



## TRACE CENTER

### ***Our Mission:***

***To prevent the barriers and  
capitalize on the opportunities  
presented by current and emerging  
information and communication technologies,  
in order to create a world that is as  
accessible and usable as possible  
for as many people as possible.***

UNIVERSITY OF WISCONSIN-MADISON

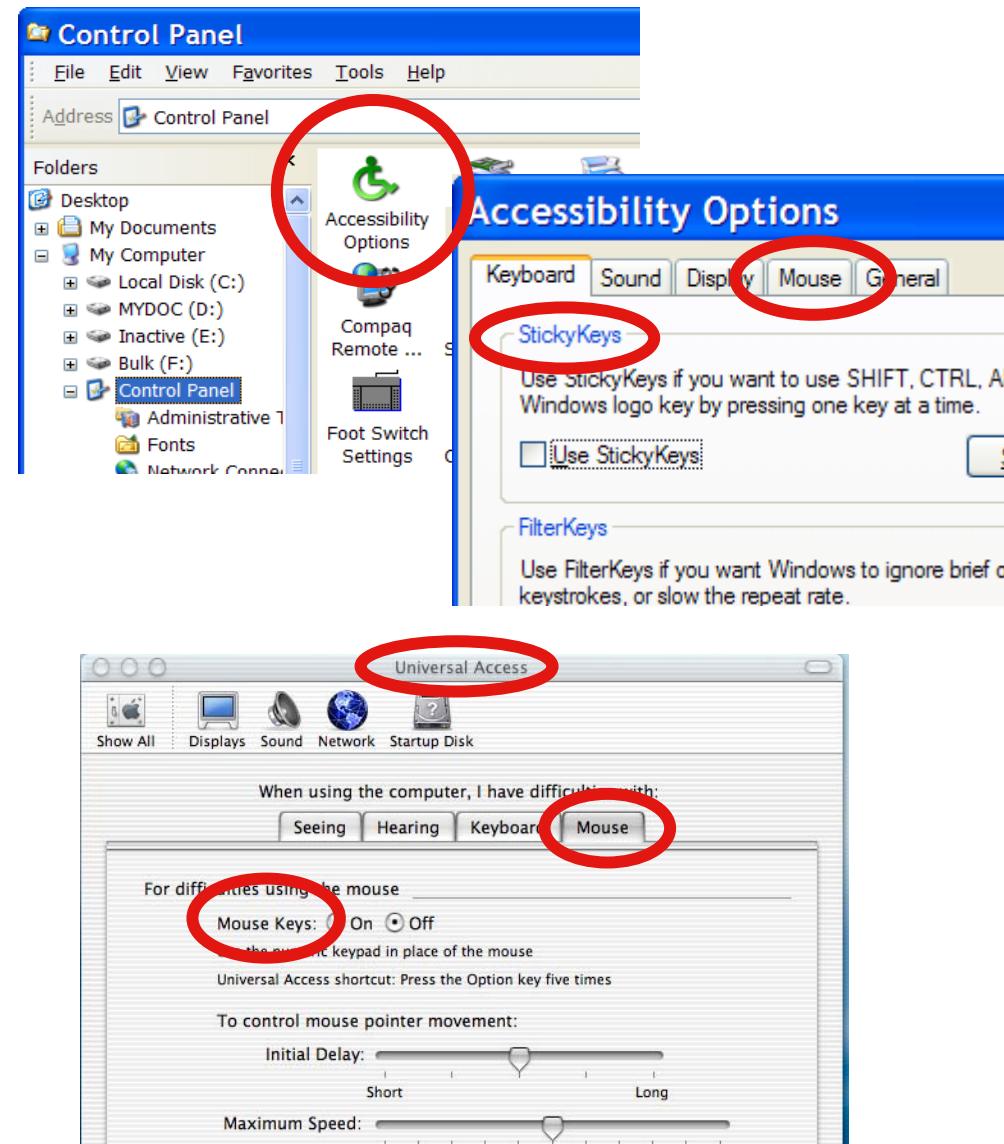
# Access Features in OSs

# Software Accessibility Features

Trace developed the access features found in standard computer operating systems (Windows, Mac OS).

These features have been included in software industry standards, including:

- ANSI
- ISO
- Free Standards Group



# Microsoft Vista Includes Access Features Developed by Trace Center



**MouseKeys**



**StickyKeys,**  
**FilterKeys**  
**(BounceKeys,**  
**RepeatKeys,** &  
**SlowKeys),**  
**ToggleKeys**



**Visual Notifications & Captions**  
(formerly called **SoundSentry**  
and **ShowSounds**)



Find these features  
in the “Ease of Use  
Center” on Vista’s  
Control Panel

# Web Access

# Making Web Sites Accessible



*“The power of the Web is in its universality.  
Access by everyone regardless of disability  
is an essential aspect.”*  
*(Tim Berners-Lee)*

Trace staff serve as:

- **Co-chair of the W3C’s Web Content Accessibility Guidelines Working Group**
- **Co-editors of the Web Content Accessibility Guidelines (WCAG 1.0 and 2.0)**

# **Access to Public I.T.M.s**

# EZ Access Interface Techniques



Automated Teller Machines



Viking Door Entry System



Electronic Voting System

## Most Recent EZ Access Implementations



World War II Memorial,  
Korean War Memorial,  
Washington, D.C.



U.S. Postal Service  
Automated Postal Center



Phoenix Sky Harbor Airport  
Paging & Information System

# Cross Disability Access Keypads



Keypads are manufactured  
by Storm Interface



Now included in the  
Newark electronics  
catalog.





# **Digital Talking Books**

## Coming Soon: NLS Digital Talking Book Player



Trace is part of a team developing a digital talking book player for the National Library Service for the Blind and Physically Handicapped (NLS).

The team is led by Battelle and HumanWare, and also includes the National Federation of the Blind.



# **Universal Remote Consoles**

## **URCs**

# Universal Remote Console: Mainstream Standards with Accessibility Benefits



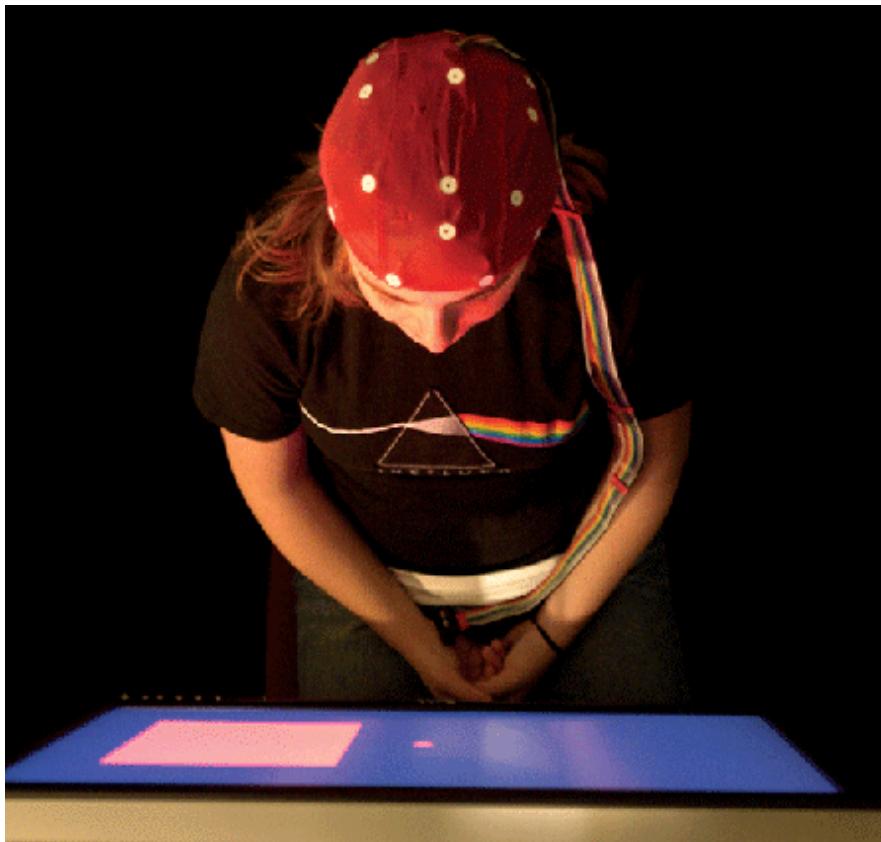
Universal Remote Console implementation by consumer electronics companies will one day make it possible for all people, including individuals with physical or other limitations, to interact with electronic devices more easily and independently.





# **Direct Brain Interface**

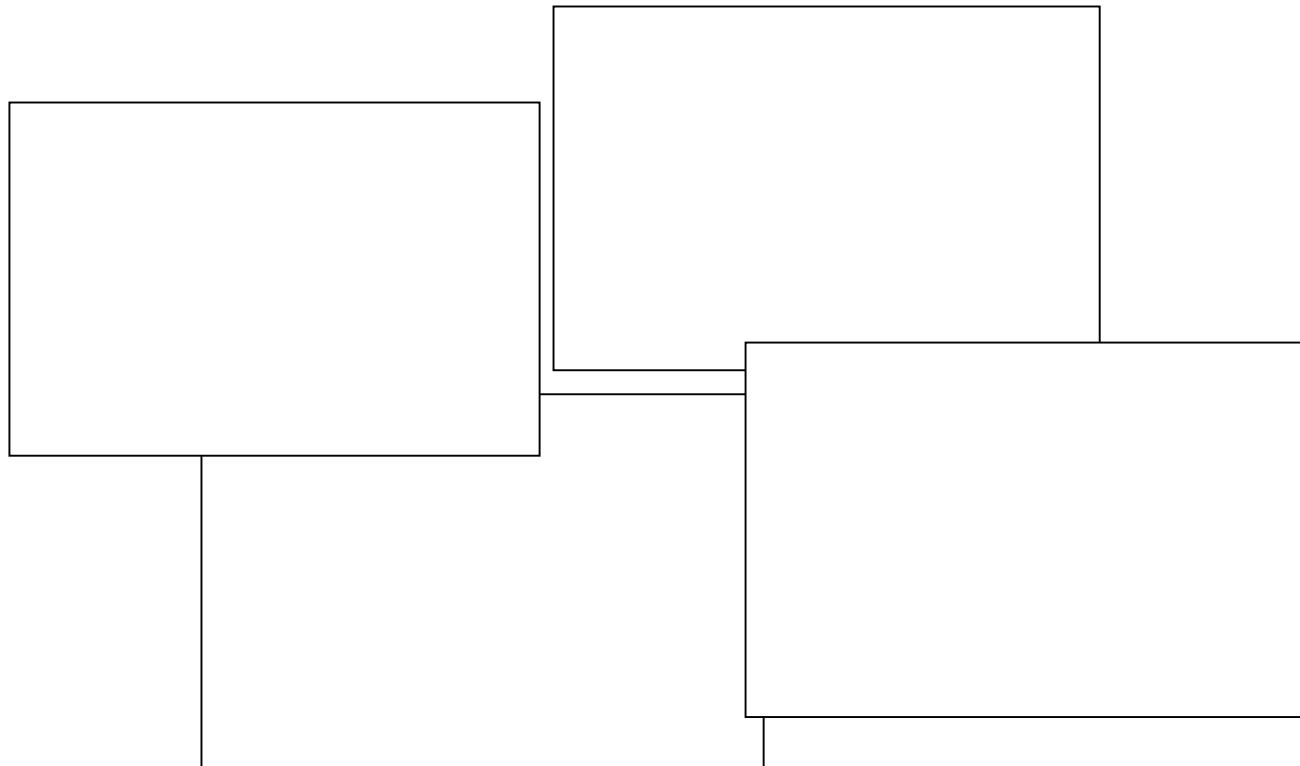
## Brain-Computer Interface Study



This type of interface shows great promise for people with severe physical disabilities, and may one day allow people who cannot speak or move to more easily and efficiently use computers and other devices.

# Training

# **Engineering Students and Industry Design Teams Experience the Difference Design Can Make**



# Working With Those Who Design the World

- **Engineering students**
  - at University of Wisconsin-Madison
- **Design teams**
  - working in IT and Telecom companies
- **Standards working groups**
- **Regulatory advisory committees**
- **Consumers and advocates**
  - for accessibility

## Trace Usability Screening Kit

T  
U  
S  
K

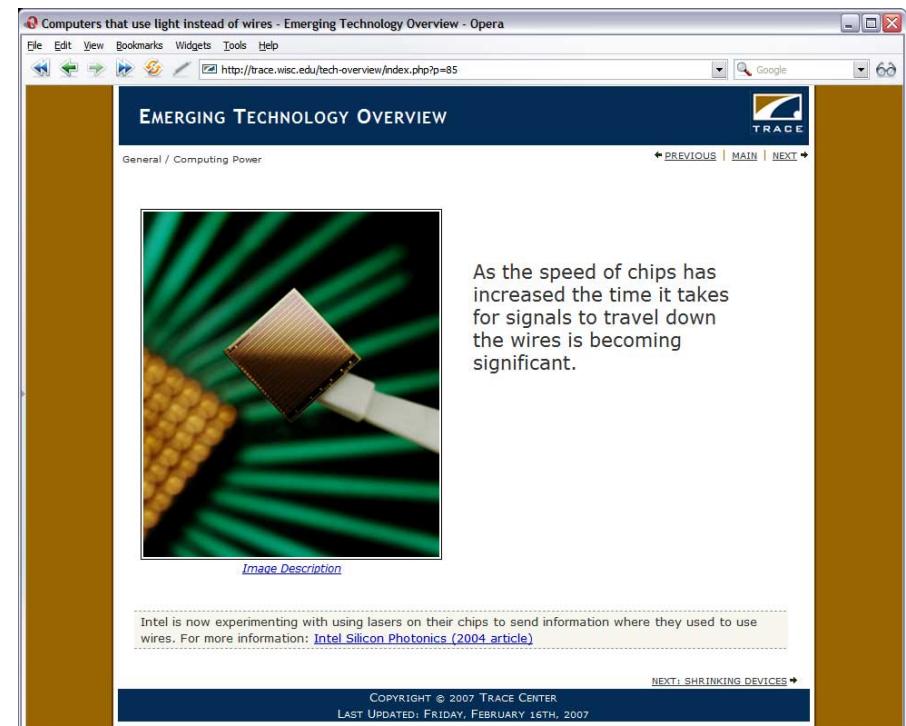


Used by mainstream product design teams to detect many of the worst access problems at an early stage in the process.

*Order Form at <http://trace.wisc.edu/TUSK/>*

# Emerging Technology Overview

New resource, available on the Trace Center website, provides a glimpse into the future of information and communications technology and how it could impact disability access.





# **Virtual Assistive Technologies**

# Virtual Assistive Technology



[Signing avatar from Vcom3D ®, 2003.]

An important goal of our work is to make it possible for all people, including individuals with different disabilities, to interact and work together effectively. By working to make mainstream technology products more accessible and usable, and by harnessing new technologies to provide “virtual” assistance when needed, this goal can be achieved.



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