

JOSHUA HAILPERN

Doctor of Philosophy Candidate in Computer Science

P.O. Box 2875, Champaign IL 61825-2875 • 914-282-0316 • joshua@hailpern.com • <http://www.hailpern.com/joshua/> • Citizenship: USA

EDUCATION

- 2006 - Present *University of Illinois at Urbana Champaign, Urbana, IL*
Doctor of Philosophy in Computer Science
Focusing on Human-Computer Interaction
Thesis Topic: *Encouraging Speech and Vocalization in Children with Autistic Spectrum Disorder*
Advisor: Karrie G. Karahalios
- 2006 *Carnegie Mellon University, Pittsburgh, PA*
Bachelor of Science in Computer Science with Honors
Minor in Music Technology
GPA: 3.23/4

HONORS & PROFESSIONAL ACTIVITY

- Fall 2007 *Presented at ASSETS Doctoral Consortium*
Encouraging Speech and Vocalization in Children with Autistic Spectrum Disorder
ACM SIG ACCESS's ASSETS Conference 2007
Tempe, AZ.
- Spring 2007 *Student Volunteer*
ACM SIG CHI Conference 2007
San Jose, CA.
- Spring 2007 *3rd place in Siebel Computing Habitat Competition*
TEAM STORM: TEAM Support Tool Oriented to Realization of Multiple ideas
Urbana-Champaign, IL.
- Spring 2007 *Honorable Mention for NSF's Graduate Research Fellowship*
- Fall 2006 *1st place in ACM Student Research Competition*
WISE: a Wizard Interface Supporting Enhanced usability
ACM SIG ACCESS's ASSETS Conference, 2006
Portland, OR.
- Fall 2006 -
Spring 2007 *Cultural Computing Fellowship*
Department of Computer Science at the University of Illinois at Urbana Champaign
Urbana-Champaign, IL.
- 2006 *Senior Leadership Award*
Carnegie Mellon University
Pittsburgh, PA.
- 2006 *Member ACM*
- 2002 *4th place in Computer Science*
Ceebler: An HTTP Proxy for Secure, Fine-Grained Access Control of Cookies
Intel Science and Engineering Fair (ISEF)
Louisville, KY.

- 2002 *1st place in Computer Science from US. Army*
Ceebler: An HTTP Proxy for Secure, Fine-Grained Access Control of Cookies
Intel Science and Engineering Fair (ISEF)
Louisville, KY.
- 2002 *2nd place Overall*
Ceebler: An HTTP Proxy for Secure, Fine-Grained Access Control of Cookies
Westchester Science and Engineering Fair (WESEF)
Westchester, NY.
- 2002 *1st place in Computer Science*
Ceebler: An HTTP Proxy for Secure, Fine-Grained Access Control of Cookies
Westchester Science and Engineering Fair (WESEF)
Westchester, NY.

PUBLICATIONS

- 2008 *VCode and VData: Illustrating a new Framework for Supporting the Video Annotation Workflow*
Joey Hagedorn, Joshua Hailpern, and Karrie G. Karahalios
Poster Paper in at ACM Conference on Advanced Visual Interfaces, May 2008
Napoli, Italy
- Visualizations: Speech, Language and Autistic Spectrum Disorder*
Joshua Hailpern, Karrie Karahalios, Jim Halle, Laura DeThorne and Mary-Kelsey Coletto
Extended Abstracts of ACM's SIG CHI Conference, April 2008
Florance, Italy
- Encouraging Speech and Vocalization in Children with Autistic Spectrum Disorder*
Joshua Hailpern, Karrie Karahalios, Laura DeThorne and James Halle
Workshop on Technology in Mental Health at ACM's SIG CHI Conference, April 2008
Florance, Italy
- 2007 *Encouraging Speech and Vocalization in Children with Autistic Spectrum Disorder*
Joshua Hailpern
ACM SIG ACCESS's Doctoral Consortium/ACM SIG ACCESS's Winter Newsletter, October 2007
Tempe, AZ.
- TEAM STORM: Demonstrating an Interaction Model for Working with Multiple Ideas During Creative Group Work*
Joshua Hailpern, Erik Hinterbichler, Caryn Leppert, Damon J. Cook and Brian P. Bailey
Proceedings of the ACM Conference on Creativity & Cognition, June 2007
Washington, D.C.
- 2006 *WISE: a Wizard Interface Supporting Enhanced Usability*
Joshua Hailpern
Proceedings of ACM's SIG ASSETS Conference, October 2006
Portland, OR.
- A SYSTEM AND METHOD OF ENHANCED VIRTUAL REALITY*
Joshua Hailpern and Peter Malkin
Filed Disclosure United States Patent by IBM, July 2006
- WISE: a Wizard Interface Supporting Enhanced Usability*
Joshua Hailpern
IBM Research Report RC24015, July 2006
- 2001 *An Analysis of the Prevalence of Cookies on the World Wide Web*
Joshua Hailpern and Charles C. Palmer
IBM Research Report RC2264, 2001

RELATED EXPERIENCE

- Summer - Fall 2007 *Independent Study on "Speech and Vocalization in Children with Autistic Spectrum Disorder" Project*
Prof. Karrie G. Karahalios, University of Illinois at Urbana-Champaign; Champaign, IL.
Designed and built visual and auditory feedback tools to encourage speech and vocalization in low functioning non-verbal children with Autistic Spectrum Disorder. Designed, organized and conducted studies to test the preferences and effect of the tool on target population.
2 Publications
- Fall 2006 *Independent Study on "TEAM STORM" Project*
Prof. Brian Bailey, University of Illinois at Urbana-Champaign; Champaign, IL.
Conducted observational studies, designed and built a prototype, and performed user tests on TEAM STORM (TEAM Support Tool Oriented to Realization of Multiple-ideas), a system to support creative idea generation for early stage design teams.
1 Publication
- Summer 2006 *Summer Internship at IBM Research*
Dr. Vicki Hanson, IBM Thomas J. Watson Research Center; Hawthorn, NY.
Usability design, implementation and testing for older adults browsing the web using IBM's Accessibility works. Conducted user testing of WISE system with older adults.
2 Publications
- 2005-2006 *Senior Thesis on "Distributed Detection of New Virus Threats in Large Scale Networks"*
Prof. Benoit Morel, Carnegie Mellon University; Pittsburgh PA.
Investigated the feasibility and practicality of a distributed virus detection network to recognize new computer viruses faster than current methods basing our model on work by John von Neumann.
- Spring 2006 *Teaching Assistant for Computer Networks: 15-441*
Profs. Peter Steenkiste and David Eckhardt, Carnegie Mellon University; Pittsburgh, PA.
Teaching Assistant for Computer Networks.
- Fall 2005 *HCI Research Project on "WISE: Wizard Interface Supporting Enhanced usability"*
Prof. Jason Hong, Carnegie Mellon University; Pittsburgh, PA.
As part of HCI 431, researched and designed a new graphical interface for older adults, based on gerontological literature, which addresses many age related challenges.
1 Publication
- Summer 2005 *Summer Internship in Computer Music*
Prof. Roger Dannenberg, Carnegie Mellon University; Pittsburgh, PA.
Designed and implemented a programming interface to a music visualization package. Converted program to C and debugged Matlab sound analysis code.
- Summer 2005 *Teaching Assistant for Fundamental Data Structures and Algorithms: 15-211*
Prof. Victor Adamchik, Carnegie Mellon University; Pittsburgh, PA.
Teaching Assistant for Fundamental Data Structures and Algorithms
- Summer 2004 *Summer Internship at IBM Software Group's Pittsburgh Lab*
Jeff Kaminski, IBM Software Group; Pittsburgh, PA.
Designed and implemented a reservation database in Lotus Notes, a script to get status and perform updates on networked systems as well as performing machine maintenance.
- Spring 2004 *Intern/Independent Study with CMU's Entertainment Technology Center*
Prof. Tina Blain, Carnegie Mellon University; Pittsburgh, PA.
- Fall 2003 *Consultant for Intermediate/Advanced Programming*
Prof. Rich Pattis, Carnegie Mellon University; Pittsburgh PA.
- Summer 2003 *Summer Internship at IBM Research*
Dr. Herb Lee, IBM Thomas J. Watson Research Center; Yorktown Heights, NY.
Designed/developed authentication/logging programs for IBM Tivoli's Internet measurement software

1999 - 2002 *Supervised Computer Research Project*
Dr. Charles Palmer, IBM T. J. Watson Research Center; Hawthorn, NY.
Conceived and developed prototype software to protect, encrypt and manage Internet cookies.
1 Publications

COMPUTER SKILLS

Applications

MS Office, Lotus SmartSuite, Adobe Creative Suite, Macromedia Dreamweaver, Macromedia Director, Processing, Sonic Foundry Family, ProTools, Reason, Finale, Epsilon/Emacs, Eclipse, Project Builder, Xcode, iLife, iWork, Final Cut Studio, Web-Sphere Development Studio

Languages

Java, Java-Script, SML, C, C++, Perl, HTML, Assembly, Matlab, Cocoa, Applescript, Carbon, OpenGL

Operating Systems

Windows (95, 98, ME, 2000, XP), OSX, OS9, Linux, Unix, Solaris

SELECTED COURSE TOPICS

Graduate: University of Illinois at Urbana Champaign

Computer Supported Cooperative Work, IT Design, Computer Graphics, Human-Computer Interaction, Graphic Design

Undergraduate: Carnegie Mellon University

Computer Science & Technology - Programming Languages, Data Structures, Algorithms, Systems, Networks, Virtual Reality, User Interface Architecture, Computer Theory, Information Warfare, Robotics, Electronic & Computer Music - *Graphic Design* - Visual Interface Design, Communication Design - *Music* - Music Theory, Recording Techniques, Physics of Music

OTHER SKILLS

Graphic Design

Print, Web, Logo, Poster and Brochure

Music

Guitar, Piano, Composition, Recording, Editing and Mastering

Video

Editing and Effects

OTHER EXPERIENCE

2007 - Present *Member Governing Board*
The Hillel Foundation, Center for Jewish Life; Champaign, IL.

2003 - Present *Web, Logo and PR Design*
The Hillel Foundation, Center for Jewish Life; Champaign, IL.
The Hillel Foundation, Jewish University Center of Pittsburgh; Pittsburgh, PA.