of Eindhoven, The Netherlands*

Doctoral Consortium**Sunday and Monday
Room O1-1**

The Doctoral Consortium is a closed session that provides an opportunity for doctoral students to explore their research interests in an interdisciplinary workshop with a group of established researchers. Participants receive feedback on their work and guidance for its future directions. The Consortium aims to develop a supportive community of scholars and a spirit of collaborative research. Consortium participants, who represent a wide range of disciplines within HCI, have been invited on the basis of submissions about their research projects. This session is open only to confirmed participants.

Doctoral Consortium Co-ChairsElizabeth Churchill •
FX Palo Alto, USAJean Vanderdonck • *Université
Catholique de Louvain, Belgium***Doctoral Consortium
Participants****The Affective Connection: How And
When Users Communicate Emotion.**Lesley Axelrod • *Brunel University, UK***Modeling Analyst Performance for
Usability Inspection**Alan Woolrych •
*University of Sunderland, UK***VRMath: Knowledge Construction
of 3D Geometry in Virtual Reality
Microworlds**Andy Yeh • *Queensland University of
Technology, Australia***Nonprogrammer Web Application
Development**Jochen Rode • *Virginia Polytechnic
Institute and State University, USA***Supporting The Professional Readers
Of Online Documents**Mark Melenhorst • *University of
Twente, The Netherlands***Objectively Evaluating
Entertainment Technology**Regan Lee Mandryk •
*Simon Fraser University, Canada***How Do People Organize Their
Desktops?**Sarah Henderson •
*University of Auckland, New Zealand***MAPS: Creating Socio-Technical
Environments in Support of
Distributed Cognition for People
with Cognitive Impairments and
Their Caregivers**Stefan Carmien • *University of
Colorado at Boulder, USA***Designing Interfaces that Influence
Group Processes**Joan Morris DiMicco •
*MIT Media Lab, USA***Barriers to Inclusive Design in the
UK Industry**Hua Dong •
*University of Cambridge, UK***Connecting Bridges across the
Digital Divide**William D. Tucker • *University of
Cape Town, South Africa***Designing Smooth Connections
Between Worlds**Daniela Gorski Trevisan • *Université
Catholique de Louvain, Belgium***Connecting With the Absent
Presence: Pervasive Technology Use
and Community Level**Lisa Kleinman •
*University of Texas, USA***Interactivity and Conceptual
Learning in Virtual Environments for
Children**Maria Roussou •
*University College London, UK***Factors Affecting the Utility of
Technology-Mediated Collaboration
in Science and Engineering**Jeremy Birnholtz •
*University of Michigan, USA***CHI Fringe 1 and 2**

These two sessions let controversial, hard to publish, alternative perspectives on HCI express themselves. Contributions to CHI Fringe were selected by the fringe chairs and are available on-line at CHI Place (www.chiplace.org).

Sessions:**Wednesday, 16:30 – 18:00
Hall E1****Thursday, 11:30 – 13:00
Hall E2****Co-Chairs:**Roel Vetegaal •
*Queen's University, Canada*Philip McKay • *Sony Corp., USA***Special Area Sessions**

This year there are special sessions for five special areas:

- Ambient Intelligence (Aml)
- European HCI Research
- Games
- Mobile Communications
- Robotics and Transport

Ambient Intelligence (Aml)**Sessions:****Tuesday, 11:00 -13:00, Hall G
Wednesday, 14:00 – 16:30, Hall F****Chair:**Thomas Rist • *DFKI, Germany*

In Europe the vision of Ambient Intelligence (Aml) has been adopted to guide and shape EC-funded research activities on information and telecommunication technologies for the coming 10 years. HCI will be one of the central building blocks of the upcoming Aml era.

European HCI Research

**Session: Thursday 14:00 – 16:30
Hall G**

Co-Chairs:

Phillipe Palanque • *LIHHS-IRIT
Université Toulouse 3, France*

Gerd Swillus •

University of Paderborn, Germany

CHI2004 takes advantage of its central European location to focus on HCI research by and for the European community.

Games

**Session: Tuesday, 11:30 – 13:00
Hall D**

Chair:

Kevin Keeker • *Microsoft, USA*

Games represent one of the most diverse set of challenges and user experiences in our field with innovations in interface design, input devices, graphics, social communication and development processes.

Mobile Communications

**Sessions:
Thursday, 09:00 – 10:30, Hall H
Thursday, 11:30 – 13:00, Hall E1**

Chair:

Bruno von Niman •
von niman consulting & ETSI, Sweden

Mobile communications are offering expanded and increasingly complex and interesting applications to a rapidly growing base of users. These sessions focus on the user interface for the future information technology society, shifting the device-driven perspective to a service- and experience-centered world.

Robotics and Transport

**Sessions: Tuesday
14:30 – 16:00 &
16:30 – 18:00, Hall D**

Chair:

Jean Scholtz • *NIST, USA*

CHI2004 will look at designing for interaction on the move, focusing on robots and transport. Sessions will explore the challenges in designing user interfaces for platforms with some degree of autonomy that move in physical spaces.

TUESDAY AT A GLANCE										
	Hall F	Hall E1	Hall E2	Hall G	Hall H	Hall D	Hall M	Hall N	Hall I	Hall K
	Opening Plenary – Hall D Next Reality: The Future of Connected Everyday – Jun Rekimoto									
09:00 - 10:30										
11:30 - 13:00	DESIGN EXPO Getting Down to Business	PAPERS Keeping Safe	PAPERS Managing Multiple Tasks	PAPERS Ambient Intelligence	TO BE ANNOUNCED	SPECIAL AREA What's My Method? A Game Show	SIG Tips & Tricks for Better Internet Usability Test	TO BE ANNOUNCED	SHORT TALKS Our-Pocket Experiences	SHORT TALKS Sharing for a Better Tomorrow
14:30 - 16:00	PAPERS/SHORT TALKS Robots I	PAPERS 3D-2D	PAPERS Information Management	PAPERS Universal Usability	DEMOS Computer-Supported Interactions	PANEL Video Visions of the Future: A Critical Review	HCI OVERVIEWS: SIG User Centered Technologies and Society	SIG The Untapped World of Video Games	SHORT TALKS Tell Me How You Really Feel?	SHORT TALKS Feel-back and Other Haptic Happenings
16:30 - 18:00	PAPERS/SHORT TALKS Robots II	PAPERS Speech and Sound	PAPERS Collaboration	PAPERS In the Classroom	DEMOS Engaging the Digital Environment	PANEL Connecting With Large Market Customers	SIG End Users Creating Effective Software	SIG eLearning and Fun	SHORT TALKS Hail Ubiquity!	SHORT TALKS Mark My Memories
	THE CONNECTORARY			SPECIAL EVENTS			OTHER ACTIVITIES			
	HIGHLIGHT ON EXHIBITS 10:30 – 11:30	EXHIBITS OPEN 10:00 – 18:00		NEWCOMERS ORIENTATION 10:30 – 11:30 Hall H	SIGCHI 101 FREE TUTORIAL 13:15 – 14:15 Hall E1	CONFERENCE RECEPTION 20:00 – 22:30 Town Hall Vienna		INFORMATION BOOTH 08:30 – 18:30	RECRUITING BOARDS 10:00 – 18:00	REGISTRATION 08:00 – 17:30

Opening Plenary

09:00 – 10:30, Hall D

**Next Reality: The Future of Connected Everyday**Jun Rekimoto • **Sony Computer Science Laboratories, Inc., Japan**

As the wave of ubiquitous computing rapidly penetrates into our everyday lives, the focus of human computer interactions is also shifting from simply improving individual “boxes” to enhancing more connected activities and communications. In this talk Dr. Rekimoto will discuss how such pervasive connectivity will change our physical space, and what the user interface challenges will be, presenting a new way of thinking about human interfaces and applications especially in a ubiquitous computing domain.

Jun Rekimoto received the B.A.Sc., the M.Sc. and the Ph.D. in Information Science from Tokyo Institute of Technology in 1984, 1986, and 1996, respectively. From 1986 to 1994, he worked for the Software Laboratory of NEC. During 1992-1993, he worked in the Computer Graphics Laboratory

at the University of Alberta, Canada, as a visiting scientist. Since 1994 he has worked for Sony Computer Science Laboratories. In 1999 he formed, and has since directed, the Interaction Laboratory within Sony CSL.

At Sony CSL, Dr. Rekimoto initiated and led the “Real-World User Interfaces” project since 1994. This project produced several research accomplishments, including NaviCam (a situationally-aware mobile assistant), Pick-and-Drop (a direct-manipulation technique for inter-appliance computing), Multiple-Device Digital Whiteboard, Augmented Surfaces, and TimeScape (time-machine user interface environment). Some of these results are being commercialized in Sony’s personal computer series called “VAIO.”

Dr. Rekimoto’s research interest includes computer augmented environments, mobile/wearable computing, virtual reality, and information visualization. He has authored dozens of refereed publications in the area of human-computer interactions, including ACM CHI and UIST. One of his works was recognized with the 30th commemorative papers award from the Information Processing Society Japan (IPSJ) in 1992. He also received the Multi Media Grand Prix Technology Award from the Multi-media Contents Association Japan in 1998, and Yamashita Memorial Research Award from IPSJ in 1999.

Tuesday 11:30 – 13:00

**Design Expo 1
Getting Down to Business
Hall F**

Session Chair: Ian McClelland • *Philips Digital Systems Laboratory, The Netherlands*

From Tools to Tasks: Discoverability and Adobe Acrobat 6.0

Ron Mendoza, Kaari Peterson • *Adobe Systems, USA*

The Palm Zire 71 Camera Interface

Ron Fernandez • *PalmOne, Inc., USA*

User-Centered eService Design and Redesign

Esin Kiris • *AT&T Research Lab, USA*

Keylekh: A Keyboard for Text Entry in Indic Scripts

Anirudha Joshi • *India Institute of Technology, Bombay, India*
Ashish Ganu, Aditya Chand, Vikram, Parmar, Gaurav Mathur • *Media Lab Asia*

MSN9: New User-Centered Desirability Methods Produce Compelling Visual Design

Don Williams, Gavin Kelly, Dennis Wixom, Lisa Anderson, August de los Reyes • *Microsoft, USA*
Naomi Zzvislak • *Siemens Business Services, Inc.*

Creating an Educational Digital Library: GROW a National Civil Engineering Educational Resource Library

Janice Lodato • *University of Arizona, USA*

**Papers
Keeping Safe
Hall E1**

Session Chair: Fabio Paternò • *ISTI-C.N.R., Italy*

Presiding Over Accidents: System Direction of Human Action

Jeffrey Heer, Nathaniel S. Good, Ana Ramirez, Marc Davis, Jennifer Mankoff • *UC Berkeley, USA*

Ubiquitous Computing for Firefighters: Field Studies and Prototypes of Large Displays for Incident Command

Xiaodong Jiang, Jason Hong • *UC Berkeley, USA*
Leila Takayama • *Stanford University, USA*
James Landay • *Intel Research Seattle, USA*

Collision Warning Design to Mitigate Driver Distraction

John Lee, Joshua Hoffman • *University of Iowa, USA*
Elizabeth Hayes • *Daimler/Chrysler, USA*

Tuesday 11:30 - 13:00

Papers

Managing Multiple Tasks
Hall E2

Session Chair: Mary Czerwinski •
Microsoft, USA

Effects of Instant Messaging on the Management of Multiple Project Trajectories

Susan Fussell, Sara Kiesler,
Leslie Setlock, Peter Scupelli •
Carnegie Mellon University, USA
Suzanne Weisband •
University of Arizona, USA

IM Here: Public Instant Messaging on Large, Shared Displays for Workgroup Interactions

Elaine M. Huang •
Georgia Institute of Technology, USA
Daniel M. Russell, Alison E. Sue •
IBM Almaden Research Center, USA

Acquiring In Situ Training Data for Context-Aware Ubiquitous Computing Applications

Stephen S. Intille, Ling Bao,
Emmanuel Munguia Tapia,
John C. Rondoni • *Massachusetts Institute of Technology, USA*

Papers

Ambient Intelligence
Hall G

Session Chair: Mikael Wieberg •
Umeå University, Sweden

Social and Temporal Structures in Everyday Collaborations

Danyel Fisher, Paul Dourish •
University of California, Irvine, USA

Telemurals: Linking Remote Spaces with Social Catalysts

Karrie Karahalios, Judith Donath •
Massachusetts Institute of Technology, USA

Transcendent Communication: Location-Based Guidance for Large-Scale Public Spaces

Hideyuki Nakanishi •
Kyoto University, Japan
Satoshi Koizumi • *JST CREST Digital City Research Center, Japan*
Toru Ishida, Hideaki Ito •
Kyoto University, Japan

Tuesday 11:30 - 13:00

Special Area
Games**What's My Method? A Game Show on Games**
Hall D

Organizers: Nicole Lazarro •
XEODesign, Inc., USA
Kevin Keeker • *Microsoft, USA*

Game Show Participants:

Jun Kim •
Microsoft Game Studios, USA
Nicole Lazarro •
XEODesign, Inc., USA
Heather Desurvire •
Behavioristics, Inc., USA
Jonathan Sykes • *Glasgow Caledonian University, Scotland*
Steve Cornett •
Indiana University, USA
Bill Fulton •
Microsoft Game Studios, USA
Kevin Keeker •
Microsoft Game Studios, USA

SIG

Tips and Tricks for a Better International Usability Test
Hall M

Organizers: Rolf Molich •
DialogDesign, Denmark
Susan Dray, David Siegel •
Dray & Associates, USA

Short Talks

Out-of-Pocket Experiences
Hall I

Session Chair: Manfred Tscheligi
• *University of Salzburg and CURE, Austria*

Facilitating Mobile Communication with Multimodal Access to Email Messages on a Cell Phone

Jennifer Lai • *IBM Research, USA*

The Effects of Background Music on Using a Pocket Computer in a Cafeteria: Immersion, Emotional Responses, and Social Richness of Medium

Kari Kallinen • *Helsinki School of Economics, Finland*

Use of Mobile Appointment Scheduling Devices

Thad E. Starner, Cornelis M. Snoeck,
Benjamin A. Wong, R. Martin
McGuire • *Georgia Tech, USA*

Designing Visual Notification Cues for Mobile Devices

Christopher Campbell •
IBM Almaden Research Center, USA
Peter Tarasewich •
Northeastern University, USA

MiniMedia Surfer: Browsing Video Segments on Small Displays

Maryam Kamvar •
Columbia University, USA
Patrick Chiu, Lynn Wilcox,
Sandeep Casi, Surapong Lertsithichai
• *FX Palo Alto Laboratory USA*

Examining Mobile Phone Text Legibility while Walking

Terhi Mustonen, Maria Olkkonen,
Jukka Häkkinen •
Nokia Research Center, Finland

Tuesday 11:30 - 13:00

Short Talks

Sharing for a Better Tomorrow
Hall K

Session Chair: Lena Mamykina •
Siemens Corporate Research, USA

Collections: Flexible, Essential Tools for Information Management

Dennis Quan • *IBM T. J. Watson Research Center, USA*
David Karger • *MIT CSAIL, USA*

IdeaKeeper Notepads: Scaffolding Digital Library Information Analysis in Online Inquiry

Chris Quintana •
University of Michigan, USA

Tangible Interface for Collaborative Information Retrieval

Alan F. Blackwell, Mark Stringer,
Eleanor F. Toye, Jennifer A. Rode •
University of Cambridge, UK

Document Co-organization in an Online Knowledge Community

Harris Wu, Michael D. Gordon,
Kurt DeMaagd •
University of Michigan, USA

Release, Relocate, Reorient, Resize: Fluid Techniques for Document Sharing on Multi-User Interactive Tables

Meredith Ringel •
Stanford University, USA
Kathy Ryall, Chia Shen, Clifton Forlines • *Mitsubishi Electric Research Laboratories, USA*
Frederic Vernier •
University of Paris, France

An Information Visualization Framework for Intrusion Detection

Anita Komlodi, John R. Goodall,
Wayne G. Lutters • *UMBC, USA*

Tuesday 14:30 - 16:00

Papers/Short Talks

Robots 1
Hall F

Session Chair: Jill Drury •
MITRE Corporation, USA

PAPERS**Fan-out: Measuring Human Control of Multiple Robots**

Dan Olsen, Stephen Wood •
Brigham Young University, USA

Dual Ecologies of Robot as Communication Media: thoughts on Coordinating Orientations and Projectability

Hideaki Kuzuoka •
University of Tsukuba, Japan
Keiichi Yamazaki •
Saitama University, Japan
Akiko Yamazaki •
Future University-Hakodate, Japan
Jun'ichi Kosaka •
University of Tsukuba, Japan
Yasuko Suga •
Saitama University, Japan

SHORT TALKS**Robotic Pets in the Lives of Preschool Children**

Peter H. Kahn Jr., Batya Friedman •
University of Washington, USA
Deanne R. Perez-Granados •
Stanford University, USA
Nathan G. Freier •
University of Washington, USA

Active Eye Contact for Human-Robot Communication

Dai Miyauchi, Arihiro Sakurai,
Akio Nakamura, Yoshinori Kuno •
Saitama University, Japan

Papers

3D-2D
Hall E1

Session Chair: Liza Boyd •
Intuit, USA

Pointing at Trivariate Targets in 3D Environments

Tovi Grossman, Ravin Balakrishnan •
University of Toronto, Canada

A Suggestive Interface for Image Guided 3D Sketching

Steve Tsang, Ravin Balakrishnan,
Karan Singh, Abhishek Ranjan •
University of Toronto, Canada

Combining 2D and 3D Views for Orientation and Relative Position Tasks

Melanie Tory, Torsten Möller, M.
Stella Atkins, Arthur Kirkpatrick •
Simon Fraser University, Canada

Tuesday 14:30 - 16:00

Papers
Information Management
 Hall E2

Session Chair: George Furnas •
University of Michigan, USA

What A To-Do: Studies of Task Management Towards the Design of a Personal Task List Manager

Victoria Bellotti, Brinda Dalal •
PARC, USA
 Nathaniel Good • *UC Berkeley, USA*
 Peter Flynn • *Cornell University, USA*
 Danny Bobrow, Nicolas Ducheneaut •
PARC, USA

Stuff Goes in But it Doesn't Come Out: A Cross-tool Study of Personal Information Management

Richard P. Boardman •
Imperial College London, UK
 M. Angela Sasse •
University College London, UK

If Not Now, When?: The Effects of Interruption at Different Moments Within Task Execution

Piotr D. Adamczyk, Brian P. Bailey •
University of Illinois at Urbana-Champaign, USA

Papers
Universal Usability
 Hall G

Session Chair: Costin Pribeanu •
ICI National Institute for R&D in Informatics, Romania

The Participatory Design of a Sound and Image Enhanced Calendar for People with Aphasia

Karyn Moffatt, Joanna McGrenere, Barbara Purves • *University of British Columbia, Canada*
 Maria Klawe •
Princeton University, USA

Isolating the Effects of Visual Impairment: Exploring the Effect of Amd on the Utility of Multimodal Feedback

Julie A. Jacko, Leon Barnard, Thitima Kongnakorn, Kevin P. Moloney, Paula J. Edwards, V. Kathlene Emery, François Sainfort •
Georgia Institute of Technology, USA

Analyses of Combinatorial User Effect in International Usability Tests

Effie Lai-Chong Law •
Eidgenössische Technische Hochschule Zürich, Switzerland
 Ebba Thora Hvannberg •
University of Iceland, Iceland

Tuesday 14:30 - 16:00

Demos
Computer-Supported Interactions
 Hall H

Session Chair: Cecile Paris •
CSIRO, Australia

ED-Lite: A Portable System for Anywhere Interactions

Noi Sukaviriya, Rick Kjeldsen, Claudio Pinhanez, Lijun Tang, Anthony Levas, Gopal Pingali, Mark Podlaseck •
IBM TJ Watson Research Labs, USA

Explorations in an Activity-Centric Collaboration Environment

Beth Brownholtz, Werner Geyer, Michael Muller, Eric Wilcox, David Millen •
IBM TJ Watson Research Labs, USA

Ambient Agoras - InfoRiver, SIAM, Hello.Wall & ViewPort

Thorsten Prante, Richard Stenzel, Carsten Röcker, Norbert Streitz, Carstan Magerkurth •
Fraunhofer IPSI, Germany

Panel
Video Visions of the Future: A Critical Review
 Hall D

Organizer: Eric Bergman •
Sun Microsystems, USA

Eric Bergman •
Sun Microsystems, USA
 Arnold Lund •
Microsoft Corporation, USA
 Hugh Dubberly •
Dubberly Design Office, USA
 Bruce Tognazzini •
Nielsen Norman Group, USA
 Stephen Intille • *MIT, USA*

Tuesday 14:30 - 16:00

HCI Overviews 1 User Centered Technologies and Society Hall M

Session Chair: Tom Gross •
Bauhaus-University Weimar, Germany

HCI Group of the Department of Ergonomics and Psychology at the Budapest University of Technology and Economics

Lajos Izsó, Károly Hercegi •
*Budapest University of Technology
and Economics, Hungary*

User Centered Technologies Research Institute

Guido Kempter, Miglena
Dontschewa, Philipp von Hellberg,
Karl-Heinz Weidmann • *University of
Applied Sciences Vorarlberg, Austria*

Advanced Studies and Research in Information and Communication Technologies & Society: The ICT&S-Center

Manfred Tscheligi • *CURE – Center
for Usability Research & Engineering,
Austria*
Regina Bernhaupt • *ICT&S-Center,
Salzburg University, Austria*

SIG The Untapped World of Video Games Hall N

Organizers:
Kevin Keeker, Randy Pagulayan •
Microsoft Games Studios, USA
Jonathan Sykes • *Glasgow
Caledonian University, Scotland*
Nicole Lazzaro •
XEO Design Inc., USA

Tuesday 14:30 - 16:00

Short Talks Tell Me How You Really Feel Hall I

Session Chair: Dorian Gorgan •
*Technical University of Cluj-Napoca,
Romania*

Passwords You'll Never Forget, but Can't Recall

Daphna Weinshall, Scott Kirkpatrick
• *Hebrew University, USA*

Affective Sensors, Privacy, and Ethical Contracts

Carson Reynolds, Rosalind Picard •
MIT Media Lab, USA

Devices for Sharing Thoughts and Affection at a Distance

Khai Truong, Heather Richter,
Gillian Hayes, Gregory Abowd •
Georgia Institute of Technology, USA

Keeping in Touch with the Family: Home and Away with the ASTRA Awareness System

Panos Markopoulos, Natalia Romero,
Joy van Baren, Wijnand Ijsselstein •
*Technical University Eindhoven,
The Netherlands*
Boris De Ruyter •
Philips Research, Netherlands
Babak Farschian •
Telenor Research, Norway

HIM: A Framework for Haptic Instant Messaging

Loy Rovers, Harm Essen •
*Eindhoven University of Technology,
The Netherlands*

Using Mental Load for Managing Interruptions In Physiologically Attentive User Interfaces

Daniel Chen, Roel Vertegaal
• *Queen's University, Canada*

Short Talks Feet-back and Other Haptic Happenings Hall K

Session Chair: Gerrit van der Veer •
*Vrije Universiteit Amsterdam,
The Netherlands*

Two-Handed Interaction on a Tablet Display

Ka-Ping Yee • *University of
California, Berkeley, USA*

Appropriateness of Foot Interaction for Non-Accurate Spatial Tasks

Toni Pakkanen, Roope Raisamo •
University of Tampere, Finland

Haptic Feedback for Pen Computing: Directions and Strategies

Ivan Poupyrev • *Sony Computer
Science Laboratories, Japan*
Makoto Okabe •
University of Tokyo, Japan
Shigeaki Maruyama •
Sony EMCS, Japan

Finger Talk: Collaborative Decision- making Using Talk and Fingertip Interaction Around a Tabletop Display

Yvonne Rogers,
William R. Hazlewood, Eli Blevis,
Yoon-Kyung Lim •
Indiana University - Bloomington, USA

Pointing Without a Pointer

John Williamson, Roderick Murray-
Smith • *University of Glasgow, UK*

Preschool Children's Use of Mouse Buttons

Juan Pablo Hourcade •
U.S. Bureau of the Census, USA
Benjamin B. Bederson, Allison Druin
• *University of Maryland, USA*

Tuesday 16:30 - 18:00

Papers/Short Talks

Robots 2
Hall F

Session Chair: Michael Goodrich •
Brigham Young University, USA

PAPERS**Telepresence Control of the NASA/DARPA Segwanaut**

S. Michael Goza,
Robert O. Ambrose •
NASA Johnson Space Center, USA
Myron A. Diftler, Ivan M. Spain •
Lockheed Martin/NASA Johnson Space Center, USA

Robotic Camera Control for Remote Exploration

Stephen Hughes, Michael Lewis •
University of Pittsburgh, USA

SHORT TALKS**Human-Robot Speech Interface Understanding Inexplicit Utterances Using Vision**

Zaliyana Mohd Hanafiah,
Chizu Yamazaki, Akio Nakamura,
Yoshinori Kuno •
Saitama University, Japan

A Tangible Architecture for Creating Modular, Subsumption-Based Robot Control Systems

Tim Gorton, Bakhtiar Mikhak •
MIT Media Laboratory, USA

Papers

Speech and Sound
Hall E1

Session Chair: Jennifer Lai •
IBM Research, USA

Flat Volume Control: Improving Usability by Hiding the Volume Control Hierarchy in the User Interface

Patrick Baudisch •
Microsoft Research, USA
John Pruitt, Steve Ball •
Microsoft, USA

Semantic Speech Editing

Steve Whittaker •
Sheffield University, UK
Brian Amento •
AT&T Labs-Research, USA

Improving Speech Playback Using Time-Compression and Speech Recognition

Sunil Vemuri, Philip DeCamp,
Walter Bender, Chris Schmandt •
Massachusetts Institute of Technology, USA

Tuesday 16:30 - 18:00

Papers

Collaboration
Hall E2

Session Chair: Chia Shen •
Mitsubishi Electric Research Labs, USA

One Hundred Days in an Activity-Centric Collaboration Environment Based on Shared Objects

Michael Muller, Werner Geyer,
Beth Brownholtz, Eric Wilcox,
David R Millen • *IBM Research, USA*

Revealing Delay in Collaborative Environments

Carl Gutwin •
University of Saskatchewan, Canada
Steve Benford •
University of Nottingham, UK
Jeff Dyck •
University of Saskatchewan, Canada
Mike Fraser, Ivan Vaghi,
Chris Greenhalgh •
University of Nottingham, UK

Caretta: A System for Supporting Face-to Face Collaboration by Integrating Personal and Shared Spaces

Masanori Sugimoto, Kazuhiro Hosoi
• *University of Tokyo, Japan*

Papers

In the Classroom
Hall G

Session Chair: Carolyn Gale •
Stanford University, USA

A Study of Digital Ink in Lecture Presentation

Richard J. Anderson •
University of Washington, USA
Ruth Anderson •
University of Virginia, USA
Crystal Hoyer, Steven A. Wolfman •
University of Washington, USA

Design Strategies and Trade-Offs for Learner-Centered Handheld Software

Kathleen Luchini, Chris Quintana,
Elliot Soloway •
University of Michigan, USA

Off-Task Behavior in the Cognitive Tutor Classroom: When Students "Game The System"

Ryan Shaun Baker, Albert T Corbett,
Kenneth R Koedinger,
Angela Z Wagner •
Carnegie Mellon University, USA

Tuesday 16:30 - 18:00

Demos
Engaging the Digital Environment
 Hall H

Session Chair: Ron Boring •
 INEEL, USA

Nodding in Conversations With a Robot

Christopher Lee, Neal Lesh, Candace Sidner • *MERL, USA*
 Louis-Philippe Morency, Ashish Kapoor, Trevor Darrell • *MIT, USA*

Gustbowl: Technology Supporting Affective Communication Through Routine Ritual Interactions

W. van der Hoog, Ianus Keller, Pieter Jan Stappers • *Delft University of Technology, The Netherlands*

Eye Contact Sensing Glasses for Attention-Sensitive Wearable Video Blogging

Connor Dickie, Roel Vertegaal, Jeffrey Shell, Changuk Sohn, Daniel Cheng, Omar Aoudeh • *Queen's University, Canada*

Panel
Connecting With Large Market Customers: Can We Still Call It Usability?
 Hall D

Organizer: Misha W. Vaughan •
 Oracle Corporation, USA

Misha Vaughan, Catherine Courage • *Oracle Corporation, USA*
 Janice Rohn • *World Savings, USA*
 Kath Elliot • *SAP Labs, USA*

SIG
End Users Creating Effective Software
 Hall M

Organizers: Brad Myers •
Carnegie Mellon University, USA
 Margaret Burnett •
Oregon State University, USA

SIG
eLearning and Fun
 Hall N

Organizers: Lisa Neal •
E-Learn Magazine, USA
 Ray Perez •
Office of Naval Research, USA
 Diane Miller • *Aptima, USA*

Tuesday 16:30 - 18:00

Short Talks
Hail Ubiquity!
 Hall I

Session Chair: Nathalie Portolan •
France Telecom, France

Ubiquitous Computing Design Principles: Supporting Human-Human and Human-Computer Transactions

Tony Salvador, Steve Barile, John Sherry • *Intel Corporation, USA*

IN-Visible: Perceiving Invisible Urban Information through Ambient Media

Goncalo Ducla-Soares, Alejandro Zulas, Panagiotis Chatzitsakyris • *MIT, USA*

How Do Users Think about Ubiquitous Computing?

Khai Truong, Elaine Huang, Molly Stevens, Gregory Abowd •
Georgia Institute of Technology, USA

Exploring the Design and Use of Peripheral Displays of Awareness Information

Ed S. De Guzman, Margaret Yau, Anthony Gagliano, Austin Park •
UC Berkeley, USA
 Anind K. Dey • *Intel Research Berkeley, UC Berkeley, USA*

Z-Tiles: Building Blocks for Modular, Pressure-Sensing Floorspaces

Bruce Richardson, Krispin Leydon, Mikael Fernstrom •
University of Limerick, Ireland
 Joseph A. Paradiso •
Media Lab Europe

A Cognitive Meta-Analysis of Design Approaches to Interruptions in Intelligent Environments

Antti Oulasvirta, Antti Salovaara •
Helsinki Institute for Information Technology, Finland

Tuesday 16:30 - 18:00

Short Talks
Mark My Memories
Hall K

Session Chair: George Robertson •
Microsoft Research, USA

Context Photography:
Modifying the Digital Camera
Into a New Creative Tool
Sara Ljungblad, Maria Håkansson,
Lalya Gaye, Lars Erik Holmquist •
Viktoria Institute, Sweden

Viewing and Annotating Media
with MemoryNet
Rakhi Rajani, Alex Vorbau •
Hewlett Packard Laboratories, USA

3Book: A Scalable 3D Virtual Book
Stuart K. Card, Lichan Hong,
Jock D. Mackinlay, Ed H. Chi •
PARC, USA

eBooks with Indexes that
Reorganizes Conceptually
Ed H. Chi, Lichan Hong, Julie Heiser,
Stuart K. Card • *PARC, USA*

Photo Annotation on a
Camera Phone
Anita Wilhelm, Yuri Takhteyev •
University of California Berkeley, USA
Risto Sarvas • *Helsinki Institute for*
Information Technology, Finland
Nancy VanHouse, Marc Davis •
University of California Berkeley, USA

Digital Graffiti: Public Annotation of
Multimedia Content
Scott Carter • *UC Berkeley, USA*
Elizabeth Churchill, Laurent Denoue,
Jonathan Helfman, Les Nelson •
FX PAL, USA

WEDNESDAY AT A GLANCE									
Hall F	Hall E1	Hall E2	Hall G	Hall H	Hall D	Hall M	Hall N	Hall I	Hall K
DESIGN EXPO Designing the Humane Interface 09:00 - 10:30	PAPERS Teamwork	STUDENT COMPETITION Finalists Presentation	PAPERS Stylus, Tap and Text	PAPERS Can You Feel Me Now?	PANEL Technology: A Means for Enhancing the Independence of Older People	SIG Safety-Critical Interaction: Usability in Incidents and Accidents	TO BE ANNOUNCED	PAPERS End-User Programming	SHORT TALKS Users Have Issues, Too
DESIGN EXPO Stories on User Experience Design and Case Study Panel 11:30 - 13:00	PAPERS Interruptions, Interruptions, Interruptions	STUDENT COMPETITION Finalists Presentation	PAPERS Mobile Text Entry	PAPERS Can You See Me Now?	SPECIAL AREA Robotics & Transport	HCI OVERVIEWS Special Needs and Aging	SIG Techniques for Designing Mobile Applications with Customer Data	PAPERS Visualizing Work	SHORT TALKS Eye Told You So
PAPERS Handhelds and Pervasive Computing 14:30 - 16:00	PANEL Trading Design Spaces: Ideas on physical design environments	PAPERS Morphing, Blending and Pointing	PAPERS/SHORT TALKS Measuring Usability	DEMOS Finding Your Way	SPECIAL AREA Ambient Intelligence	HCI OVERVIEWS Global HCI	SIG Evaluating Interactive Information Retrieval Systems	SHORT TALKS Social Dot Net	SHORT TALKS Web For All, and All For Web
PAPERS Games 16:30 - 18:00	CHI FRINGE 1 Connect	PAPERS Search and You Will Find	PAPERS Design Methods	DEMOS Enabling Alternative Interactions	INVITED SESSION Emerging Initiatives in HCI: From Idea to Reality	SIG Universal Remote Console Standard	SIG Including Accessibility as a Component of Web-Related Research	SHORT TALKS Sharing and Caring	SHORT TALKS Are You My Type?
THE CONNECTIVE			SPECIAL EVENTS			OTHER ACTIVITIES			
INTERACTIVE POSTER HIGHLIGHTS 10:30 - 11:30			ACM SIGCHI MEMBERSHIP MEETING 13:15 - 14:15 Hall E1			INFORMATION BOOTH 08:30 - 18:30			
EXHIBITS OPEN 08:30 - 18:30			HOSPITALITY RECEPTIONS 18:30 - 20:30 Conference Center			REGISTRATION 08:00 - 17:30			
						RECRUITING BOARDS 08:30 - 18:30			

Wednesday 09:00 - 10:30

Design Expo 2

Designing the Humane Interface

Hall F

Session Chair: Jodi Forlizzi •
Carnegie Mellon University, USA

Disneyworld.com Redesign
Shilpa Sood, Rhonda Gilligan,
Chris Chandler, Shelley Slack • *Walt Disney Parks and Resorts Online, USA*

Designing Tangible Interfaces for Children's Collaboration
Diana Africano, Kent Lindbergh,
Peter Lundholm, Fredrik Nilbrink •
Umeå University, Sweden

360 Degrees of Usability Testing
Michael Morgan, Laura Borns •
eBay, Inc., USA

Designing Remail: Reinventing the Email Client Through Innovation and Integration
Bernard Kerr, Eric Wilcox •
IBM Research, USA

Flexible Interface/Application Design for Awards e-Catalog
Larisa Gieneart, Ellisum Wolterstorf,
James Mattson, Martin Tschofen •
Carlson Marketing Group, USA

Designing a Multimedia Conversation Aid for Reminiscence Therapy in Dementia Care Environments
Gary Gowans, Jim Campbell,
Alm Norman, Richard Dye •
University of Dundee, Scotland
Arlene Astell, Maggie Ellis •
Department of Psychology, University of St. Andrews, Scotland

Papers

Teamwork

Hall E1

Session Chair: Jonathan Grudin •
Microsoft, USA

Persistence Matters: Making the Most of Chat in Tightly-Coupled Work
Darren Gergle •
Carnegie Mellon University, USA
David R. Millen •
IBM T.J. Watson Research, USA
Robert E. Kraut, Susan R. Fussell •
Carnegie Mellon University, USA

Computational GOMS Modeling of a Complex Team Task: Lessons Learned
David E. Kieras •
University of Michigan, USA
Thomas P. Santoro •
Naval Submarine Medical Research Laboratory, USA

A Social Proxy for Distributed Tasks: Design and Evaluation of a Working Prototype
Thomas Erickson • *IBM T.J. Watson Research Center, USA*
Wei Huang •
University of Michigan, USA
Catalina Danis, Wendy A. Kellogg •
IBM T.J. Watson Research Center, USA

Wednesday 09:00 - 10:30

Student Competition 1

Finalists Presentation

Hall E2

Session Chairs: Jonathan Sykes •
Glasgow Caledonian University, Scotland
Todd Zazelenchuk •
Whirlpool Corporation, USA

Finalists to be announced.

Papers

Stylus, Tap and Text

Hall G

Session Chair: Shumin Zhai •
IBM Research, USA

Tapping vs. Circling Selections on Handheld Devices: Evidence for Different Performance-Shaping Factors
Sachi Mizobuchi •
Nokia Japan, Japan
Michiaki Yasumura •
Keio University, Japan

Performance of Menu-augmented Soft Keyboards
Poika Isokoski •
University of Tampere, Finland

TNT – A Numeric Keypad Based Text Input Method
Magnus Ingmarsson, David Dinka •
Linköping University, Sweden
Shumin Zhai •
IBM Almaden Research Center, USA

Papers

Can You Feel Me Now?

Hall H

Session Chair: Angela Chang •
Motorola Advanced Concepts Group, USA

Papier-Mâché: Toolkit Support for Tangible Input
Scott Klemmer, Jack Li, James Lin •
UC Berkeley, USA
James Landay •
University of Washington, USA

Feeling Bumps and Holes without a Haptic Interface: the Perception of Pseudo-Haptic Textures
Anatole Lécuyer •
IRISA/INRIA, France
Jean-Marie Burkhardt • *INRIA, France*
Laurent Etienne • *IRISA, France*

Pressure Widgets
Gonzalo Ramos, Matthew Boulos,
Ravin Balakrishnan •
University of Toronto, Canada

Wednesday 09:00 - 10:30

Panel
**Technology: A Mean for
 Enhancing the Independence
 and Connectivity of Older
 People**
Hall D

Organizer: Sara J. Czaja •
University of Miami, USA

Herman Bourma •
*Eindhoven University of Technology,
 The Netherlands*
 Sara J. Czaja •
University of Miami, USA
 Hiroyuk Umemuro •
Tokyo Institute of Technology, Japan
 Wendy A. Rogers •
Georgia Institute of Technology, USA
 Richard Schulz •
University of Pittsburgh, USA
 Sri Hastuti Kuniawan •
University of Manchester, UK

SIG
**Safety-Critical Interaction:
 Usability in Incidents and
 Accidents**
Hall M

Organizers:

Philippe Palanque • *LIHHS-IRIT, France*
 Chris Johnson •
University of Glasgow, Scotland
 Floor Koornneef • *Delft University of
 Technology, The Netherlands*
 Gerd Szwillus •
University of Paderborn, Germany
 Peter Wright • *University of York, UK*

Wednesday 09:00 - 10:30

Papers
End-User Programming
Hall I

Session Chair: Austin Henderson •
Pitney Bowes, USA

**a CAPPElla: Programming by
 Demonstration of Context-Aware
 Applications**

Anind K. Dey •
Intel Research Berkeley, USA
 Raffay Hamid •
Georgia Institute of Technology, USA
 Chris Beckmann, Daniel Hsu •
UC Berkeley, USA
 Ian Li •
University of Washington, USA

**Impact of Interruption Style on End-
 User Debugging**

Shrinu Prabhakararao, T. J. Robertson,
 Margaret Burnett, Curtis Cook,
 Joseph Ruthruff, Laura Beckwith,
 Amit Phalgune •
Oregon State University, USA

**Designing the Whyline: A
 Debugging Interface for Asking
 Questions about Program Failures**

Andrew J. Ko, Brad A. Myers •
Carnegie Mellon University, USA

Short Talks
Users Have Issues, Too
Hall K

Session Chair: Richard Anderson •
Riander, USA

**Augmenting Icons for
 Deaf Computer Users**

Helen Petrie, Wendy Fisher •
City University London, UK
 Kurt Weimann, Gerhard Weber •
Multimedia Campus Kiel, Germany

**A Process for Creating the Business
 Case for User Experience Projects**

Jeff Herman • *eBay, Inc., USA*

**Email Task Management Styles: The
 Cleaners and the Keepers**

Jacek Gwizdka • *University of
 Toronto, Canada*

**Remarkable Computing - the
 Challenge of Designing
 for the Home**

Marianne Graves Petersen •
University of Aarhus, Denmark

**Techniques for Researching and
 Designing Global Products in an
 Unstable World: A Case Study**

Brooke Foucault, Ryan Russell,
 Genevieve Bell •
Intel Corporation, USA

**Electronic Privacy, Trust and Self-
 Disclosure in E-Recruitment**

Heike Schaumburg • *Humboldt
 Universität zu Berlin, Germany*
 Nickel Jennifer •
Free University Berlin, Germany

Wednesday 11:30 - 13:00

Design Expo 3

Stories on User Experience Design and Case Study Panel

Hall F

Session Chairs: Jonathan Arnowitz •
PeopleSoft, USA

Luke Ball •
Independent Consultant, USA

The Drift Table: Designing for Ludic Engagement

William Gaver, Andy Boucher,
Sara Pennington, Brendan Walker, •
Royal College of Art, UK
John Bowers •
Royal Institute of Technology, UK
Hans Gellerson, Albrecht Schmidt,
Nicholas Villars •
Lancaster University, UK
Anthony Steed •
University College London, UK

Wi-Fi and Handhelds - Perfect Synergy

See Pike • PalmOne, USA
Paul Osborne •
Hewlett Packard, USA

Matching User and Business Goals

Dana Chisnell •
Usability Works, USA
Meredith Brown •
Blue Shield of California, USA

Papers

Interruptions, Interruptions, Interruptions

Hall E1

Session Chair: Antti Oulasvirta •
Helsinki Institute for Information
Technology, Finland

A Diary Study of Task Switching and Interruptions

Mary Czerwinski, Eric Horvitz •
Microsoft Research, USA
Susan Wilhite • Microsoft, USA

Examining the Robustness of Sensor-Based Statistical Models of Human Interruptibility

James Fogarty, Scott Hudson •
Carnegie Mellon University, USA
Jennifer Lai • IBM Research, USA

Constant, Constant Multi-tasking Craziness: Managing Multiple Working Spheres

Victor Gonzalez, Gloria Mark •
University of California, Irvine, USA

Student Competition 2

Finalists Presentation

Hall E2

Session Chairs: Jonathan Sykes •
Glasgow Caledonian University,
Scotland
Todd Zazelenchuk •
Whirlpool Corporation, USA

Finalists to be announced.

Wednesday 11:30 - 13:00

Papers

Mobile Text Entry

Hall G

Session Chair: John Arnott •
University of Dundee, Scotland

Twiddler Typing: One-Handed Chording Text Entry for Mobile Phones

Kent Lyons, Thad Starner,
Daniel Plaisted, James Fusia,
Amanda Lyons, Aaron Drew,
Ernest Wayne Looney •
Georgia Institute of Technology, USA

A Comparison of Consecutive and Concurrent Input Text Entry Techniques for Mobile Phones

Daniel Wigdor, Ravin Balakrishnan •
University of Toronto, Canada

Model for non-Expert Text Entry Speed on 12-Button Phone Keypads

Andriy Pavlovych,
Wolfgang Stuerzlinger •
York University, Canada

Papers

Can You See Me Now?

Hall H

Session Chair: Pavel Slavik • Czech
Technical University, Czech Republic

Mouse and Touchscreen Selection in the Upper and Lower Visual Fields

Barry A. Po, Brian D. Fisher,
Kellogg S. Booth • University of
British Columbia, Canada

Sharp or Smooth? Comparing the Effects of Quantization vs.

Frame Rate for Streamed Video

John D. McCarthy, M. Angela Sasse,
Dimitrios Miras •
University College London, UK

Unintended Effects: Varying Icon Spacing Changes Users' Visual Search Strategy

Sarah P. Everett, Michael D. Byrne •
Rice University, USA

Wednesday 11:30 - 13:00

Special Area Robotics & Transport Hall D

Session Chair: Sara Kiesler •
Carnegie Mellon University, USA

Organizer: Jean Scholtz • *NIST, USA*

**Robrno Demonstration:
Teleoperation Telepresence**
Ludek Zalud • *Brno University of
Technology, Czech Republic*

NASA Robonaut
S. M. Goza •
NASA Johnson Space Center, USA

**Operator Interactions with
Autonomous Robots**
David Bruemmer • *Idaho National
Engineering and Environmental
Laboratory, USA*

HCI Overviews 2 Special Needs and Aging Hall M

Session Chair: Julie Jacko •
Georgia Institute of Technology, USA

About Interaction Group
Sung Woo Kim • *Samsung
Electronics, Republic of Korea*

**CUHTec: The Centre for Usable
Home Technology**
Andrew Monk, Julia Brant,
Peter Wright, John Robinson •
University of York, UK

**CREATE: Center for Research and
Education on Aging and Technology
Enhancement**
Wendy A. Rogers •
Georgia Institute of Technology, USA
Sara J. Czaja •
University of Miami, USA

SIG Techniques for Designing Mobile Applications with Customer Data Hall N

Organizers:
Karen Holzblatt •
InContext Enterprises, USA
Pekka Ketola •
Nokia Multimedia, Finland
Thea Turner • *Motorola Labs, USA*

Wednesday 11:30 - 13:00

Papers Visualizing Work Hall I

Session Chair: Garrett Dworman •
Tec-Ed, Inc., USA

**Physically Large Displays Improve
Path Integration in 3D Virtual
Navigation Tasks**
Desney Tan, Darren Gergle,
Peter Scupelli, Randy Pausch •
Carnegie Mellon University, USA

**Connecting Time-oriented Data
And Information to a Coherent
Interactive Visualization**
Ragnar Bade •
University of Magdeburg, Germany
Silvia Miksch • *Vienna University of
Technology, Austria*

**Designing to Support Awareness:
A Predictive, Composite Model**
Rachid Hourizi, Peter Johnson •
University of Bath, UK

Short Talks Eye Told You So Hall K

Session Chair: Liza Boyd •
Intuit, USA

**Regressions Re-visited:
a New Definition for the Visual
Display Paradigm**
James Renshaw, Janet Finlay •
Leeds Metropolitan University, UK
David Tyfa, Robert Ward •
University of Huddersfield, UK

**EyeDraw: A System for Drawing
Pictures with the Eyes**
Anthony Hornof, Anna Cavender,
Rob Hoselton •
University of Oregon, USA

**Attentive Display: Paintings as
Attentive User Interfaces**
David Holman, Roel Vertegaal,
Changuk Sohn, Daniel Cheng •
Queen's University, Canada

**Eye Gaze Interaction with
Expanding Targets**
Darius Miniotas, Oleg Spakov •
University of Tampere, Finland
I. Scott MacKenzie •
York University, Canada

**Impact of Video Editing Based on
Participants' Gaze in Multiparty
Conversation**
Yoshinao Takemae, Kazuhiro Otsuka,
Naoki Mukawa •
NTT Corporation, Japan

**Haptic Chameleon: A New Concept
of Shape-Changing User Interface
Controls with Force Feedback**
Georg Michelietsch, Jason Williams,
Martin Osen, Beatriz Jimenez,
Stefan Rapp • *Sony International
(Europe) GmbH, Germany*

Wednesday 14:30 - 16:00

Papers
Handhelds and Pervasive Computing
 Hall F

Session Chair: Andrew Monk •
University of York, UK

The Potential for Energy-aware User Interfaces on Handheld Devices

Tim Harter • *Hewlett Packard, USA*
 Sander Vroegindeweij, Erik Geelhoed •
Hewlett Packard/HP Labs, UK
 Meera Manahan,
 Partha Ranganathan •
Hewlett Packard, USA

Breaking the Book: Translating the Chemistry Lab Book into a Pervasive Computing Lab Environment

M.C. Schraefel, Gareth Hughes,
 Hugo R. Mills, Graham Smith,
 Terry R. Payne, Jeremy Frey •
University of Southampton, UK

Understanding the Micronote Lifecycle: Improving Mobile Support for Informal Note Taking

Min Lin, Wayne Lutters •
UMBC, USA
 Tina Kim • *Rice University, USA*

Panel
Trading Design Spaces: Exchanging Ideas on Physical Design Environments
 Hall E1

Organizer: Wendy Ju •
Stanford University, USA

Margot Berenton •
University of Queensland, Australia
 Michael Haller •
Upper Austria University, Austria
 Amanda Parkes • *MIT, USA*
 Scott Klemmer •
University of California Berkeley, USA
 Brian Lee • *Stanford University, USA*
 Dan Rosenfeld • *NYU, USA*

Wednesday 14:30 - 16:00

Papers
Morphing, Blending and Pointing
 Hall E2

Session Chair: Alexander Nikov •
Fatih University, Turkey

Multiblending: Displaying Overlapping Windows Simultaneously Without the Drawbacks of Alpha Blending

Patrick Baudisch •
Microsoft Research, USA
 Carl Gutwin •
University of Saskatchewan, Canada

Designing a Compelling User Interface for Morphing

David Vronay •
Microsoft Research Asia, China
 Shuo Wang •
Tsinghua University, China

Semantic Pointing: Improving Target Acquisition with Control-Display Ratio Adaptation

Renaud Blanch,
 Michel Beaudouin-Lafon •
Université Paris-Sud, France
 Yves Guiard • *CNRS, France*

Papers/Short Talks
Measuring Usability
 Hall G

Session Chair: Ebba Thora Hvannberg •
University of Iceland, Iceland

PAPERS

A Comparison of Static, Adaptive, and Adaptable Menus

Leah Findlater, Joanna McGrenere •
University of British Columbia, Canada

Master Usability Scaling

Michael McGee •
Oracle Corporation, USA

SHORT TALKS

From Mental Effort to Perceived Usability: Transforming Experiences into Summary Assessments

Marc Hassenzahl • *Darmstadt University of Technology, Germany*
 Nina Sandweg • *Siemens Corporate Technology, Germany*

Applying User Testing Data to UEM Performance Metrics

Jarinee Chattratichart •
London Metropolitan University, UK
 Jacqueline Brodie •
Brunel University, UK

Wednesday 14:30 - 16:00

Demos

Finding your Way

Hall H

Session Chair: Michael Muller •
IBM Research, USA

The Future of Signs: Interactive Information, Inexpensively!
Aradhana Goel, Michael Higgins,
Mickey McManus, Marc Peterson •
MAYA Design, USA

IDeixis: Image Based Deixis for Finding Location-Based Information
Konrad Tollmar, Tom Yehm
Trevor Darrell • MIT, USA

ReMail: A Reinvented Email Prototype
Steven Rohall, Dan Gruen,
Paul Moody, Martin Wattenberg,
Mia Stern, Bernard Kerr, Bob Stachel,
Kushal Dave, Robert Amres,
Eric Wilcox •
IBM Watson Research, USA

Special Area

Ambient Intelligence

Hall D

Organizer: Thomas Rist •
DFKI, Germany

Ambient Intelligence from a Consumer Electronics Point of View
Emile Aarts • Philips Research &
Eindhoven University of Technology,
The Netherlands

Smart Environments and the Disappearing Computer
Norbert Streitz •
Fraunhofer IPSI, Germany

A New Paradigm for Human-Centered IT Applications and Services – The Ambient Intelligence Framework
José L. Encarnação • Technische
Universität Darmstadt, Germany

Wednesday 14:30 - 16:00

HCI Overviews 3

Global HCI

Hall M

Session Chair: V. Kathlene Emery •
Georgia Institute of Technology, USA

User-Driven Innovation in the Future Applications Lab
Lars Erik Holmquist •
Viktoria Institute, Sweden

Designing Between Borders: The Distributed UI Design Team at Adobe

Katja Rimmi •
Adobe Systems Inc., USA
Jonathan Rath •
Adobe Systems Inc., Canada
Lynn Shade •
Adobe Systems Inc., USA

24/7 or Bust: Designing for the Challenges of Global UCD
Dan Rosenberg, Uday Gajendar •
Oracle, USA

SIG

Evaluating Interactive Information Retrieval Systems

Hall N

Organizers:
Nicholas Belkin •
Rutgers University, USA
Susan Dumais •
Microsoft Research, USA
Jean Scholtz • NIST, USA
Ross Wilkinson • CSIRO, Australia

Short Talks

Social Dot Net

Hall I

Session Chair: James “Bo” Begole •
Sun Labs Europe, France

Conference State Estimation by Biosignal Processing - Observation of Heart Rate Resonance
Masamichi Hosoda,
Akira Nakayama, Minoru Kobayashi,
Satoshi Iwaki •
NTT Corporation, Japan

Friendster and Publicly Articulated Social Networking
Danah Boyd • UC Berkeley, USA

Dealing With Mobile Conversations in Public Places: Some Implications for the Design of Socially Intrusive Technologies
Steve Love, Mark Perry •
Brunel University, UK

All Together Now: Visualizing Local and Remote Actors of Localized Activity
Scott Lederer, Jeffrey Heer •
University of California, Berkeley,
USA

Text Analysis as a Tool for Analyzing Conversation in Online Support Groups
Adam D. I. Kramer, Susan R. Fussell,
Leslie D. Setlock •
Carnegie Mellon University, USA

Production of Pace as a Collaborative Activity
Areti Galani, Matthew Chalmers •
University of Glasgow, Scotland

Wednesday 14:30 - 16:00**Short Talks****Web For All, and All For Web
Hall K**

Session Chair: Fred Sampson •
PeopleSoft, USA

**Banner Ads Hinder Visual Search
and Are Forgotten**

Moira Burke •
University of Oregon, USA
Nicholas Gorman, Erik Nilsen •
Lewis & Clark College, USA
Anthony Hornof •
University of Oregon, USA

Link Colors Guide a Search

Tim Halverson, Anthony J. Hornof •
University of Oregon, USA

**American Sign Language
of the Web**

Deborah Fels •
Ryerson University, Canada
Jan Richards •
University of Toronto, Canada
Jim Hardman • *Canadian Hearing
Society, Canada*
Sima Soudian, Charles Silverman •
Ryerson University, Canada

**Older Adults and Web Usability:
Is Web Experience the Same
as Web Expertise?**

Ann-Marie Chadwick-Dias,
Donna Tedesco, Tom Tullis •
Fidelity Investments USA

Blogging by the Rest of Us

Diane J. Schiano •
Stanford University, USA
Bonnie A. Nardi • *UC Irvine, USA*
Michelle Gumbrecht, Luke Swartz •
Stanford University, USA

**Search Result Exploration: A
Preliminary Study of Blind and
Sighted Users' Decision Making
and Performance**

Melody Ivory •
University of Washington, USA
Shiqing Yu •
Encysys Consulting USA
Kathryn Gronemyer •
University of Washington, USA

Wednesday 16:30 - 18:00**Papers****Games
Hall F**

Session Chair: Desney Tan •
Carnegie Mellon University, USA

**Moving Out of the Control Room:
Decentralizing Orchestration of a
Mixed Reality Game**

Andy Crabtree, Steve Benford, Tom
Rodden, Martin Flintham,
Rob Anastasi, Adam Drozd •
University of Nottingham, UK
Matt Adams, Nick Tandavanitj, Ju
Row-Farr • *Blast Theory, UK*
Anthony Steed •
University College London, UK
Chris Greenhalgh •
University of Nottingham, UK

**The Usability of Massively
Multiplayer Online Role-Playing
Games: Designing for New Users**

Steven Cornett •
Indiana University, USA

**Labeling Images with a
Computer Game**

Luis von Ahn, Laura Dabbish •
Carnegie Mellon University, USA

CHI Fringe 1**Connect
Hall E1**

Session Chair: Roel Vertegaal •
Queen's University, Canada

**tranSticks: Media Virtually
Connected Beyond Space**

Yuji Ayatsuka, Jun Rekimoto •
*Sony Computer Science Laboratories,
Japan*

**Personification Technologies:
Developing Artificial Companions
for Older People**

Oliver Mival, Stewart Cringean,
David Benyon •
Napier University, UK

**The Watcher and The Watched:
Social Judgments about Privacy
in a Public Place**

Batya Friedman, Peter H. Kahn, Jr.,
Jennifer Hagman •
University of Washington, USA

**blue-c: Using 3D Video for
Immersive Telepresence Applications**

Silke Lang, Staphan Wuermlin,
Ludger Hovestadt, Markus Gross •
ETH Zurich, Switzerland
Jan Borchers •
RWTH Aachen, Germany

**A Phenomenological Account of
Social Interactions with Computers**

Seth Nickell •
Stanford University, USA

Wednesday 16:30 - 18:00

Papers
Search and You Will Find
 Hall E2

Session Chair: Thea Turner •
Motorola Labs, USA

Clustering Find and Replace
 Robert C. Miller, Alisa M. Marshall •
Massachusetts Institute of Technology, USA

The Perfect Search Engine Is Not Enough: An Observational Study of Orienteering Behavior in Directed Search

Jaime Teevan, Christine Alvarado •
Massachusetts Institute of Technology, USA

Mark S. Ackerman •
University of Michigan, USA
 David R. Karger • *Massachusetts Institute of Technology, USA*

WaveLens: A New View onto Internet Search Results

Tim Paek, Susan Dumais, Ron Logan •
Microsoft Research, USA

Papers
Design Methods
 Hall G

Session Chair: Elizabeth Dykstra-Erickson •
Kinoma Inc., USA

Finding Meaningful Uses for Context-Aware Technologies: The Humanistic Research Strategy
 Antti Oulasvirta • *Helsinki Institute for Information Technology, Finland*

Putting the Users Center Stage: Role Playing and Low-fi Prototyping Enable End Users to Design Mobile Systems

Dag Svanaes, Gry Seland •
Norwegian University of Science and Technology, Norway

Variation in Element and Action: Supporting Simultaneous Development of Alternative Solutions

Michael Terry, Elizabeth Mynatt •
Georgia Tech, USA
 Kumiyo Nakakoji, Yasuhiro Yamamoto •
University of Tokyo, Japan

Wednesday 16:30 - 18:00

Demos
Enabling Alternative Interactions
 Hall H

Session Chair: Rachel White •
NCR, Scotland

Non-Visual Information Display Using Tactons

Stephen Brewster, Lorna Brown •
University of Glasgow, UK

TERESA: A Transformation-Based Environment for Designing Multi-Device Interactive Applications

Silvia Berti, Giulio Mori, Fabio Paterno, Carmen Santoro •
ISTI-CNR, Italy

Not Just Intuitive: Examining the Basic Manipulation of Tangible User Interfaces

Chen-je Huang •
University of Washington, USA

Common Sense Investing - A User-Centric Approach

Sharad Chandra Sundararajan •
IBM, USA
 Ashwani Kumar • *MIT, USA*

Invited Session
Emerging Initiatives in HCI: From Idea to Reality
 Hall D

Organizers:
 Thomas Rist • *DFKI, Germany*
 Norbert Streitz •
Fraunhofer IPSI, Germany

EU-IST Research Initiatives and Funding Opportunities in Ambient Systems

Thierry Van der Pyl •
European Commission, EU

Where and How does Funding for HCI and UA Fit into the New CISE?

Ephraim P. Glinert •
National Science Foundation, USA

Support for Speech Processing and Human-technology Interaction in Germany

Bernd Reuse • *Federal Ministry of Education and Research (BMBF), Germany*

Wednesday 16:30 - 18:00

SIG
Universal Remote Console Standard: Natural User Interaction in Ambient Intelligence
Hall M

Organizers:
 Gottfried Zimmermann, Gregg Vanderheiden • *Trace Center, USA*
 Maribeth Gandy • *Georgia Tech, USA*

SIG
Including Accessibility as a Component of Web-Related Research
Hall N

Organizers:
 Markku Hakkinen • *Japan DAISY Consortium, USA*
 Carlos Velasco • *Fraunhofer-FIT, Germany*

Short Talks
Sharing and Caring
Hall I

Session Chair: Nathan Bos • *University of Michigan, USA*

Interviewing Over Instant Messaging
 Amy Vaida, Elizabeth D. Mynatt • *Georgia Institute of Technology, USA*
 Thomas Erickson, Wendy A. Kellogg • *IBM T.J. Watson Research Center, USA*

Towards Caring Machines
 Timothy W Bickmore • *Boston University School of Medicine, USA*
 Rosalind W Picard • *MIT Media Lab USA*

Communicating Emotions in Online Chat Using Physiological Sensors and Animated Text
 Hua Wang, Helmut Prendinger, Takeo Igarashi • *University of Tokyo, Japan*

Don't Blame Me, I am Only the Driver: Impact of Blame Attribution on Attitudes and Attention to Driving Tasking
 Marie Jonsson • *Toyota ITC/Stanford University, USA*
 Clifford Nass • *Stanford University, USA*
 Jack Endo, Ben Reaves • *Toyota ITC, USA*
 Helen Harris, Janice Ta, Nicholas Chan, Sean Knapp • *Stanford University, USA*

Wednesday 16:30 - 18:00

Online Personals: An Overview and Call for Research
 Andrew T. Fiore, Judith S. Donath • *MIT Media Lab, USA*

Catalyzing Social Interaction with Ubiquitous Computing: A Needs Assessment of Elders Coping with Cognitive Decline
 Margaret Morris, Jay Lundell, Eric Dishman • *Proactive Health, Intel Research, USA*

Short Talks
Are You My Type?
Hall K

Session Chair: Peter Messner • *CURE, Austria*

Comparing the Immediate Usability of Graffiti 2 and Virtual Keyboard
 Thomas Költringer, Thomas Grechenig • *Vienna University of Technology, Austria*

A Reduced QWERTY Keyboard for Mobile Text Entry
 Nathan Green, Jan Kruger, Chirag Faldu, Robert St. Amant • *North Carolina State University, USA*

MouthType: Text Entry by Hand and Mouth
 Michael J. Lyons • *ATR Intelligent Robotics and Communication Labs and ATR Media Information Science Labs, Japan*
 Chi-ho Chan • *ATR Media Information Science Labs, Japan*
 Nobuji Tetsutani • *ATR Media Information Science Labs and ATR Intelligent Robotics and Communication Labs, Japan*

A Commonsense Approach to Predictive Text Entry
 Tom Stocky, Alex Faaborg, Henry Lieberman • *MIT Media Laboratory, USA*

Recent Developments in Text-Entry Error Rate Measurement
 William Soukoreff, Scott MacKenzie • *York University, Canada*

A User Interface Framework for Kinetic Typography-enabled Messaging Applications
 Gregor Möhler, Martin Osen, Heli Harrikari • *Sony Corporate Laboratories Europe, Germany*

THURSDAY AT A GLANCE										
Hall F	Hall E1	Hall E2	Hall G	Hall H	Hall D	Hall M	Hall N	Hall I	Hall K	
NO SESSION 09:00 - 10:30	PAPERS Modelling Human-Performance	PAPERS Online Trust	PAPERS Telephones, Sickness and Affect	SPECIAL AREA Mobile Communications	PANEL How to Trust Robots Further Than We Can Throw Them	HCI OVERVIEWS: SIG Open Source, Patents and Big Players	SIG Asynchronous Learning Networks: Priorities for Development	SHORT TALKS Sensor Sensibility	SHORT TALKS Come Play With Me	
NO SESSION 11:30 - 13:00	PANEL Mobile Communications	CHI FRINGE 2 Bots/Borgs	PAPERS Multi-Modal Creation	DEMOS Games and Virtual Environments	PANEL Interface, Autonomy and Interactions in Automotive Driving	HCI OVERVIEWS: SIG Methodologies, Toolkits, and Performance	SIG Context-Sensitive Design and Human-Centered Interactive Systems	PAPERS On-Line Communities	SHORT TALKS Hands and Tools	
NO SESSION 14:30 - 16:00	PAPERS Tangible Computing	SPECIAL AREA European HCI Research	PAPERS Sharing Your World	DEMOS Visualizing Information	TO BE ANNOUNCED	SIG Personal Information Management	SIG Current Issues in Assessing and Improving Information Usability	SHORT TALKS Truth, Lies, and Usability Tapes	SHORT TALKS We Do Windows	
Closing Plenary - Hall D The Future of Designing Experiences - Tim Brown										
THE CONNECTINARY			SPECIAL EVENTS				OTHER ACTIVITIES			
INTERACTIVE POSTER HIGHLIGHTS 10:30 - 11:30			NONE				INFORMATION BOOTH 08:30 - 14:00 REGISTRATION 08:30 - 14:00			
EXHIBITS OPEN 08:30 - 16:30							RECRUITING BOARDS 08:30 - 16:30			

Thursday 09:00 - 10:30

Papers
**Modelling Human-
 Performance**
 Hall E1

Session Chair: Michael Arent •
PeopleSoft, USA

**Model-based Evaluation of Cell
 Phone Menu Interaction**

Robert St. Amant, Thomas E. Horton
 • *North Carolina State University,
 USA*
 Frank E. Ritter •
Pennsylvania State University, USA

**A Constraint Satisfaction Approach
 to Predicting Skilled
 Interactive Cognition**

Alonso Vera •
NASA Ames Research Center, USA
 Andrew Howes •
Cardiff University, UK
 Michael McCurdy •
NASA Ames Research Center, USA
 Richard L. Lewis •
University of Michigan, USA

**Predictive Human Performance
 Modeling Made Easy**

Bonnie E. John, Konstantine Prevas •
Carnegie Mellon University, USA
 Dario D. Salvucci •
Drexel University, USA
 Kenneth R. Koedinger •
Carnegie Mellon University, USA

Papers
Online Trust
 Hall E2

Session Chair: John Thomas •
IBM TJ Watson Research Center, USA

**Trust and Mistrust of Online
 Health Sites**

Elizabeth Sillence, Pamela Briggs,
 Lesley Fishwick •
Northumbria University, UK
 Peter Harris • *Sheffield University, UK*

**Deception and Design: The Impact
 of Communication Technologies on
 Lying Behavior**

Jeff Hancock, Jennifer Thom-Santelli,
 Thompson Ritchie •
Cornell University, USA

**Privacy Policies as Decision-Making
 Tools: A Usability Evaluation of
 Online Privacy Notices**

Carlos Jensen, Colin Potts •
Georgia Institute of Technology, USA

Thursday 09:00 - 10:30

Papers
**Telephones, Sickness,
 and Affect**
 Hall G

Session Chair: Marcin Sikorski •
*Gdansk University of Technology,
 Poland*

**Exploring PC-Telephone
 Convergence with the Enhanced
 Telephony Prototype**

JJ Cadiz, Attila Narin, Gavin Jancke,
 Anoop Gupta • *Microsoft, USA*
 Michael Boyle •
University of Calgary, Canada

**Virtual Guiding Avatar: An Effective
 Procedure to Reduce Simulator
 Sickness in Virtual Environments**

James Jeng-Weei Lin,
 Habib Abi-Rached, Michal Lahav •
University of Washington, USA

**Categorical Imperative NOT: Facial
 Affect is Perceived Continuously**

Diane J. Schiano •
Stanford University, USA
 Sheryl Ehrlich • *Adobe Systems, USA*
 Kyle Sheridan • *WebMD, USA*

Special Area
**Mobile Communications:
 Adding Content, Fun and
 Simplicity Into the Mobile
 User Experience**
 Hall H

Organizer:

Bruno von Niman • *von niman
 consulting & ETSI, Sweden*

Participants:

Stephen Brewster •
University of Glasgow, UK
 Johan Hjelm • *Ericsson and Open
 Mobile Alliance, Sweden*
 Timo Kinnunen • *Digia, Finland*
 Sofia Svanteson •
Ocean Observations, Sweden

Thursday 09:00 - 10:30

Panel

How to Trust Robots Further Than We Can Throw Them

Hall D

Organizer: David Bruemner • Idaho National Laboratory, USA

David Bruemner • Idaho National Laboratory, USA
 Michael Goodrich • Brigham Young University, USA
 Nilajan Sarkar • Vanderbilt University, USA
 Bill Smart • Washington University in St. Louis, USA
 Douglas Few • Idaho National Laboratory, USA
 Don Norman • Nielsen Norman Group, USA
 Jean Scholtz • National Institute of Standards and Technology, USA
 Mark Swinson • USA Army Research Office, USA
 Holly Yanco • University of Massachusetts Lowell, USA

HCI Overviews 4

Open Source, Patents, Big Players

Hall M

Session Chair: Michael Byrne • Rice University, USA

Professional Usability in Open Source Projects: GNOME, OpenOffice.org, NetBeans
 Calum Benson • Sun Microsystems Ireland Ltd., Republic of Ireland
 Matthias Müller-Prove • Sun Microsystems GmbH, Germany
 Jiri Mzourek • Sun Microsystems Czech, Czech Republic

The Rise of Intrusive Online Advertising and the Response of User Experience Research at Yahoo!
 Christian Rohrer, John Boyd • Yahoo! Inc., USA

User Centered Design at European Patent Office
 Alard Weisscher, Josine van de Ven, Raghu Kolli • Meru Research, Netherlands
 Ged Owens • European Patent Office, Germany

SIG

Asynchronous Learning Networks: Priorities for Software Development

Hall N

Organizers:
 Starr Roxanne Hiltz • NJIT, USA
 Maryam Alavi • Emory University, USA
 Donna Dufner • University of Nebraska, USA

Thursday 09:00 - 10:30

Short Talks

Sensor Sensibility

Hall I

Session Chair: William Gaver • Royal College of Art, UK

Sensing GamePad: Electrostatic Potential Sensing for Enhancing Entertainment Oriented Interactions
 Jun Rekimoto • Sony Computer Science Laboratories, Japan
 Hua Wang • Tokyo University, Japan

Lessons Learned Using Ubiquitous Sensors for Data Collection in Real Homes
 Jennifer Beaudin, Stephen Intille, Emmanuel Munguia Tapia • Massachusetts Institute of Technology, USA

Giveaway Wireless Sensors for Large-Group Interaction
 Mark Feldmeier, Joseph Paradiso • MIT Media Lab, USA

Interactive Therapy with Instrumented Footwear
 Joseph Paradiso, Stacy Morris, Ari Benbasat, Erik Asmussen • MIT Media Lab, USA

'ensemble': Playing with Sensors and Sound
 Kristina Andersen • STEIM, The Netherlands

FingerSense - Augmenting Expressiveness to Physical Pushing Button by Fingertip Identification
 Jingtao Wang, John Canny • University of California Berkeley, USA

Short Talks

Come Play With Me

Hall K

Session Chair: Scott Mainwaring • Intel, USA

A Grounded Investigation of Game Immersion
 Paul Cairns, Emily Brown • UCL Interaction Centre, UK

More Than Just Fun and Games: Assessing the Value of Educational Video Games in the Classroom
 Jeremy Lee, Kathleen Luchini, Benjamin Michael, Cathie Norris, Elliot Soloway • University of Michigan, USA

Does it Matter if You Don't Know Who's Talking? Multiplayer Gaming with Voiceover IP
 John Halloran, Geraldine Fitzpatrick • University of Sussex, UK
 Yvonne Rogers • Indiana University, USA
 Paul Marshall • University of Sussex, UK

Project Massive: A Study of Online Gaming Communities
 A. Fleming Seay, William Jerome, Kevin Sang Lee, Robert Kraut • Carnegie Mellon University, USA

Using Heuristics to Evaluate the Playability of Games
 Heather Desurvire • Behavioristics, Inc. USA
 Martin Caplan • Avatar-X, USA
 Jozsef A. Toth • Institute for Defense Analysis, USA

Social Interaction in 'There'
 Barry Brown, Marek Bell • University of Glasgow, UK

Thursday 11:30 - 13:00

Invited Session

Mobile Communication

Hall E1

Organizer:

Bruno von Niman • *von niman consulting & ETSI, Sweden*

Mobile Industry User Experience Leaders: Struggling for the Ultimate Mobile User Experience-Present Issues and Future Hopes

Mikael Anneroth • *Ericsson, Sweden*
 Martin Böcker • *Siemens, Germany*
 Panu Korhonen • *Nokia, Finland*
 Michael von Roeder • *Vodafone, Germany*
 Tim Brown • *IDEO, USA*

CHI Fringe 2

Bots | Borgs

Hall E2

Session Chair: Philip McKay • *Sony, USA*

PAPERS

"Killer App" of Wearable Computing: Wireless Force Sensing Body Protectors for Martial Arts

Ed Chi • *PARC & Stanford Taekwondo Program, USA*
 Jin Song, Greg Corbin • *Impact Measurement, USA*

Game-Based Design of Human-Robot Interfaces for Urban Search and Rescue

Bruce Maxwell, Nicolas Ward, Frederic Heckel • *Swarthmore College, USA*

The Experience of Enchantment in Human-Computer Interaction

John McCarthy • *University College Cork, Ireland*
 Peter Wright • *University of York, UK*
 Jayne Wallace, Andrew Dearden • *Sheffield Hallam University, UK*

Between Bodies: Using Experience Modeling to Create Gestural Protocols for Physiological Data Transfer

Thecla Schiphorst • *Simon Fraser University, Canada*
 Kristina Andersen • *STEIM, The Netherlands*

Thursday 11:30 - 13:00

SHORT TALKS

Interaction Techniques Using Prosodic Features of Speech and Audio Localization

Alex Olwal • *Royal Institute of Technology (KTH), Columbia University, Sweden*
 Steven Feiner • *Columbia University, Sweden*

Using Social Geometry to Manage Interruptions In Attentive Office Cubicles

Maria Danninger • *Technische Universität München, Germany*
 Roel Vertegaal • *Human Media Lab Queen's University, Canada*
 Daniel P. Siewiorek • *HCI Institute Carnegie Mellon University, USA*

The Transparent Video Facetop and its Use in Support of Distributed Collaborative Tasks

Dorian Miller, David Stotts • *University of North Carolina at Chapel Hill, USA*

An Ethnography of Lists in Mothers' Work

Laurel Swan • *Independent, UK*
 Alex Taylor • *Social Shaping Research, UK*

Problems of Identity in Online Poker Games

Scott Golder, Judith Donath • *MIT Media Laboratory, USA*

Papers

Multi-Modal Creation

Hall G

Session Chair: Noelle Carbonell • *LORIA and CNRS/INRIA, France*

Animaatiokone - an Installation for Creating Clay Animation

Perttu J. Härmäläinen • *Helsinki University of Technology, Finland*
 Mikko Lindholm, Ari Nykänen • *University of Art and Design Helsinki UAH, Finland*
 Johanna Höysniemi • *University of Tampere, Finland*

Manipulating Music: Multimodal Interaction for DJs

Timothy Beamish, Karon Maclean, Sidney Fels • *University of British Columbia, Canada*

I/O Brush: Drawing with Everyday Objects as Ink

Kimiko Ryokai, Stefan Marti, Hiroshi Ishii • *MIT Media Laboratory, USA*

Thursday 11:30 - 13:00

Demos

Games and Virtual Environments

Hall H

Session Chair: Randy Pagulayan •
Microsoft Game Studios, USA

Human Pacman: A Wide Area Socio-Physical Interactive Entertainment System in Mixed Reality

Adrian Cheok, Kok Hwee Goh, Farzam Farbiz, Wei Liu, Yu Li, Siew Wan Fong, Xubo Yang, Sze Lee Teo •
National University of Singapore, Singapore

Measuring Presence in Virtual Environments

Rod McCall, Shaleph O'Neil, Fiona Carroll •
Napier University, Scotland

Genres as a Tool for Understanding and Analyzing User Experience in Games

Zhan Ye •
Blackwell Consulting Services, USA

Panel

Interface, Autonomy and Interactions in Automotive Driving

Hall D

Organizers:

Erwin Boer •
Erwin Boer Consulting, USA
Michael A. Goodrich •
Brigham Young University, USA

Robert Gardner •
Motorola Technical Staff, USA
Marika Hoedemaeker •
TNO, The Netherlands
Toshiyuki Inagaki •
University of Tsukuba, Japan
Satoshi Kitazaki •
Nissan Research Center, Japan
John Lee •
University of Iowa, USA
Aaron Marcus •
Aaron Marcus and Associates Inc., USA
Nicholas Ward •
University of Minnesota, USA

Thursday 11:30 - 13:00

HCI Overviews 5

Methodologies, Toolkits, and Performance

Hall M

Session Chair: Ji Soo Yi •
Georgia Institute of Technology, USA

Collaborating on Ethnography & Design Research: Center for Ethnography & Contextual Innovation at HFI

Kaushik Ghosh, Apala Lahiri Chavan •
Human Factors International, Mumbai

Laboratory for Automation Psychology and Decision Processes

Kent L. Norman •
University of Maryland, USA

IBM Almaden's User Sciences & Experience Research Lab

Daniel M. Russell, Steve Cousins •
IBM Almaden, USA

SIG

Context-Sensitive Design and Human-Centered Interactive Systems

Hall N

Organizers:

Keiichi Sato •
Illinois Institute of Technology, USA
Ken Dourous •
Motorola Labs, USA

Papers

On-Line Communities

Hall I

Session Chair: Joe Konstan •
University of Minnesota, USA

Studying Cooperation and Conflict between Authors with History Flow Visualizations

Fernanda Viegas •
MIT Media Lab, USA
Martin Wattenberg, Dave Kushal •
IBM Research, USA

Slash(dot) and Burn: Moderation in a Massive Online Conversation Space

Cliff Lampe, Paul Resnick •
University of Michigan, USA

Think Different: Increasing Online Community Participation Using Uniqueness and Group Dissimilarity

Pamela Ludford, Dan Cosley, Dan Frankowski, Loren Terveen •
University of Minnesota, USA

Thursday 11:30 - 13:00

Short Talks

Hands and Tools

Hall K

Session Chair: Mark Handel •
University of Michigan, USA

Single-Handed Interaction Techniques for Multiple Pressure- Sensitive Strips

Gabor Blasko, Steven Feiner •
Columbia University, USA

HabilisDraw 3.0: A Bimanual Tool-Based Direct Manipulation Drawing Environment

Colin Butler, Robert St. Amant •
North Carolina State University, USA

Interacting with Sketched Interface Design

Beryl Plimmer •
University of Auckland, New Zealand
Mark Apperley •
University of Waikato, New Zealand

ICARE: A Component-Based Approach for the Design and Development of Multimodal Interfaces

Jullien Bouchet, Laurence Nigay •
clips-imag, France

FingerPrint: Supporting Social Awareness in a Translucent Sensor- mediated Cue-based Environment

Cristian Bogdan,
Kerstin Severinson Eklundh •
KTH, Sweden

Learner Articulation in an Immersive Visualization Environment,

Joan Mazur, Cindy Lio •
University of Kentucky, USA

Thursday 14:30 - 16:00

Papers

Tangible Computing

Hall E1

Session Chair: Jonathan Arnowitz •
PeopleSoft, USA

DiamondSpin: An Extensible Toolkit for Around-the-Table Interaction

Chia Shen • *Mitsubishi Electric
Research Labs, USA*
Frédéric Vernier •
University of Paris, France
Clifton Forlines • *Mitsubishi Electric
Research Labs, USA*
Meredith Ringel •
Stanford University, USA

Gummi: A Bendable Computer

Carsten Schwesig, Ivan Poupyrev •
*Sony Computer Science Laboratories,
Japan*
Eijiro Mori •
Sony Design Center, Japan

Topobo: A Constructive Assembly System with Kinetic Memory

Hayes Raffle, Amanda Parkes,
Hiroshi Ishii • *MIT Media Lab, USA*

Special Area

European HCI Research

Hall E2

Organizers:

Philippe Palanque • *LIHHS-IRIT,
Université Toulouse 3, France*
Gerd Szwillus •
Universität Paderborn, Germany

The Causes of Accidents and Incidents Involving Interactive Systems in Europe and the USA

Chris Johnson •
University of Glasgow, UK

European HCI Theory - a Uniquely Disparate Perspective

Alan Dix • *Lancaster University, UK*

A User-centred Perspective on the Design of Affective Interaction Involving Both Body and Mind

Kristina Höök •
DSV at SU/KTH, Sweden

Thursday 14:30 - 16:00

Papers

Sharing Your World
Hall G**Session Chair:** Claire O'Malley •
*University of Nottingham, UK***RAW: Conveying Minimally-mediated Impressions of Everyday Life With an Audio-photographic Tool**Joëlle Bitton, Stefan Agamanolis,
Matthew Karau •
*Media Lab Europe, Ireland***Supporting Social Presence through Lightweight Photo Sharing On and Off the Desktop**Scott Lee Tiernan •
Microsoft Research, USA
Eric Fellheimer • *Massachusetts Institute of Technology, USA***The Familiar Stranger: Anxiety, Comfort, and Play in Public Places**Eric Paulos, Elizabeth Goodman •
Intel Research, USA

Demos

Visualizing Information
Hall H**Session Chair:** Dan Olsen •
*Brigham Young University, USA***Haystack: A Personalized, Unified Interface to Creating, Browsing, and Organizing Arbitrary Information**Dennis Quan •
IBM TJ Watson Research, USA
David Karger • *MIT CSAIL, USA***Browsing Through an Information Visualization Design Space**Thomas Baudel • *ILOG, France***CareView: Analyzing Nursing Narratives for Temporal Trends**Lena Mamykina, Stuart Goose,
David Hedqvist • *Siemens Corporate Research Inc., USA*
David V. Beard •
*Idaho State University, USA***Anthropomorphic Visualization: A New Approach For Depicting Participants in Online Spaces**Ethan Perry, Judith Donath •
MIT Media Lab, USA

Thursday 14:30 - 16:00

SIG

Personal Information Management
Hall M**Organizers:**Ofer Bergman •
Tel Aviv University, Israel
Richard Boardman •
Imperial College London, UK
Jacek Gwizdzka •
University of Toronto, Canada
William Jones •
University of Washington, USA

SIG

Current Issues in Assessing and Improving Information Usability
Hall N**Organizers:**Stephanie Rosenbaum •
Tec-Ed, Inc., USA
Dana Chisnell • *UsabilityWorks, USA*

Short Talks

Truth, Lies, and Usability Tapes
Hall I**Session Chair:** D. J. Hoets •
*Flipside User Experience Design, The Netherlands***A Comparison of Synchronous Remote and Local Usability Studies for an Expert Interface**A.J. Brush •
University of Washington, USA
Morgan Ames • *University of California, Berkeley, USA*
Janet Davis •
*University of Washington, USA***Automatic Support for Web User Studies with SCONE and TEA**Hartmut Obendorf,
Harald Weinreich, Torsten Haß •
*University of Hamburg, Germany***Computerized Self-Administered Questionnaires on Touchscreen Kiosks: Do They Tell the Truth?**Pieter Bignaut • *University of the Free State, South Africa***Task-Evoked Pupillary Response to Mental Workload in Human-Computer Interaction**Brian Bailey, Shamsi Iqbal •
University of Illinois, USA
Sam Zheng • *Beckman Institute, University of Illinois, USA***Reconditioned Merchandise: Extended Structured Report Formats in Usability Inspection**Gilbert Cockton, Alan Woolrych,
Mark Hindmarch •
*University of Sunderland, UK**(Continued on next page.)*

Thursday 14:30 - 16:00

*(Continued from previous page.)***From Quality in Use to Value in the World**Gilbert Cockton • *University of Sunderland, UK*

Short Talks

We Do Windows
Hall K**Session Chair:** Todd Zazelenchuk • *Whirlpool Corp., USA***WinCuts: Manipulating Arbitrary Window Regions for More Effective Use of Screen Space**Desney Tan • *Carnegie Mellon University, USA*
Brian Meyers • *Microsoft, USA*
Mary Czerwinski • *Microsoft Research, USA***Goopy Interfaces: An Approach for Rapidly Repurposing Digital Content**Les Nelson, Elizabeth F. Churchill, Denoue Laurent, Jonathan Helfman, Paul Murphy • *FX Palo Alto Laboratory, USA***Wideband Displays: Mitigating Multiple Monitor Seams**Jock Mackinlay • *PARC, USA*
Jeffrey HEER • *University of California, Berkeley, USA***Letting Every Pupil Learn Japanese Hand Alphabets with Visual Interfaces**Miki Namatame • *Tsukuba College of Technology, Japan*
Yasushi Harada, Fusako Kusonoki • *Tama Art University, Japan*
Takao Terano • *Tsukuba University Japan***Focus+Context Sketching on a Pocket PC**Edward Lank, Son Phan • *San Francisco State University, USA***Mouse Ether: Accelerating the Acquisition of Targets Across Multi-Monitor Displays**Patrick Baudisch, Cutrell Edward, Ken Hinckley • *Microsoft Research, USA*
Robert Gruen • *Microsoft, USA***Closing Plenary**

16:30 - 18:00, Hall D

**The Future of Designing Experiences**Tim Brown • *IDEO, USA*

Why is designing a product not the same as designing an experience? How come technology as often as not frustrates rather than enhances a great experience? This talk discusses some of the learning IDEO has gained from working in thirty five industries on things as diverse as the future of the patient experience in healthcare to advanced retail prototypes.

Tim Brown is CEO and President of IDEO, the world's leading design consultancy specializing in turnkey product development and innovation strategy. Prior to taking his current position in 2000, Tim led IDEO Europe from 1995 to 2000 and managed IDEO's San Francisco office from 1990 to 1995.

Tim has led strategic client relationships with such companies as Apple, NEC, Steelcase, Sony, Epson, Whirlpool, and Matsushita. He has received numerous design awards, and his designs have been exhibited at the Axis Gallery in Tokyo and Design Museum in London.

Tim's special interest has been in cultivating great design and innovative thinking within multidisciplinary teams. He has been active in design education for many years, lecturing at Stanford University, Cranbrook Academy of Art, the Royal College of Art, and the University of Northumberland. Tim earned his Master of design degree from the Royal College of Art in London and his BA in Design for Industry from the University of Northumberland.

POSTERS

Posters present exciting new findings, ongoing with demonstrated promise, preliminary results, timely work still in a state to be influenced, tightly argued essays, or opinion pieces. Posters are visual presentations of work and are displayed throughout the conference. Visit the posters and discuss these late breaking and on-going works with the authors in an informal setting.

Social Networking

IPO1

The Keep-In-Touch Phone: A Persuasive Telephone for Maintaining Relationships

Scott Golder •
MIT Media Laboratory, USA

IPO2

BumpList: Developing Beneficial Email List Structures

Jonah Brucker-Cohen • *Media Lab Europe and Trinity College Dublin, Ireland*
Michael Bennett • *Media Lab Europe and University College Dublin, Ireland*
Stefan Agamanolis •
Media Lab Europe, Ireland
Fred Cummins • *Media Lab Europe and University College Dublin, Ireland*
Linda Doyle •
Trinity College Dublin, Ireland

IPO3

In-Car Concepts to Support Working Parents

Rachel Eardley, Jenny Hyams,
Abigail Sellen •
Hewlett-Packard Laboratories, UK

IPO4

Apeer: A Peripheral Interface to Improve Social Awareness of Brief Topical Discussion

Chad Thornton, Neema Moraveji,
Patrick Barry, Kevin Shiue •
Carnegie Mellon University, USA

IPO5

SWIM: Fostering Social Network Based Information Search

Jun Zhang, Marshall Van Alstyne •
School of Information, University of Michigan, USA

Affective User Interface

IP06

The Efficacy of Psychophysiology for Realising Affective Computing

Louise Venables, Jennifer Allanson, Stephen Fairclough • *Liverpool John Moores University, UK*

IP07

Lovelet: A Heartwarming Communication Tool for Intimate People by Constantly Conveying Situation Data

Hidenori Fujita, Kazushi Nishimoto • *Japan Advanced Institute of Science and Technology, Japan*

Home

IP08

Tele-Biographies: Data Collection Techniques to Capture the ways People Interact with Digital TV

Mark A. Blythe, Jisoo Park, Andrew F. Monk • *University of York, UK*

IP09

Making Recipes in the Kitchen of the Future

Iitiro Siiro • *Tamagawa University Japan*
Noyuri Mima, Ian Frank, Tetsuo Ono, Hillel Weintraub • *Future University-Hakodate, Japan*

Entertainment

IP10

Assessing Visitor Behavior and Attitudes in the medien.welten Exhibition

Ottmar Moritsch, Eva Hornecker, Matthias Stifter • *Technical University Vienna, Austria*

IP11

Ambient Urban Interludes: Passing Glances

Cati Vaucelle • *Media Lab Europe, Ireland*
Katherine Moriwaki, Linda Doyle • *Trinity College Dublin, Ireland*

E-Learning

IP12

Hands-on Learning of Computer Programming in Introductory Stage Using a Model Railway Layout

Haruo Noma, Hirokazu Sasamoto • *ATR Media Information Science, Japan*
Youichi Itoh, Yoshifumi Kitamura, Fumio Kishino • *Osaka University, Japan*
Nobuji Tetsutani • *ATR Media Information Science, Japan*

IP13

Visual, Attractive, and Luminous: Learning Japanese Hand Alphabets for Elementary School Pupils

Yasushi Harada • *Tama art University, Japan*
Miki Namatame • *Tsukuba College of Technology, Japan*
Fusako Kusunoki • *Tama art University, Japan*
Takao Terano • *Tsukuba University, Japan*

IP14

Accessing Services: Dumb Clients in a Smart Classroom

Edward Lank, Amy Ichnowski, Shahid Khatri • *San Francisco State University, USA*

IP15

Emotion In a Ticket

Apala Lahiri Chavan, Sushmita Munshi • *Human Factors International, India*

Robots

IP16

Robotic Walker Interface: Designing for the Elderly

Irina Shklovski, Yuan-Chou Chung, Robert Adams • *Carnegie Mellon University, USA*

IP17

Design Guidelines for Improved Human-Robot Interaction

Jill L. Drury • *The MITRE Corporation, USA*
Dan Hestand, Holly A. Yanco • *University of Massachusetts Lowell, USA*
Jean Scholtz • *National Institute of Standards and Technology, USA*

Agents

IP18

Well-Integrated Needs-Oriented Recommender Components Regarded as Helpful

Markus Stolze • *IBM Research, Zurich Research Laboratory, Switzerland*
Fabian Nart • *ETH Zurich, Switzerland*

IP19

Human Computer Interaction in Multiplayer Computer Games

Joseph Maclnnes • *Saint Mary's University, USA*

Information Retrieval

IP20

MetaCrystal: Visual Interface for Meta Searching

Anselm Spoerri • *Rutgers University, USA*

IP21

Depth- and Breadth-First Processing of Search Result Lists

Kerstin Kloeckner, Nadine Wirschum, Anthony Jameson • *German Research Institute for Artificial Intelligence (DFKI), Germany*

IP22

Who's My Daddy? An Approach to Decentralized Information Architecture

Abe Crystal, Jesse Wilbur • *University of North Carolina at Chapel Hill, USA*

Document Access

IP23

Telling Stories to Computers for Document Retrieval

Daniel Gonçalves, Joaquim Jorge • *Instituto Superior Técnico, Portugal*

IP24

Readness" – A Design Exploration of Personal Document Management in Historical and Collaborative Context

Michael Muller • *IBM Research, USA*

TV Remote Control

IP25

Interaction and Product Design of Gesture Based TV Remote Control

Sang-Hwan KIM, Joonho Ok, Hyun Joo Kang, Min-Chul Kim, Mijeong Kim • *Samsung Electronics, Republic of Korea*

IP26

Effective Interaction Techniques for Moving Cursor Using a Remote Control

Soo Chul Lim, Ji Hyea Han, Min Young Jo, Eun Mi Jeon, Woo Sik Choi, Chang Geun Song, Song Yong Sim, Sung Woo Kim • *Samsung Electronics, Republic of Korea*

Display

IP27

Office Window of the Future? Two Case Studies of an Augmented Window

Batya Friedman, Nathan G. Freier, Peter H. Kahn, Jr. • *University of Washington, USA*

IP28

Evaluating the Comprehension of Ambient Displays

Lars Erik Holmquist • *Viktoria Institute, Sweden*

New Interaction Design

IP29

Developing Tangible Interaction and Augmented Reality in Director

Ji-Dong Yim, Tekjin Nam • *KAIST, Korea*

IP30

Interaction Design for Electronic Musical Interfaces

Bert Schiettecatte • *Vrije Universiteit Brussel, Belgium*

Input & Interaction Technology**IP31****Measuring Gaze Point on Handheld Mobile Devices**

Kristian Lukander • *Finnish Institute of Occupational Health, Finland*

IP32**Joystick Text Entry with Date Stamp, Selection Keyboard, and EdgeWrite**

Jacob Wobbrock, Brad Myers, Hiet Hiet Aung • *Carnegie Mellon University, USA*

Mobile Interaction**IP33****Kick-Up Menus**

Volker Paelke, Christian Reimann, Dirk Stichling • *University of Paderborn, Denmark*

IP34**What You See is Where You Go: Preliminary Findings in Situated Way-Finding Research**

Christopher Lueg • *University of Technology, Australia*
Nicola Bidwell • *Charles Darwin University, Australia*

Web Usability**IP35****Measuring Visual Appeal of Web Pages**

Ronald Boring • *INEEL, USA*
Gary Fernandes • *Carleton University, Canada*

IP36**Managing Icon Abundance on eBay**

Maureen Fan, Kathleen Ko • *eBay Inc., USA*

Usability**IP37****Using Monetary Incentives and Auction to Elicit User Preferences between Usable and Beautiful Systems**

Tamar A. Ben-Bassat, Joachim Meyer, Noam Tractinsky • *Ben-Gurion University of the Negev, Israel*

IP38**Testing Multimodal Notification Cues on a Mobile Device**

Peter Tarasewich, Tashfeen Bhimdi, Myra Dideles • *Northeastern University, USA*

IP39**Reengineering Planning Process Guided by Usability Evaluation**

Sérgio Luisir Discola, Júnia C. A. Silva • *Federal University of São Carlos, Brazil*

User-Centered Design**IP40****Designing for Privacy: A Method for Structured Analysis of Privacy Vulnerabilities**

Carlos Jensen • *Georgia Tech, USA*

IP41**Story Lifecycle in a Product Development Organization**

Majie Zeller, Sandra Kogan • *IBM Software Group, USA*
Michael Muller • *IBM Research, USA*
Merry Morse • *IBM Software Group, USA*

EXHIBITS

Exhibits provide an opportunity for conference attendees to learn about a broad spectrum of HCI offerings. They feature the latest in HCI-oriented products and services from commercial vendors, institutions, and publishers.

Exhibit Hours

Tuesday.....10:30 – 19:00
Wednesday.....08:00 – 19:00
Thursday.....08:00 – 16:30

EXHIBITOR LISTINGS**BIOBSERVE****Stand G**

BIOBSERVE provides powerful and innovative tools for usability testing experiments. We offer a system for software usability testing that allows full screen capture of computer screens without any loss of information. We also provide software running on handheld computers for mobile data acquisition.

CURE**Stand 11**

CURE has pioneered human-computer interaction and usability research in Austria and performs high profile applied research activities. USECON offers commercial usability and user experience services covering all phases of the product lifecycle well integrated into a solid human-centric management approach.

Cybelius Software**Stand 8**

Cybelius Maestro™ is a simulation and development tool for user centered mobile devices. Maestro™ relies on component-based and reusable product simulations that can be utilized in usability engineering.

Google**Stand M**

Google's ease of use is the result of a continued focus on putting the user first. If you're interested in the challenge of making information easily accessible to a global audience, please stop by our booth. We have several open positions and would be happy to discuss them with you.

FrogPad**Stand 3**

FrogPad™ is the only one-handed fully functional keyboard that is 1/5 the size of a normal Qwerty keyboard and emulates all of its functions. It works with most USB compatible devices and is quickly becoming the data entry standard for mobile devices.

Human Factors International**Stand E**

Human Factors International offers consulting, training, and products in software usability. Since 1981, we have worked on over 2,300 interface projects and taught over 1,400 courses on interface design worldwide.

InContext Enterprises**Stand 7**

We'll be demonstrating CDTools, our new software application designed specifically to support customer-centered design. We'll also be happy to talk to you about Contextual Design, the front-end, customer-centered design process created by InContext. Visit www.incent.com.

Interface Consult**Stand F**

Interface Consult (www.usability.at) is a leading usability company in Austria, founded in 1994. The company offers a broad range of usability consulting services for all phases of the project lifecycle.

John Wiley & Sons, Ltd.**Stand K**

John Wiley and Sons Ltd are a leading publisher of computing books, providing timely and reliable resources for both the professional and academic markets.

Lawrence Erlbaum Assoc.**Stand 6**

LEA publishes the scholarly journal, Human-Computer Interaction, as well as cutting edge books and other journals in HCI, human factors, CSCW, educational technology, cognitive science, applied psychology and related disciplines. Please visit our booth.

LC Technologies Eyegaze System**Stand 4**

LC Technologies Eyegaze Development System is an instrument for measuring, recording, playing back, and analyzing what a person's eyes are doing. Calibration takes only 10 seconds. Now available portable or with binocular eyetracking.

Mangold Software**Stand 18**

We offer leading solutions for the collection, transcription and analysis of observational data in human and animal behaviour. Our products have been used all over the world for more than 10 years.

Microsoft Corporation**Stands C & D**

Our mission is to enable people and businesses throughout the world to realize their full potential. Try out our latest software and connect with the people behind it.

Morgan Kaufmann Publishers**Stand H**

Morgan Kaufmann publishes the Series in Interactive Technologies for interaction design professionals, academics, and students as well as for all software, WWW, and multimedia developers involved in user interface design. New titles this year include Richard Ling's The Mobile Connection; Susan Fowler's Web Application Development Handbook; Colin Ware's Information Visualization, 2nd Ed; and Barbara Mirel's Interaction Design for Complex Problem Solving.

Noldus Information Technology**Stands 1 & 2**

Noldus offers software and integrated systems including portable and stationary labs for recording and analyzing human-computer interaction. The new Observer is available for live observations and video analysis and will be displayed in our booth. We will also demonstrate new tools for mobile observations.

**Samsung Electronics Co. Ltd.,
(Interaction Group, Software Center)****Stand 9**

The Interaction Group from Samsung Electronics presents GIA (gesture-based interactive photo album) along with a number of research outcomes. Discuss career opportunities in the interaction design/HCI areas with us!

SAP**Stand L**

SAP presents its knowledge base for user interface design (SAP Design Guild), the "UI First" development process as well as new user interface concepts. Specialists in user productivity will be available to discuss career opportunities at SAP.

Smart Eye AB**Stand 17**

Smart Eye Pro is targeted at users and applications that require high-accuracy measurements of head pose and gaze in 3 dimensions at full frame rate. Web: www.smarteye.se.

Springer Verlag**Stand J**

Springer's publishing programme contains a wide range of books, journals and electronic media covering all fields of computer science. For detailed information about all publications, please visit www.springeronline.com.

Taylor & Francis**Stand 10**

Building on two centuries' experience, Taylor & Francis has grown rapidly to become a leading international academic publisher. With offices worldwide, the Taylor & Francis Group publishes more than 800 journals.

TechSmith**Stand N**

Morae is the only fully integrated, all-digital software solution for analyzing human-computer interaction. Powered by patent-pending, Rich Recording Technology™, Morae allows you to record, log, analyze and share.

The MIT Press**Stand 5**

The MIT press is a premiere publisher in titles on computer-human interaction. New and recent back list titles are available at 20% conference discount. New title highlights include: Design Research by Brenda Laurel and Activity-Centered Design by Geri Gay and Helene Hembrooke.

Tobii Technology5**Stand B**

Tobii Technology provides solutions for eye-tracking and applications based on this. Check out our unique tools for usability/advertising studies, and a preview of upcoming products for eye-based computer interaction.

Yahoo! Inc.**Stand A**

Yahoo! is the leading destination on the web for people to find anything, communicate with anyone, or buy anything, wherever they are.

RECRUITING BOARDS

A designated area in **The Connectionary** focuses on recruiting. Organizations interested in recruiting new personnel have purchased poster board space to display pertinent information about available positions. Bring your resume and it will be delivered to authorized representatives of these recruiting organizations. This area provides an excellent opportunity for all conference participants to obtain valuable information about employment opportunities as well as increase their networking with HCI professionals.

Recruiting Organizations**Champion Sponsors**

Google
Microsoft
SAP
Yahoo!

Contributing Sponsors

Intel
Nokia
Sun Microsystems

Exhibitors

Human Factors International

Recruiting Board Hours:

Tuesday 10:00 – 18:00
Wednesday 08:30 – 18:30
Thursday 08:30 – 16:30

About Vienna**The CHI2004
Conference City**

CHI2004 will be held in Vienna, Austria's capital, which combines imperial tradition with modern creativity. Vienna is a city full of culture, history, art, music, fun, and much more. Its incomparable wealth of historical treasures, its great traditions and its exciting artistic and cultural scene makes Vienna as a major European tourist destination. Vienna ranks among the worldwide top international conference destinations.

Vienna, with its approximately 1.5 million inhabitants, spreads over 415 square kilometres and is divided into 23 districts. Almost half of the city is covered by parks – Vienna has more parks than any other European capital. There are not only “city greens,” such as the Stadtpark (with the most photographed object in the city, the golden Johann Strauss monument), the woods and meadows of the Prater, and the spacious Schönbrunn Palace Park, but also the Vienna Woods, vineyards and farmland, and the expansive river banks of the legendary Danube. During summer, the temperature rarely rises above 30° C; during the winter it hardly ever falls below - 5° C.

**From Roman Camp to
Capital of the Republic**

Vienna's history goes back to the first century, when the Romans founded the military camp Vindobona. In 1137, the city of Vienna was first mentioned in documents, and around 1155 the Dukes of Babenberg chose it as their residence. From 1282 on, the Habsburgs reigned for more than six centuries. Today's cityscape is dominated by the Baroque, which for the main part originated during the reign of Empress Maria Theresia. Emperor Franz Joseph I also put his imprint on the city when he levelled the city walls in 1857 and saw to it that the splendid Ringstrasse boulevard was built. After 68 years as emperor, he died during World War I, and in 1918 Vienna became the capital of the Republic of Austria. After the so-called “Anschluss” of Austria to Hitler's Germany, Vienna was designated a “Reichsgau” (an administrative district of the Third Reich during the Nazi period) in 1938; after 1945, it once again became the capital of the Austrian Republic. Since 1967, the city has been one of only three United Nations cities (in addition to New York and Geneva) and in 1995 it became one of 15 capitals of the European Union.

Imperial Romance and World-Class Art

Tourists are eager to visit Vienna because of the city's exciting combination of the royal-imperial flair of the past with the latest trends, the responsible cultivation of a precious heritage and charming traditions. The Habsburg architecture is a suitable setting for this image: magnificent buildings date back to the baroque, to historicism (the so-called "Ringstrassen Style"), and to art nouveau. In Vienna, one still revels in the romantic center of a long-lost empire.

But much more than old buildings turn Vienna into a city of beauty: one also finds excellent museums, fine art collections and world-renowned works of art in the city. The Museum of Fine Arts offers the world's largest collection of paintings by Bruegel. Many works by Gustav Klimt and Egon Schiele are exhibited in the Austrian Gallery at Belvedere and in the Leopold-Museum in the new Museumsquartier.

In 2001 Vienna opened the MuseumsQuartier Wien in the center of the city, next to two renowned museums. Covering 45,000 square meters it is an architecturally fascinating combination of a baroque building (the former Imperial Stables) with future-oriented design. With 60,000 square meters of usable floor space on eight different levels, it is one of the ten largest cultural centers in the world, offering a unique combination of events. Among the highlights are the Leopold Museum with the largest collection of Schiele paintings in the world, and works of such renowned modern Austrian artists as Klimt, Kokoschka and Gerst. The MuseumsQuartier also houses the Museum of Modern Art, the Tobacco Museum, the Vienna Architecture Center, and the Kunsthalle Wien.

City of Music with Lifestyles from Gemütlich to Trendy

Vienna has traditionally placed high value placed on art, fostering creativity by its citizens, and attracting artists from other countries. Vienna boasts 50 theaters, including three opera houses and two theaters staging musicals, 100 museums, as well as renowned drama, music and dance festivals. In addition, outstanding exhibitions are shown all year long. This means that an extraordinarily rich cultural program is available throughout the year, which makes Vienna one of the leading cultural centers of Europe.

Vienna, as a city of music, enjoys a paramount reputation around the world. No other city has been home to so many composers of international renown: some, such as Schubert, Strauss, Schoenberg and Berg were born there; others, such as Haydn, Mozart, Beethoven, Brahms and Mahler chose to live there. The Wiener Philharmoniker is one of the world's great orchestras, and the Vienna Symphony and several other orchestras and groups are not far behind. The Vienna State Opera is one of the finest opera houses anywhere, and the city is home to two additional opera houses. The Vienna Boys' Choir enchants music lovers around the world. In addition to classical music, Vienna has also made its mark as a city of musicals, and recent successes in electronic music show that the avant-garde is also taken seriously in Vienna. A very special way to enjoy music is presented at the House of Music - a unique high-tech adventure journey into the phenomenon of music - where sounds become visible, organ pipes may be walked on and visitors can be turned into virtual conductors or composers.

Lifestyle: Royal-Imperial Nostalgia and New Trends

This juxtaposition of such traditional gems as coffeehouses and Heurigen (wine restaurants), which demonstrate Vienna's ability to enjoy life in a relaxed atmosphere, and ultra-modern events such as the Life Ball and the Festival for Electronic Music, conveys a lifestyle that is attractive to the modern tourist offering an array from which he or she may choose according to his or her mood: relaxation and serenity or action and stimulation.

Around the Naschmarkt, Vienna's multi-national fruit and vegetable market - every Saturday, a Flea Market next to it adds a special flair - an extraordinarily diverse gastronomic scene has developed over the past years. Mariahilfer Strasse - the direct link between the historic old city and Vienna's most popular sightseeing attraction, Schönbrunn Palace - has been transformed into an attractive Shopping Mile since the completion of the Underground line U 3. During the summer, Viennese and tourists alike visit not only the Prater with its Riesenrad (Giant Ferris Wheel), but also the Copa Cagrana on Danube Island - which boasts Europe's largest open-air party. And the Heurigen regions on the hillsides of the Vienna Woods invite one and all to seriously "study" Vienna and its wines.

Austria Center Vienna The CHI2004 Conference Venue

CHI2004 will take place in the Austria Center Vienna, located at the eastern part of the city. The conference center is situated near the United Nations buildings and the New Danube. Around the New Danube the Danube Island has become the largest and most popular leisure area of the city with over 40 km of bathing beaches, countless restaurants and leisure facilities. The Conference Center is also in the heart of the Danube City, which has been developed over the last years as a center of business and technology. The conference center is easily accessible by all means of transport.

Jugendstil The CHI2004 Design Inspiration

In April 1897, the Secession Artists Association was founded in Vienna, a unique variety of the European Jugendstil (Art Nouveau) movement. Its leading figures were Otto Wagner and Gustav Klimt. The aim of the movement was for art to penetrate all aspects of life. Vienna shows a rich collection of Jugendstil at different places in Vienna. Famous architectural examples include the Secession, a small building housing the 26 meter long Beethoven Frieze by Gustav Klimt; the Otto Wagner Ensemble; and the Postsparkasse (Post Office Savings Bank).

**Vienna Waits For You
12 Tips to Experience and
Enjoy Arts & Delights**

Vienna is old and new, classical and trendy, nostalgic and dynamic. Here are 12 tips for the newcomer to help you explore, experience and enjoy the arts and delights of the city: a sort of checklist for your visit to Vienna:

- A 1000-year-old crown and “Sissi’s” Bathtub: the Imperial Palace with all its treasures
- The “Ringstrasse” – a window on the former Habsburg monarchy and a splendid boulevard today
- The Joys and Frustrations of the Habsburgs: Schönbrunn Palace - witness to the history of the monarchy, from Maria Theresia to the resignation of the last emperor
- MuseumsQuartier: The vast new cultural premises attract visitors with the largest Schiele collection of the world, Warhol’s portraits and much more
- The Kunsthistorisches Museum, a delight for lovers of classical art housing works by Bruegel, Titian and more
- The Viennese Coffeehouse: a traditional meeting place for romantic travelers and leisurely bon vivants
- Austrian Gallery Belvedere, Bank Austria Kunstforum and Kunsthalle Wien - three guarantees of first-class art exhibitions

- Cool & Trendy: from shopping to clubbing – take a 24-hour trip through the Vienna Scene of young people
- Art Nouveau & Secession: The golden luster of Vienna at the turn of the last century
- Vienna State Opera: a grand building with grand opera and the Opera Ball
- Musikverein with its Golden Hall: home to the Vienna Philharmonic Orchestra
- Vienna & Wine: Heurigen inns invite visitors to the outlying districts where tall stories are told and much wine is drunk

Further Information Links:

Vienna Information: info.wien.at
 Vienna Information: www.wien.gv.at
 Secession: www.secession.at
 Conference Center: www.acv.at

**GENERAL CONFERENCE
INFORMATION**

CHI2004 is more to the HCI profession than just the leading technical forum. It provides attendees with opportunities to make new contacts and renew old friendships with colleagues from around the world.

ALCOHOLIC BEVERAGES

On-premise consumption of alcohol is subject to provincial regulation. The minimum legal drinking age in Vienna is 16.

ATTIRE/WEATHER

CHI conferences are casual dress. You may wish to bring semi-formal attire for the Conference Reception (not required). Vienna has a moderate continental climate. The average temperature in Vienna in April is 18-20° Celsius. You may expect a range of weather during CHI2004; we recommend dressing in layers as you may experience the chill of winter or the beginning of a warm spring.

CELL PHONE COURTESY

CHI2004 requests that all cellular phones, pagers and other equipment with audible alarms be turned off in all sessions as a courtesy to the presenters and other attendees.

THE CHI STORE

At the Entrance

The CHI Store offers merchandise not available at any other time. Please stop by the CHI Store to select items that are offered in very limited quantities.

CHI Store Hours

Sunday, 6 April..... 12:00 – 17:30
 Monday, 7 April08:00 – 21:30
 Tuesday, 8 April08:00 – 17:30
 Wednesday, 9 April .08:00 – 17:30
 Thursday, 10 April....08:00 – 14:00

COFFEE BREAKS

Regularly scheduled morning and afternoon breaks take place in The Connectionary on Tuesday, Wednesday and Thursday. They are included in the registration fee.

Cash concessions (e.g. a coffee house in the exhibitions area) are available throughout the conference center. Lunch possibilities (not included in the conference fee) are available in the Restaurant Area of the Conference Center.

THE CONNECTIONARY

Located in Level OE. The Connectionary is a large central area that is the site for all main conference breaks, exhibits, posters, and Recruiting Boards. You will also find Internet access and the Message Boards. Seating areas make The Connectionary the perfect place to meet with old or new friends, enjoy food and beverages or just relax between sessions.

The Connectionary Hours

Saturday..... 15:00 – 19:00
 Sunday..... 08:00 – 18:30
 Monday 08:00 – 18:30
 Tuesday 08:00 – 18:30
 Wednesday 08:00 – 18:30
 Thursday..... 08:00 – 16:00

CURRENCY EXCHANGE

There are several bank offices around the venue and around the conference hotels, where you can arrange your currency exchanges during the day.

ELECTRICAL POWER

It is ACM SIGCHI policy to use the local power source. The electrical voltage in Austria is 230V AC. CHI2004 does not provide power converters, extension cords, power strips, or other electric accessories. If you are presenting at CHI2004, **please be sure to contact your session chair** if you have questions about connecting your laptop or peripherals in session.

HOTEL & INFORMATION BOOTH**Level OE**

The CHI2004 Hotel & Information Booth provides hotel and local information. Visit the booth for confirmations and vouchers for your hotels reservations, as well as local tourist information. The Hotel & Information Booth is located in the entrance area (Level OE) opposite the registration desks. It can be reached by telephone at +43-1-26069-2002.

Information Booth Hours:

Sunday..... 15:00 – 19:00
Monday 09:00 – 17:30
Tuesday 08:30 – 18:30
Wednesday 08:30 – 18:30
Thursday..... 08:00 – 14:00

CONFERENCE OFFICE**Level OE**

The Conference Office is located near the entrance area (Level OE). Telephone messages can be taken for you and posted to the message boards. It can be reached at +43-1-26069-2003

MESSAGE BOARDS**The Connectionary**

Message boards can be used to post messages to other conference participants.

PRESS OFFICE

CHI2004 welcomes members of the press. Please stop by the Press Office for information on press events this week and to learn more about CHI2004, SIGCHI and future CHI conferences. We will be happy to schedule interviews with selected authors at the conference.

RECORDING PROHIBITED

The use of any type of audio or video recording device is not permitted during any part of the conference. The use of still cameras is permissible; however, reprinting photographs in print or electronic publications is prohibited without the written permission of each individual photographed.

REGISTRATION**Entrance Area - Level OE**

Tel.: +43-1-26069-2000

Onsite Registration Hours

Saturday, 24 April.... 15:00 - 19:00
Sunday, 25 April..... 08:00 - 17:30
Monday, 26 April 08:00 - 21:30
Tuesday, 27 April 08:00 - 17:30
Wednesday, 28 April 08:00 - 17:30
Thursday, 29 April.... 08:00 - 14:00

SMOKING POLICY

CHI Conferences are smoke-free. There are easily accessible outdoor areas at the Conference Center where smoking is permitted.

SPECIAL NEEDS AND ACCESS

Information about special directions for persons with impaired mobility, sign language services, interpreters, dietary restrictions, or other assistance is available upon request. If you need special assistance please contact the Conference Office.

STUDENT VOLUNTEERS

Student Volunteers are a great source of information about the conference and are a pleasure to meet. Many are working on their Ph.D.s and some are looking for job opportunities. You will recognize Student Volunteers by their red CHI2004 Student Volunteer T-Shirt.

**TRANSPORTATION/
PARKING**

CHI2004 will provide no busing. Vienna has a comprehensive public transport system. To reach the conference center from the city center (Stephansplatz) take the U1 underground line (red). Exit at Vienna International Centre/ Kaisermühlen and take the exit marked Schüttaustraße. Travelling time is about 8-10 minutes from the city center (Stephansplatz).

If you need a taxi, please contact the Hotel & Information Booth.

Parking Decks are located directly below the conference center (Austria Center Vienna). There are around 1000 spaces. Parking is charged on an hourly basis.

VOLUNTEERING

If you are interested in volunteering for future SIGCHI conferences and events, please speak with someone at the SIGCHI booth in the The Connectionary or visit The Conference Office. Volunteering is a great way to make new contacts in the field of HCI and gain valuable experience.