

# Shengdong Zhao

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## PROFILE

Strong research interests in Human Computer Interaction, Digital Documents and Services. Expertise in gesture and pen-based interaction, gesture-based menus, auditory widgets and interfaces for mobile environment, information visualization, digital documents and digital library.

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## EDUCATION

*University of Toronto, Toronto, ON, Canada*

Ph.D. candidate in Computer Science (Human Computer Interaction)

03 - Present

Proposed Dissertation Topic: Elastic Representation Space in Information Visualization

*University of California at Berkeley, Berkeley, CA, U.S.A.*

Master of Information Management & Systems

01

Thesis Project: DinfoBuilder (Dynamic Information Builder), an XML based next generation information management software.

*Linfield College, McMinnville, OR, U.S.A.*

Bachelor of Science

98

Areas of Concentration: Computer Science, Biology

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## PUBLICATIONS

*Refereed (Full) Conference Paper*

4. Shengdong Zhao, Maneesh Agrawala, Ken Hinckley (in press - 2006). Zone and polygon menus: using relative position to increase the breadth of multi-stroke marking menus. To appear in *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI) 2006*.

3. Shengdong Zhao, Michael J. McGuffin, Mark H. Chignell (2005). Elastic hierarchies: combining treemaps and node-link diagrams. *Proceedings of IEEE Symposium on Information Visualization (InfoVis) 2005*. p. 57-64.

2. Shengdong Zhao, Ravin Balakrishnan. (2004). Simple vs. compound mark hierarchical marking menus. *Proceedings of the ACM Symposium on User Interface Software and Technology (UIST) 2004*. p. 33-42. [Received 5,5,5,5 from all reviewers - the highest review score in UIST 2004.]

1. monica c. schraefel., Yuxiang Zhu, David Modjeska, Daniel Wigdor, Shengdong Zhao. Hunter gatherer: interaction support for the creation and management of within-web-page collections *Proceedings of the eleventh international conference on World Wide Web (www) 2002*, Honolulu, Hawaii, USA

*Short Papers, Posters & Workshop Papers*

3. monica schraefel, Maria Karam, Shengdong Zhao. Listen to the Music: Audio Preview Cues for Exploration of Online Music. *Interact 2003*, Switzerland.

2. monica schraefel, Maria Karam, Shengdong Zhao. Audio Preview Cues: Interaction Aides for Exploration of Online Music and Beyond, *HCI International 2003*

1. monica schraefel, Maria Karam, Shengdong Zhao. mSpace: interaction design for user-determined, adaptable domain exploration in hypermedia, *AH2003: Workshop on Adaptive Hypermedia and Adaptive Web-Based Systems*.

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## RELATED WORKING EXPERIENCE

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### *Microsoft Research, Redmond, WA, U.S.A.*

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Research Intern

05

Conducting research and development under Maneesh Agrawala and Ken Hinckley on gesture-based menu techniques. Research result summarized in "Zone and Polygon Menus: using relative position to increase the breadth of multi-stroke marking menus", and to appear in the proceedings of *ACM Conference on Human Factors in Computing Systems (CHI) 2006*.

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### *University of Toronto, Toronto, ON, Canada*

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Research Associate

01-02

Designing and developing Hunter Gatherer 2 and the mSpace project. Using Java, JavaScript, XML, 3D visualization models.

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### *University of California at Berkeley, Berkeley, CA, U.S.A.*

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Research Assistant

99-01

Developing behaviors for the Multivalent Document Model of the [California Digital Library Project](#). Writing PDF Media Adaptor, and Multipage Behavior for MVD browser. Developing server side support for Composite Document Model. Using Java, XML, XSL, CSS, DOM, SAX, etc.

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### *Space Machine Inc., Sunnyville, CA, U.S.A.*

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Intern

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Managing and training the data operation team to collect and provide e-commerce data for CommerceMap and its related services. Developing features for local Internet e-commerce services. Using Java, Oracle 8i Database, BEA WebLogic Application Server.

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### *SeeUthere.com (now OnVantage Inc.), Mountain View, CA, U.S.A.*

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Programmer

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Developing the business logic of the seeUthere.com using ASP/Com and Java technology. Using ASP/Com/Visual Basic, SQL Server, Store Procedure, Visual Source Safe, JavaScript, Java, and CVS.

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### *Lawrence Berkeley National Laboratory, Berkeley, CA, U.S.A.*

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Computer System Engineer

98 – 99

Developing the "[DOE 2000 Electronic Notebook](#)" sponsored by the Department of Energy. Building a tool that enable collaboration and on-line facilitation to revolutionize DOE's ability to solve large, complex problems. Using Java Swing, JavaBean, RMI, JDBC, Multicast, Socket, etc.

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## TEACHING EXPERIENCE

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### *University of Toronto, Toronto, ON, Canada*

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Lecturer – "CSC104 The Why and How of Computing."

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Developed syllabus and overall course structure, and lectured for the first 3 weeks.

Teaching Assistant – "Various Courses"

02,03,04,05

CSC318: The Design of Interactive Media; CSC428: Human Computer Interaction; CSC343: Introduction to Databases.

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## SKILLS

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Programming: Java, C, C++, ASP/Visual Basic, Tcl, Lisp, Pascal, Logo, 3D graphics, etc.

STATS: SPSS, SAS, etc.

OS: Win 95/98/NT/2k, Unix/Linux (FreeBSD, Linux, Solaris), Mac OS X, PalmOS, Phone, etc.

Internet: HTML, XML, XSL, CSS, CGI, Java Script, TCP/IP, Client/Server, P2P, etc.

Database: Oracle, Microsoft Sql Server, PostgreSQL, MySQL, Access, etc.

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#### SERVICE TO RESEARCH COMMUNITY

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Paper reviewing:

- ACM Conference on Human Factors in Computing Systems (CHI): 2005, 2006
  - Graphic Interface (GI): 2005
  - Human-Computer Interaction (Journal)
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#### LANGUAGES

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- Chinese (Mandarin) – native language
  - English – speak fluently and read/write with high proficiency
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#### References:

Professor Mark Chignell  
Department of Mechanical & Industrial Engineering  
Department of Computer Science  
University of Toronto  
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