

XIAOLONG (LUKE) ZHANG
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CURRENT POSITION

- Assistant Professor, School of Information Sciences and Technology
Pennsylvania State University, University Park

EXPERIENCE

- Assistant Professor, 08/2003 – 06/2005
School of Information Resources & Library Science, University of Arizona

EDUCATION

- University of Michigan, Ann Arbor, Michigan
Ph.D., Information Science: Specialization in Human-Computer Interaction (HCI), 2003
- Tsinghua University, Beijing, China
M.E., 1994
- Tsinghua University, Beijing, China
B.E., 1992

GENERAL RESEARCH INTERESTS

- Human-computer interaction, computer-supported cooperative work (CSCW), 3D virtual environments, information visualization, information retrieval

PUBLICATIONS

Refereed Journal and Conference Papers

- Zhang, X. (2005). Space-Scale Animation: Enhancing Cross-Scale Understanding of Multiscale Structures in Multiple Views. In *Proceedings of the 3rd International Conference on Coordinated & Multiple Views in Exploratory Visualization*, July, 2005. London, UK, IEEE Computer Society, pp 109-120.
- Zhang, X. & Furnas, G. W. (2005). mCVEs: Using Cross-Scale Collaboration To Support User Interaction With Multiscale Structures. In *PRESENCE: Teleoperators and Virtual Environments*. vol. 14, no. 1, pp. 31-46.
- Zhang, X. & Furnas, G. W. (2002) Social Interactions in Multiscale CVEs. In *Proceedings of the ACM Conference on Collaborative Virtual Environments 2002 (CVE 2002)*, October, 2002, Bonn, Germany, pp. 31-38.
- Furnas, G. W. & Zhang, X. (2000) Illusions of Infinity: Feedback for Infinite Worlds. In *Proceedings of the ACM Symposium on User Interface Software and Technology 2000 (UIST 2000)*, November, 2000, San Diego, California, pp. 237-238.
- Furnas, G. W. & Zhang, X. (1998) MuSE: Multiscale Editor. In *Proceedings of the ACM Symposium on User Interface Software and Technology 1998 (UIST 98)*, November, 1998, San Francisco, California, pp. 107-116.

Book Chapters

- Zhang, X. & Furnas, G. W. (2005). Multiscale Space and Multiscale Place. In *Davenport, E. & Turner, P. (Eds.): Space, Spatiality and Technologies*. Springer, pp. 261-280.

Refereed Conference Short Papers and Posters

- Zhang, X. (2005). A Granularity Model on Virtual Navigation. Poster in the Conference on Spatial Information Theory 2005.
- Sun, G. & Zhang, X. (2005). GeoViKE: Support Knowledge Exploration with Geo-Visualization. Honorable Mention in the IEEE Symposium on Information Visualization 2005 Contest.
- Zhang, X. & Furnas, G. W. (2003). The Effectiveness of Multiscale Collaboration in Virtual Environments. In *Extended Abstract of the ACM Conference on Human Factors in Computing Systems 2003 (CHI 2003)*, April, 2003, Ft. Lauderdale, Florida, pp. 790-791.

PRESENTATIONS

- Space-Scale Animation: Enhancing Cross-Scale Understanding of Multiscale Structures in Multiple Views. *The 3rd International Conference on Coordinated & Multiple Views in Exploratory Visualization*, July, 2005. London, UK.
- Multiscale Collaboration in Virtual Environments: Concepts, Implications, and Evaluations. *Institute of Psychology, The Chinese Academy of Sciences*, July 29, 2004, Beijing, China
- Using Multiscale Technology To Support User Interactions With Large Information/Model Structures. *AI Lab, University of Arizona*, May 21, 2004, Tucson, Arizona
- Multiscale Space and Multiscale Place. *Workshop on Space, Spatiality, and Technology*. University of Napier, December, 2003, Edinburgh, Scotland.
- Using Multiscale Collaboration to Support Cross-Scale Scientific Research. *Internet Technology Commerce and Design Institute ITCDI Collaboration Symposium*, University of Arizona, January, 2004, Tucson, Arizona, USA.
- Multiscale Collaborative Virtual Environments. *The ACM CVE 2000 workshop on the Future of CVEs*, October, 2000, San Francisco, California, USA.

OTHER RESEARCH ACTIVITIES

- Review Panelist, *Human-Computer Interaction Program, National Science Foundation (NSF)*, March, 2004.
- Paper Reviewer, *the ACM Conference on Human Factors in Computing Systems 2004*, October, 2003.
- Invited Participant, *Human Computer Interaction Consortium Workshop 2002*, 1998.
- Paper Reviewer, *the ACM Symposium on User Interface Software and Technology 2001*, May, 2001.
- Student Assistant, *NSF Science of Collaboratories Workshop*, May, 2001, Ann Arbor, MI.
- Student Volunteer, *the ACM Symposium on User Interface Software and Technology 2000*, 1997.

RESEARCH GRANTS

- Using Multiscale Technology to Augment Spatial Cognition. *Faculty Summer Research Grant*, College of Social and Behavioral Sciences, University of Arizona, \$5,000, 2004.
- Using Multiscale Collaboration to Support Cross-Scale Scientific Research. *Faculty Small Grants*, Office of Vice President for Research, University of Arizona, \$9,587, 2003.
- Understanding User Interactions in Multiscale Collaborative Virtual Environments. *PROP 301 Information Technology/Information Science Grant*, College of Social and Behavioral Sciences, University of Arizona, \$23,150, 2003.

TEACHING

- As Instructor
 - IRLS 506: Research Methods, University of Arizona*
 - IRLS 588-002/791: Introduction to Information Technologies, University of Arizona*
 - IRLS 588-003: Collaborative Information Retrieval, University of Arizona*
- As Graduate Student Instructor
 - SI 502: Choice and Learning, University of Michigan*
 - SI 682: User Interface Design, University of Michigan*
 - SI 540: Understanding Networked Computing, University of Michigan*
 - SI 503: Search and Retrieval, University of Michigan*

SERVICE ACTIVITIES

- Co-Chair of the Registration Committee, the ACM UIST 2005.
- Member, *Advisory Board of Social & Behavioral Sciences Research Institute*, College of Social and Behavioral Sciences, University of Arizona, 2004 – 2005..
- Member, *Taskforce for the Education and Research Program on Information, Technology and Society*, University of Arizona, 2003- 2005.
- Member, *Curriculum Committee, Research Committee, Doctoral Committee*, School of Information Resources & Library Science, University of Arizona, 2003 – 2005.
- Chair, *Arizona Chapter, American Society for Information Science and Technology*, 2004 – 2005.
- Chair-Elected, *Arizona Chapter, American Society for Information Science and Technology*, 2003 – 2004.

PROFESSIONAL AFFILIATION

- Association for Computing Machinery (ACM)
- American Society for Information Science and Technology (ASIS&T)
- Institute of Electrical and Electronics Engineers – Computer Society (IEEE)