

# Welcome to the 23<sup>rd</sup> Annual HCIL Symposium

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**Benjamin B. Bederson**

Director - HCIL

Associate Professor - Computer Science



# Human-Computer Interaction Laboratory (HCIL)

## ❑ Interdisciplinary Group

- Computer Science
- Information Studies
- Psychology
  
- Biology
- Business
- English
- Education
- Engineering
- Government & Politics
- Maryland Institute of Technology in the Humanities

## ❑ Part of UMIACS, the Institute for Advanced Computer Studies



Design, implement, and evaluate novel interaction technologies that are universally usable, useful, efficient, and appealing



# Resurgence of Awareness of UI

## Web 2.0

- Usability
- Democracy
- Users rule

Bigger displays

More visual

More devices



# HCIL Members

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## HCIL Faculty

- Ben Bederson, Allison Druin, François Guimbretière, Kent Norman, Doug Oard, Catherine Plaisant, Jenny Preece, Ben Shneiderman, Vibha Sazawal, Ann Weeks

Eric Baehrecke, Evan Golub, Paul Herrnson, Anita Komlodi, Wolfgang Jank, Matt Kirschenbaum, Jonathan Lazar, Gary Rubloff, Galit Shmueli, Martha Nell Smith, Dagobert Soergel

## Staff

- Aaron Clamage, Jesse Grosjean, Daqing He, Hilary Hutchinson, Hyunmo Kang, Sabrina Liao, Cyndy Parr, Mary Ramos, Anne Rose, Kiki Schneider, Ryen White



# HCIL Students

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## **College of Information Studies**

- Laura Hadley, Jinmook Kim, Xiaoli Huang, Baolong Liu, Sheri Massey, Tracey Masterson, Katy Newton, Deborah Wallace, Jianqiang Wang

## **Computer Science**

- Georg Apitz, Aleks Aris, Nicholas Chen, Gene Chipman, Jerry Fails, Hilary Hutchinson, Amy Karlson, Bill Kules, Bongshin Lee, Chunyuan Liao, Adam Perer, James Rose, Hyun Young Song, Haixia Zhao

## **Education**

- Mona Leigh Guha

## **Psychology**

- Susan Campbell, Anna Walkyria Rivadeneira, Ben Smith





# New Website

2<sup>nd</sup> Google hit for "HCI"  
after hcibib.org



The screenshot shows the HCIL website homepage. At the top left is the HCIL logo (a stylized head with a yellow dot) and the text "Human-Computer Interaction Lab University of Maryland". To the right is a search bar. Below the header is a navigation menu with links: "News + Events", "About HCIL", "People", "Research", "Publications", and "Academics". The main content area features a large group photo of HCIL members waving, with the text "20+ years of research, publications, and resources" overlaid. To the left of the photo are three blue boxes: "quick find :: Current Research Projects", "20+ years of Tech Report Online", and "15+ years of Video Reports". Below the photo is a "NEWS" section with the headline "HCIL's 23rd Annual Symposium June 1-2, 2006!". To the right of the news section are two columns of links: "Research" (Research Overview, Faculty Listed by Research Project Areas, Visualization, Education, Digital Libraries, Design Process, Physical Devices, Research Histories, Project Highlights, Project Screenshots) and "Publications" (Online Tech Reports, Video Reports, Books, Products, Presentations). Further right is a "Monthly Research Profiles" section with a photo of a child and text about the "INTERNATIONAL CHILDREN'S DIGITAL LIBRARY HELPS YOUNG READERS WORLDWIDE". At the bottom are two more sections: "Hcil's 23 Symposium" (June 1-2, 2006, June 1: Join us and about 300 attendees for the HCIL Annual Symposium) and "HCIL Seminar Series" (Come hear our distinguished speakers throughout the semester. Next speaker :: Hureth).

HCIL Human-Computer Interaction Lab University of Maryland

search

News + Events About HCIL People Research Publications Academics

quick find ::  
Current Research Projects

20+ years of  
Tech Report Online

15+ years of  
Video Reports

NEWS

20+ years of research, publications, and resources

HCIL's 23rd Annual Symposium  
June 1-2, 2006!

[Information Visualization Evaluation](#)  
HCIL helps organize the VAST contest and the BELIV'06 workshop at AVI 2006

[Supports Exploratory Search](#)  
HCIL's Ryan White and Bill Kules are featured in the April edition of [CACM](#) for their work on Exploratory Search.

[Grants for Free Small Service Projects Awarded](#)  
[HCIL Seminar Series](#)  
IBM Faculty Award  
HCIL Director Ben Bederson has won the prestigious IBM Faculty

Research  
Research Overview  
Faculty Listed by Research Project Areas  
• Visualization  
• Education  
• Digital Libraries  
• Design Process  
• Physical Devices  
Research Histories  
Project Highlights  
Project Screenshots

Publications  
Online Tech Reports  
Video Reports  
Books  
Products  
Presentations

Monthly Research Profiles

INTERNATIONAL CHILDREN'S DIGITAL LIBRARY HELPS YOUNG READERS WORLDWIDE  
Libraries have come a long way since Andrew Carnegie's vision of developing citizenship through increased literacy. Generations have benefited from abundant books in free libraries, purchased with his donated wealth. Times change. Imagine a virtual library of international children's

Hcil's 23 Symposium  
June 1-2, 2006  
June 1:  
Join us and about 300 attendees for the HCIL Annual Symposium

HCIL Seminar Series  
Come hear our distinguished speakers throughout the semester.  
Next speaker :: Hureth



- HCIL Expanding into Hornbake Library
- Increased connections to CLIS
- Look for new venue next year...



# International Children's Digital Library Reaches 1,000,000 users



- ☐ With ~1,000 books
- ☐ In 35 languages
- ☐ Working with the World Bank
- ☐ Going to Mongolia
- ☐ Started a non-profit Foundation



[www.childrenslibrary.org](http://www.childrenslibrary.org)





# New Service Work

- ❑ Life is short, and Work is fun
- ❑ So we we decided to bring them together
- ❑ And we put out a call for our time



Paint Branch river cleanup

14 HCILers, 27 bags of trash, 12 bags of recyclables, 3 tires and a bit of rain ...



# Service Project: Backyard Jungle (w/ PBS)

Helping PBSKids.org &  
Forum One Comm.

=> Redesigning  
Backyard Jungle



Led by HCIL Prof. Allison Druin



# Service Project: Institute for End User Computing

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Running survey and forum to identify sources of computer rage, end user expectation failures, orphaned computer

=> Inform future system design



Led by HCIL Prof. Kent Norman



# HCIL Successes

## □ Ph.D. Graduates:

- Hilary Hutchinson
- Jinmook Kim
- Bill Kules
- Bongshin Lee
- Jianqiang Wang
- Haixia Zhao

## □ Job Placement

- University of Buffalo
- University of Iowa
- University of South Carolina
- Microsoft Research
- Google

## □ Major honors:

- IBM Faculty Award for Piccolo (Ben Bederson)
- American Association for University Women (College Park Chapter) for Ph.D. (Haixia Zhao)
- Best student paper at JCDL 2005 (Jack Kustanowitz)





# HCIL Publications

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- ❑ Conferences:
  - HCIL Symposium 2006 w/ workshops & tutorials
  - Workshop on HCI and U.S. Public Policy – CHI 2006
  - Workshop on InfoViz evaluation (BELIV) – AVI 2006
  - Workshop on Creativity Support Tools – 2005
  - Visual Analytics Science & Technology Contest 2006
  - Upcoming major conference on Creativity & Cognition - 2007
- ❑ CACM Special Issues on:
  - Personal Information Management (Jan 2006)
  - Exploratory Search (April 2006)
- ❑ Many conference and journal publications...
- ❑ 22 Tech Reports published



# HCIL Software

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## □ Recently available software

- Hierarchical Clustering Explorer  
[www.cs.umd.edu/hcil/hce](http://www.cs.umd.edu/hcil/hce)
- International Children's Digital Library  
[www.childrenslibrary.org](http://www.childrenslibrary.org)
- iSonic – Data Sonification for Blind Users  
[www.cs.umd.edu/hcil/audiomap](http://www.cs.umd.edu/hcil/audiomap)
- SpaceTree – Tree browser  
[www.cs.umd.edu/hcil/spacetree](http://www.cs.umd.edu/hcil/spacetree)
- TaxonTree – Application of SpaceTree to animal taxonomy  
[www.cs.umd.edu/hcil/biodiversity](http://www.cs.umd.edu/hcil/biodiversity)
- TimeSearcher – Time-series data visualization  
[www.cs.umd.edu/hcil/timesearcher](http://www.cs.umd.edu/hcil/timesearcher)
- TreePlus – Network Visualization  
<http://www.cs.umd.edu/hcil/treeplus>
- Piccolo (Java & C#) – Structured graphics toolkit  
[www.cs.umd.edu/hcil/piccolo](http://www.cs.umd.edu/hcil/piccolo)



# Research supporters

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## □ Major Supporters

- ARDA / Booz Allen Hamilton
- Institute for Museum and Library Services (IMLS)
- Microsoft Research
- National Science Foundation (NSF)

## □ Additional Supporters

- AOL
- Mellon Foundation
- National Institute of Standards and Technology (NIST)
- U.S. National Park Foundation



# Symposium 2006 Supporters

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THE HIVE GROUP  
BUSINESS AT A GLANCE



## □ UMD campus units:

- Department of Computer Science (CS)
- Institute for Advanced Computer Studies (UMIACS)
- College of Computer, Mathematical and Physical Sciences (CMPS)
- Institute for Systems Research (ISR)
- College of Information Studies (CLIS)
- Dingman Center for Entrepreneurship





# Symposium Program

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9am: Presentations

12:30pm: Lunch

1:45pm: Final Presentations

3:30pm: Posters and Demos (with cake!)

Enjoy the presentation slides, paper abstracts, DVD, etc. in your bag



Please don't forget  
the survey (w/ prize!)



# Today's Topics

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## Morning

### **Keynote: "Creativity Support Tools"**

#### **Visual Interfaces**

- Web Search
- The "erotic" in Emily Dickinson
- Network Visualization
- Social Networks
- Publication Analyses

#### **Public Access**

- International Children's Digital Library
- ICDL Communities
- Children's Field Trips
- Voting Machines

## Afternoon

### **Interaction & Devices**

- Mobile devices & thumbs
- Eye tracking for search
- 3D Annotation
- Active Pens
- Document Navigation
- Mobile Mapping

