



## ACCESSIBILITY AND COMPUTING

A Regular Publication of the ACM  
Special Interest Group on  
Accessible Computing

June 2005

Number 82

### Contents:

1	From the Editor	1
2	New British Standard on Managing Inclusive Design	3
3	Introducing Ease of Access into IBM	6
4	New Accessibility Model for Microsoft Windows and Cross Platform Development	11
5	Leveraging Universal Design in a Financial Services Company	18
6	Accessibility from the front line – a UK industry perspective of web accessibility	25

### Doctoral consortium papers:

7	Investigating the Mutual Effects of Physical Training and Mu-Based Brain-Computer Interface Systems	30
8	Interactive Sonification of Geo-referenced Data	33

## SIGACCESS Newsletter

A regular publication of the ACM Special Interest Group on  
Accessible Computing

### SIGACCESS Officers & Information

#### *Chairperson*

Vicki Hanson  
IBM T.J. Watson Research Center  
19 Skyline Drive  
Hawthorne, NY 10532, USA.  
+1-914-784-6603 ( work )  
chair\_SIGACCESS@acm.org

#### *Vice-chairperson*

Jennifer Mankoff  
HCI Institute,  
School of Computer Science  
Carnegie Mellon University  
5000 Forbes Ave  
Pittsburgh, PA 15213-3891, USA  
+1 (412) 268-1295 ( work )  
vc\_SIGACCESS@acm.org

#### *Secretary/Treasurer*

Andrew Sears  
Information Systems Dept.  
UMBC  
1000 Hilltop Circle  
Baltimore, MD 21250, USA.  
+1-410-455-3883 ( work )  
treasurer\_SIGACCESS@acm.org

#### *Newsletter Editor*

Simeon Keates,  
IBM TJ Watson Research Center  
19 Skyline Drive  
Hawthorne, NY 10532, USA.  
editors\_SIGACCESS@acm.org

#### *Who we are*

SIGACCESS is a special interest group of ACM. The SIGACCESS Newsletter is published regularly in January, June, and September. We encourage a wide variety of contributions, such as: letters to the editor, technical papers, short reports, reviews of papers of products, abstracts, book reviews, conference reports and/or announcements, interesting web page URLs, local activity reports, etc. Actually, we solicit almost anything of interest to our readers.

Material may be reproduced from the Newsletter for non-commercial use with credit to the author and SIGACCESS. Deadlines are one month before publication dates. Submissions may be sent as hard copy ( paper ), but machine-readable files are preferred. Postscript or PDF files may be used if layout is important, but word-processor files, text files, or e-mail are also acceptable. Ask the editor if in doubt.

Finally, you may publish your work here before submitting it elsewhere. We are a very informal forum for sharing ideas with others who have common interests.

Anyone interested in editing a special issue on an appropriate topic should contact the editor.

# Accessibility and Computing



## The Newsletter of ACM SIGACCESS

NUMBER 82, June 2005

---

### **A note from the Editor**

Dear SIGACCESS member:

Welcome to the first on-line version of the SIGACCESS Newsletter. For readers who wish to maintain a hard-copy catalogue of Newsletters, a downloadable PDF version is available ready for printing.

If you prefer to browse the articles on-line, we also have an HTML version, with active hyperlinks to supporting material.

Back-copies of the Newsletter can still be obtained through the ACM Digital Library, although this will only include the PDF versions. The ACM currently has no mechanism for storing HTML versions. However, we will maintain an archive of back-copies that will be available via the SIGACCESS web-pages (<http://www.acm.org/sigaccess/>).

### **About this issue**

This issue has been inspired by the launch in February of this year of a new British Standard, BS7000 Part 6 – Guide to Managing Inclusive Design. The first article, by Alan Topalian, describes the new standard, its aims and objectives. This standard is important because it is possibly the first attempt of its kind to look at how a corporate entity should structure its business practices to support and nurture Inclusive Design.

Continuing on from this theme are four articles from authors based in industry. The first of these discusses a new initiative being put into practice internally by IBM, that of Ease of Access. This initiative recognises that accessibility needs to be implemented in active concert with usability to develop products that are genuinely usable and accessible by as many people as possible.

The second article is from Rob Haverty of Microsoft and is about User Interface (UI) Automation, which is the new accessibility framework for Microsoft Windows® and is destined to replace Microsoft® Active Accessibility® (MSAA). His article provides an introduction to the concepts underlying UI Automation and its cross-platform implementation.

Marguerite Bergel, Ann Chadwick-Dias and Tom Tullis of Fidelity Investments discuss their work on leveraging Universal Design approaches in the financial services sector. Their work has a particular focus on the e-commerce area and their article highlights the research and development activities that Fidelity is undertaking to maximise their ability to meet the needs of their customers. In their conclusion, Bergel et al. echo the Ease of Access concept from the IBM article, that usability and accessibility need to be addressed together.

Finally, in this section of the Newsletter, Jon Dodd of Bunnyfoot Universality writes about his personal experiences working in this area for a consultancy. He describes the rationale that prompted Bunnyfoot to move into the accessibility domain and the progress that he, as a practitioner, has seen over the past 5 years. Again, he echoes the argument that usability and accessibility both need to be addressed explicitly to meet the needs of the end-users.

The final two articles in this issue are from the Doctoral Consortium held at ASSETS 2004. In her article on mu-based Brain-Computer Interface systems, Adriane Davis of Georgia State University investigates whether training some to use such a system can improve physical performance. Although this work is inspired by improving athletic performance, the underlying principles are equally applicable to physical therapy and rehabilitation.

The last article in this issue is from Haixia Zhao and introduces his research at the University of Maryland, College Park, into the use of non-speech sound to assist blind or low vision users navigating through information spaces.

### **And finally...**

Just a reminder that registration for ASSETS 2005 is still open at:

<http://www.acm.org/sigaccess/assets05/>

*Simeon Keates*

Newsletter Editor