



ASSETS 2010

The 12th International ACM SIGACCESS Conference on Computers and Accessibility
Orlando, FL, October 25-28, 2010

PRELIMINARY PROGRAM

Monday - October 25

8:00 am	Registration	
9:00 am	Conference Opening <i>Armando Barreto, ASSETS'10 Chair (Florida International University, USA)</i>	
9:15 am	Keynote Address <i>Session Chair: Vicki L. Hanson (University of Dundee, UK)</i>	The Future of Assistive Technologies: A Time of Promise and Apprehension <i>(Albert M Cook)</i>
10:15 am	Break	
10:45 am	Technical Paper Session 1: Considering Accessibility <i>Session Chair: Clayton Lewis (University of Colorado at Boulder, USA)</i>	Disability Studies as a Source of Critical Inquiry for the Field of Assistive Technology <i>(Jennifer Mankoff, Gillian Hayes and Devva Kasnitz)</i>
		A General Education Course on Universal Access, Disability, Technology and Society <i>(Sri Kurniawan, Sonia Arteaga and Roberto Manduchi)</i>
		Towards Accessible Touch Interfaces <i>(Tiago Guerreiro, Hugo Nicolau, Joaquim Jorge and Daniel Gonçalves)</i>
12:15 pm	Lunch	
1:30 pm	Technical Paper Session 2: Evaluating Accessibility <i>Session Chair: Jaime Sanchez (University of Chile, Chile)</i>	Towards a Tool for Keystroke Level Modeling of Skilled Screen Reading <i>(Shari Trewin, Bonnie E. John, John Richards, Cal Swart, Jonathan Brezin and John Thomas)</i>
		Accessibility by Demonstration: Enabling End Users to Guide Developers to Web Accessibility Solutions <i>(Jeffrey Bigham, Jeremy Brudvik and Bernie Zang)</i>
		Testability and Validity of WCAG 2.0: The Expertise Effect <i>(Giorgio Brajnik, Yeliz Yesilada and Simon Harper)</i>

3:00 pm	Poster Session I & Break <i>Posters and Demonstrations Chair: Yeliz Yesilada (Middle East Technical University, Northern Cyprus Campus and University of Manchester, UK)</i> <i>ACM Student Research Competition Chair: Jeffrey P. Bigham (University of Rochester, USA)</i>	Posters and Demonstrations – Part I ACM Student Research Competition Posters
4:00 pm	Technical Paper Session 3: Accessibility Research in the Wild <i>Session Chair: Jinjung Feng (Towson University, USA)</i>	Field Evaluation of a Collaborative Memory Aid for Persons with Amnesia and their Family Members <i>(Mike Wu, Ronald Baecker and Brian Richards)</i>
		In-Situ Study of Blind Individuals Listening to Audio-Visual Contents <i>(Claude Chapdelaine)</i>
		Understanding the Challenges and Opportunities for Richer Descriptions of Stereotypical Behaviors of Children with ASD: A Concept Exploration and Validation <i>(Nazneen Nazneen, Fatima Boujarwah, Shone Sadler, Amha Mogus, Gregory Abowd and Rosa Arriaga)</i>
7:00 pm	Conference Reception	
Tuesday - October 26		
8:30 am	Registration	
9:00 am	Technical Paper Session 4: Non-Visual Access <i>Session Chair: Giorgio Brajnik (University of Udine, Italy)</i>	Designing Auditory Cues to Enhance Spoken Mathematics for Visually Impaired Users <i>(Emma Murphy, Enda Bates and Donal Fitzpatrick)</i>
		Evaluating a Tool for Improving Accessibility to Complex Visual Objects <i>(Leo Ferres, Livia Sumegi and Gitte Lindgaard)</i>
		A Tactile Windowing System for Blind Users <i>(Denise Prescher, Gerhard Weber and Martin Spindler)</i>
10:30 am	Break	
11:00 am	Technical Paper Session 5: Sign Language <i>Session Chair: Harriet Fell (Northeastern University, USA)</i>	Modeling and Synthesizing Spatially Inflected Verbs for American Sign Language Animations <i>(Matt Huenerfauth and Pengfei Lu)</i>
		An Evaluation of Video Intelligibility for Novice American Sign Language Learners on a Mobile Device <i>(Kimberly A. Weaver, Thad Starner and Harley Hamilton)</i>
		A Web-Based User Survey for Evaluating Power Saving Strategies for Deaf Users of MobileASL <i>(Jessica J. Tran, Tressa W. Johnson, Joy Kim, Rafael Rodriguez, Sheri Yin, Eve A. Riskin, Richard E. Ladner and Jacob O. Wobbrock)</i>

12:30 pm	Lunch	
1:30 pm	ACM Student Research Competition Finalists <i>Session Chair: Jeffrey P. Bigham (University of Rochester, USA)</i>	Presentations by the top student research competition entrants
2:30 pm	Poster Session II & Break <i>Posters and Demonstrations Chair: Yeliz Yesilada (Middle East Technical University, Northern Cyprus Campus and University of Manchester, UK)</i> <i>Doctoral Consortium Chair: Matt Huenerfauth (City University of New York, USA)</i>	Posters and Demonstrations – Part II Doctoral Consortium student posters
3:30 pm	Technical Paper Session 6: Accessible Education <i>Session Chair: Torsten Felzer (Darmstadt University of Technology, Germany)</i>	Multiple View Perspectives: Improving Inclusiveness and Video Compression in Mainstream Classroom Recordings <i>(Raja Kushalnagar, Anna Cavender and Jehan-Francois Paris)</i>
		Note-Taker 2.0: The Next Step Toward Enabling Students who are Legally Blind to Take Notes in Class <i>(David S Hayden, Liqing Zhou, Michael J Astrauskas and John A Black Jr.)</i>
		Using Accessible Math Textbooks with Students Who Have Learning Disabilities <i>(Preston Lewis, Steve Noble and Neil Soiffer)</i>
		Relating Computer Tasks to Existing Knowledge to Improve Accessibility for Older Adults <i>(Nic Hollinworth and Faustina Hwang)</i>
5:30 pm	SIGACCESS Business Meeting <i>Session Chair: Andrew Sears (UMBC)</i>	Everyone welcome
7:30 pm	Accessibility @ Disney	Jay Cardinali and his colleagues from Disney will demonstrate a PowerPoint presentation as well as examples of AT handheld technology to the conference attendees. (Presentation/demonstration will take place in the conference hotel)
Wednesday - October 27		
8:30 am	Registration	
9:00 am	Technical Paper Session 7: Communication <i>Session Chair: Faustina Hwang (University of Reading, UK)</i>	Click on Bake to Get Cookies: Guiding Word Finding with Semantic Associations <i>(Sonya Nikolova and Marilyn Tremaine)</i>
		Are Synthesized Video Descriptions Acceptable? <i>(Masatomo Kobayashi, Trisha O'Connell, Bryan Gould, Hironobu Takagi and Chieko Asakawa)</i>
		Broadening Accessibility Through Special Interests: A New Approach for Software Customization <i>(Robert Morris, Connor Kirschbaum and Rosalind Picard)</i>

10:30 am	Break	
11:00 am	Technical Paper Session 8: Mobility <i>Session Chair: Sri Kurniawan (University of California Santa Cruz, USA)</i>	VI Bowling: A Tactile Spatial Exergame for Individuals with Visual Impairments <i>(Tony Morelli, John Foley and Eelke Folmer)</i>
		Leveraging Proprioception to Make Mobile Phones More Accessible to Users with Visual Impairments <i>(Frank Chun Yat Li, David Dearman and Khai Truong)</i>
		Autonomous Navigation through the City for the Blind <i>(Jaime Sanchez and Natalia De La Torre)</i>
12:30 pm	Lunch	
1:30 pm	Technical Paper Session 9: Approaches to Therapy <i>Session Chair: Marilyn Tremaine (Rutgers University, USA)</i>	Introducing Multimodal Paper-Digital Interfaces for Speech-Language Therapy <i>(Anne Marie Piper, Nadir Weibel and James Hollan)</i>
		A Tool to Promote Prolonged Engagement in Art Therapy: Design and Development from Art Therapist Requirements <i>(Jesse Hoey, Kristis Zutis, Valerie Leuty and Alex Mihailidis)</i>
		Stroke Therapy through Motion-Based Games: A Case Study <i>(Gazihan Alankus, Rachel Proffitt, Caitlin Kelleher and Jack Engsberg)</i>
3:00 pm	Wrap-up and Awards Session <i>Chair: Armando Barreto (Florida International University, USA)</i>	Vicki Hanson, <i>ASSETS'10 Program Chair</i> Jeffrey P. Bigham, <i>ACM Student Research Competition Chair</i> Kathy McCoy, <i>ASSETS'11 General Chair</i>

POSTER SESSION I – Monday 3:00 PM - 4:00 PM – (Will also include the Student Research Competition posters)

The Design and Development of an Interactive Aural Rehabilitation Therapy Program
(Najwa AlGhamdi and Yousef AlOhal)

Usability and use of SLS:Caption
(Deborah Fels, Martin Gerdzhev, Janice Ho and Ellen Hibbard)

What Can the 'Ash Cloud' Tell Us About Older Adults' Technology Adoption?
(Lorna Gibson, Paula Forbes and Vicki Hanson)

Cerebral palsy and online social networks
(Makayla Lewis)

Walking in Another's Shoes: Aphasia Emulation Software
(Joshua Hailpern, Marina Danilevsky and Karrie Karahalios)

Naming Practice for People with Aphasia in a Mobile Web Application: Early User Experience
(Khalyle Hagood, Terrance Moore, Tiffany Pierre, Gail Ramsberger, Paula Messamer and Clayton Lewis)

Evaluating Text Descriptions of Mathematical Graphs
(Yarden Moskovitch and Bruce Walker)

Gesture Recognition for Fingerspelling Applications: An Approach Based on Sign Language Cheremes
(Renata Cristina Barros Madeo, Sarajane Marques Peres, Daniel Baptista Dias and Clodis Boscaroli)

Reading Difficulty in Adults with Intellectual Disabilities: Analysis with a Hierarchical Latent Trait Model
(Martin Jansche, Lijun Feng and Matt Huenerfauth)

Using the Phone with a Single Input Signal Only: Evaluation of 3dScan's Telephone Module
(Torsten Felzer, Stephan Rinderknecht and Tsvetoslava Vateva)

I Like to Log: A Questionnaire Study towards Accessible Lifelogging for Older Users
(Niamh Caprani, Cathal Gurrin and Noel E. O'Connor)

Customizable Keyboard
(Eric Missimer, Samuel Epstein, John Magee and Margrit Betke)

Adaptive Mappings for Mouse-Replacement Interfaces
(John Magee, Samuel Epstein, Eric Missimer and Margrit Betke)

Audio and haptic based virtual environments for orientation and mobility in people who are blind
(Jaime Sanchez and Angelo Tadres)

The Evaluation of Visually Impaired People's Ability of Defining the Object Location on Touch-screen
(Keijiro Usui, Masamitsu Takano, Yusuke Fukushima and Ikuko Yairi)

Developers and Accessibility - When Do They Meet?
(Michele Burton)

[DEMONSTRATION] Sasayaki: An Augmented Voice-based Web Browsing Experience
(Shaojian Zhu, Daisuke Sato, Hironobu Takagi and Chieko Asakawa)

[DEMONSTRATION] EPG: Speech Access to Program Guides for People with Disabilities
(Michael Johnston and Amanda Stent)

[DEMONSTRATION] Interactive SIGHT Demo: Textual Summaries of Simple Bar Charts
(Seniz Demir, David Oliver, Edward Schwartz, Stephanie Elzer, Sandra Carberry and Kathleen McCoy)

POSTER SESSION II – Tuesday 2:30 PM - 3:30 PM - (Will also include the Doctoral Consortium Posters)

JBrick: Accessible Lego Mindstorm Programming Tool for Users who are Visually Impaired
(*Stephanie Ludi, Mohammed Abadi, Yuji Fujiki, Michael Goldberg, Spencer Herzberg, Priya Sankaran and Allen Voter*)

Toward Tactile Authentication for Blind Users
(*Ravi Kuber and Shiva Sharma*)

VocSyl: Visualizing Syllable Production for Children with ASD and Speech Delays
(*Joshua Hailpern, Karrie Karahalios, Laura DeThorne and Jim Halle*)

Development of Tactile Map Production Device and Tactile Map with Multilingual Vocal Guidance Function
(*Kouki Doi, Wataru Toyoda and Hiroshi Fujimoto*)

Automatic, Intuitive Zooming for People Who are Blind or Visually Impaired
(*Ravi Rastogi and Dianne Pawluk*)

A Multimodal, Computer-Based Drawing System for Persons Who are Blind and Visually Impaired
(*Patrick Headley and Dianne Pawluk*)

A Low-Cost, Variable-Amplitude Haptic Distributed Display for Persons who are Blind and Visually Impaired
(*Patrick Headley and Dianne Pawluk*)

Comparison of Methods Presenting Contour Information to Individuals who are Blind or Visually Impaired
(*Steve D'Souza and Dianne Pawluk*)

Tailor-made Mouse for People with Physical Disabilities
(*Minsun Jang, Jiho Choi and Seongil Lee*)

Image Categorization for Improving Accessibility to Information Graphics
(*Jinglun Gao, Rafael Carrillo and Kenneth Barber*)

Designing Effective Sound-Based Aquarium Exhibit Interpretation for Visitors with Vision Impairments
(*Carrie Bruce and Bruce Walker*)

V-Braille: Haptic Braille Perception using a Touch-screen and Vibration on Mobile Phones
(*Chandrika Jayant, Christine Acuario, William Johnson, Janet Hollier and Richard Ladner*)

The Agenda: Structuring the lives of Autistic Teenagers
(*Alain P.C.I. Hong, Sjoerd van Heugten, Tom Kooken, Nikkie Vinke, Myrtille Vromans and Suleman Shahid*)

Performance-Based Functional Assessment: A Multi-Focus Approach
(*Kathleen Price and Andrew Sears*)

Blind Guidance Using Mobile Computer Vision: A Usability Study
(*Roberto Manduchi, Sri Kurniawan and Homayoun Bagherinia*)

iWalk: A Lightweight Navigation System for Low-Vision Users
(*Amanda Stent, Shiri Azenkot and Ben Stern*)

Anti-Blur Feedback for Visually Impaired Users of Smartphone Cameras
(*Pannag Sanketi and James Coughlan*)

[DEMONSTRATION] Detecting objects and obstacles for visually impaired individuals using visual saliency
(*Benoît Deville, Guido Bologna and Thierry Pun*)

[DEMONSTRATION] Color-Audio encoding Interface for Visual Substitution: See CoOr Matlab-based Demo
(*Juan Diego Gomez, Guido Bologna and Thierry Pun*)

[DEMONSTRATION] Assistive Web Browsing with Touch Interfaces
(*Faisal Ahmed, Muhammad Islam, Yevgen Borodin and I.V. Ramakrishnan*)