

LUIS FRANCISCO-REVILLA

4411 Spicewood Springs Rd. #1405 · Austin, Texas, 78759, USA
Phone: 1+512-232-2983 · Fax: 1+512-471-3971 · E-mail: revilla@ischool.utexas.edu

AREAS OF INTEREST

My interests focus on human-centered computing. They include, but are not limited to, the areas of digital libraries, information systems, hypermedia, intelligent user interfaces, CSCW, and software engineering.

EDUCATION

Computer Science, Ph.D.

Texas A&M University

Dissertation: Multi-model Adaptive Spatial Hypertext

Advisor: Dr. Frank M. Shipman, III

College Station, Texas, USA
December 2004

Computer Science, Master of Science

Texas A&M University

Thesis: Mars Medical Assistant

Advisor: Dr. Frank M. Shipman, III

College Station, Texas, USA
December 1998

Electronic and Communications Engineering, Bachelors

Universidad Iberoamericana

Thesis: Sistema de Control y Monitoreo Programable

Mexico City, Mexico
May 1992

RESEARCH EXPERIENCE

Spatial Hypermedia for Visually Impaired (AudibleSpace)

The University of Texas. School of Information

Investigate how to convey the structural information implied in two-dimensional spatial layouts to visually impaired (VI) users. Investigate how VI users interact with two-dimensional environments. Design and develop AudibleSpace, an adaptive spatial hypermedia system for VI users. Compare the interactions of VI users with one-dimensional environments such as screen readers to augmented two-dimensional environments such as AudibleSpace. AudibleSpace has generated one publication to date.

Multi-Model Adaptive Spatial Hypermedia (MASH)

Texas A&M University. Ph.D. Dissertation

Investigated how to improve information delivery in contexts such as the Web that rely on general purpose presentations and require readers to adapt to them. Created the MASH approach, which combines the augmented expressiveness of spatial hypermedia with the flexibility of adaptive hypermedia. Investigated how to automatically resolve conflicts between adaptation suggestions that originate from multiple independent models. Designed and developed WARP, a Web-based multi-model adaptive spatial hypermedia system. Evaluated the system and approach qualitatively and quantitatively. MASH has generated several publications – five publications currently in print and several more in preparation.

Path Manager / Distributed Collections Manager

Texas A&M University. Center for the Study of Digital Libraries

Investigated how to aid managers of distributed collections by creating mechanisms that automatically assess the relevance of changes of electronic documents such as Web pages based on the syntactic and semantic distance between two documents or between a document and a collection. Addressed the issue of relocating lost items and finding appropriate replacements. Path Manager has generated four publications, two releases and is currently on its third iteration of development and evaluation.

Walden's Paths

Texas A&M University. Center for the Study of Digital Libraries

Explored how to create coherent presentations using digital materials such as Web pages, which have been created by third parties having alternative audiences and settings in mind. Designed and implemented a system that supports the authoring and reading of these presentations (called paths). Devised approaches that support path authors to recontextualize the materials by gathering, ordering, and annotating the Web pages. The Walden's Paths project has been very prolific, resulting in the publication of thirteen papers.

Visual Knowledge Builder (VKB)

Texas A&M University. Center for the Study of Digital Libraries

Investigated the authoring, use and distribution of spatial hypermedia information. Designed and developed the third release of VKB, a presentation-oriented spatial hypermedia system implemented in Java. VKB has generated a large volume of publications and it provides a robust platform used by several researchers.

Mars Medical Assistant (MMA)

Texas A&M University. Masters Thesis

Explored the use of multiple models to adapt the content and presentation of hypermedia documents. Built a system that adapts the information delivery in response to characteristics of the user (e.g., knowledge), the situation (e.g., emergency) and task (e.g., diagnosing). Generated three publications including my thesis.

Research Summer Internship

FX Palo Alto Laboratory

Conducted research in the area of digital video, mixed media, and the Internet. Investigated and implemented novel approaches to the presentation of mixed media on digital environments. Details of the project cannot be presented here due to a non-disclosure agreement.

TEACHING EXPERIENCE

The University of Texas

Assistant Professor

Graduate: Intelligent Users Interfaces, Serving and Understanding Users, and Java Programming

Austin, Texas, USA

01/06 - present

Texas A&M University

Teaching Assistant

Undergraduate: Pascal laboratory.

College Station, Texas, USA

08/97 - 06/98

Universidad Iberoamericana

Lecturer

Undergraduate: Linear Control, Control Fundamentals, Circuit Analysis, C, and Computer Architecture.

Mexico City, Mexico

01/92 - 01/94

PROFESSIONAL EXPERIENCE

The University of Texas. School of Information

Assistant Professor

Research and Teaching. Projects: WARP, DCM, and VKB.

College Station, Texas, USA

02/05 - 01/06

Texas A&M. Center for the Study of Digital Libraries

Postdoctoral Research Associate

Research, Design and Development. Projects: MASH, VKB, Path Manager, and Walden's Paths.

College Station, Texas, USA

02/05 - 01/06

Texas A&M. Center for the Study of Digital Libraries

Research Assistant

Research, Design and Development. Projects MASH, Path Manager, Walden's Paths, and MMA.

College Station, Texas, USA

08/98 - 12/04

FX Palo Alto Laboratory*Research Summer Internship*

Research in digital video, multimedia, and Internet.

Palo Alto, California, USA

05/01 - 08/01

NCR*Consultant*

Industry Planning, Project Management, Design and Development: Consulting for the entire Latin America Area in Retail Industry. Interfacing between international software houses and Latin America customers.

Mexico City, Mexico

01/96 - 08/96

NCR / AT&T G.I.S.*Industry Manager*

Account Management, Sales, Marketing, and Project Management. Handling major accounts in Mexico such as JC Penney's, and 7-Eleven with responsibilities for several million dollars.

Mexico City, Mexico

01/95 - 01/96

NCR / AT&T G.I.S.*Solution Specialist*

Sales Support, Application Design, Maintenance and Customer Support. Participating extensively in the project for the Fiscal Approbation of NCR's Point Of Sale equipment.

Mexico City, Mexico

02/94 - 01/95

Universidad Iberoamericana*Full time lecturer / Electronic Laboratories Coordinator*

Teaching and Management. Managing staff and equipment of the Electronic Engineering Laboratory.

Mexico City, Mexico

11/92 - 01/94

JOURNAL PUBLICATIONS

1. **FRANCISCO-REVILLA, L.**, SHIPMAN F.M. "Conflict Management in Multi-model Adaptive Hypermedia" submitted for publication to *Journal of Digital Information*. Texas A&M University, Texas, USA. <http://jodi.tamu.edu>
2. KARADKAR U.P., **FRANCISCO-REVILLA, L.**, FURUTA R., SHIPMAN F.M., ARORA A., DASH S., DAVE P. AND LUKE E. "Creating, Using and Managing Meta-Documents to Support Information Discovery in Digital Libraries", in *International Journal on Digital Libraries*, Vol. 4, No. 1 (August 2004), Springer-Verlag, Berlin, Germany, pp. 25-30.
3. KARADKAR, U.P., **FRANCISCO-REVILLA, L.**, FURUTA, R., HSIEH, H., AND SHIPMAN III, F.M. "Evolution of the Walden's Paths Authoring Tools", in *Computers in the Social Studies Journal*, Vol. 9, No. 1 (January 2001), www.cssjournal.com. (Also in Proceedings of WebNet 2000 – World Conference on the WWW and Internet, San Antonio, TX, October 30-November 4, 2000, ACM Press, New York, USA, pp. 299-304.)
4. SHIPMAN, F.M., FURUTA, R., HSIEH, H., **FRANCISCO-REVILLA, L.**, KARADKAR, U., RELE, A., SHENOY, G., AND BRENNER, D.A. "Using the Internet in the Classroom: Variety in the Use of Walden's Paths", in *Computers in the Social Studies Journal*, Vol. 9, No. 1 (January 2001), www.cssjournal.com. (Also in Proceedings of Ed-Media '99, Seattle, Washington, June 19-24, 1999, pp. 335-340.)

REFEREED CONFERENCE PUBLICATIONS

1. **FRANCISCO-REVILLA, L.** "Spatial Hypermedia for the Visually Impaired" *Accepted for publication in Proceedings of 2006 Symposium on Interactive Visual Information Collections and Activity (IVICA)*, College Station, TX, October 20-22, 2006, <http://www.csd.tamu.edu/IVICA>.
2. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. "Parsing and Interpreting Ambiguous Structures in Spatial Hypermedia" in *Proceedings of Sixteenth ACM Conference on Hypertext and Hypermedia (HT'05)*, Salzburg, Austria, September 6-9, 2005, ACM Press, New York, USA, pp. 107-116.
3. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. "Instructional Information in Adaptive Spatial Hypertext" in *Proceedings of the 2004 ACM Symposium on Document Engineering 2004*, Milwaukee, Wisconsin, October 28-30, 2004, ACM Press, New York, USA, pp. 124-133.

4. DAVE P., **FRANCISCO-REVILLA, L.**, KARADKAR U.P., FURUTA R., SHIPMAN, F.M., AND BOGAN P.L. "Incorporating Physical and Digital Artifacts into Growing Personal Collections" in *Proceedings of the 8th European Conference on Digital Libraries (ECDL 2004)*, Bath, England, September 12-17, 2004, Lecture Notes in Computer Science (LNCS) 3232, Springer-Verlag, Berlin, Germany, pp. 341-352.
5. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. "WARP: A Web-based Dynamic Spatial Hypertext" in *Proceedings of the Fifteenth ACM Conference on Hypertext and Hypermedia (HT'04)*, Santa Cruz, CA, August 9-13, 2004, ACM Press, New York, USA, pp. 235-236.
6. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. "Managing Conflict in Multi-model Adaptive Spatial Hypertext" in *Proceedings of the Fifteenth ACM Conference on Hypertext and Hypermedia (HT'04)*, Santa Cruz, CA, August 9-13, 2004, ACM Press, New York, USA, pp. 237-238.
7. DAVE P., BOGAN P., KARADKAR U., **FRANCISCO-REVILLA, L.**, FURUTA R., AND SHIPMAN, F. "Managing Growing Collections" in *Proceedings of the Fifteenth ACM Conference on Hypertext and Hypermedia (HT'04)*, Santa Cruz, CA, August 9-13, 2004, ACM Press, New York, USA, pp. 171-180.
8. DALAL, Z., DASH, S., DAVE, P., **FRANCISCO-REVILLA, L.**, FURUTA, R., KARADKAR, U., AND SHIPMAN, F. "Managing Distributed Collections: Evaluating Web Page Changes, Movement, and Replacement" in *Proceedings of the 4th ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL 2004)*, Tucson, Arizona, June 7-11, 2004, ACM Press, New York, USA, pp. 160-168.
9. ARORA A., BARKER E., KARADKAR U.P., DAVE P., **FRANCISCO-REVILLA L.**, FURUTA R., SHIPMAN F.M., DASH S., DALAL Z. "The Walden's Paths Quiz Engine" in *World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education 2003 (E-Learn 2003)*, Phoenix AZ, November 7-11, 2003, AACE pp. 2052-2059.
10. DAVE P., KARADKAR U.P., FURUTA R., **FRANCISCO-REVILLA, L.**, SHIPMAN F.M., DASH S., DALAL Z. "Browsing Intricately Interconnected Paths" in *Proceedings of Fourteenth Conference on Hypertext and Hypermedia (HT'03)*, Nottingham, UK, August 26-30, 2003. ACM Press, New York, USA, pp. 95-103.
11. KARADKAR U.P., KERNE A., FURUTA R., **FRANCISCO-REVILLA, L.**, SHIPMAN F.M., AND WANG J. "Connecting Interface Metaphors to Support Creation of Path-Based Collections" in *Proceedings of the 7th European Conference on Research and Advanced Technology for Digital Libraries (ECDL 2003)*, Trondheim, Norway, August 17-22, 2003, pp. 338-349.
12. **FRANCISCO-REVILLA, L.**, SHIPMAN, F.M., FURUTA, R., KARADKAR, U., AND ARORA, A. "Perception of Content, Structure, and Presentation Changes in Web-based Hypertext" in *Proceeding of the Twelfth ACM Conference on Hypertext and Hypermedia (HT '01)*, Aarhus, Denmark, August 14-18, 2001, ACM Press, New York, USA, pp. 205-214.
13. **FRANCISCO-REVILLA, L.**, SHIPMAN, F.M., FURUTA, R., KARADKAR, U., AND ARORA, A. "Managing Change on the Web" in *Proceeding of the 1st ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL '01)*, Roanoke Virginia, USA, June 24-28, 2001, ACM Press, New York, USA, pp. 67-76.
14. KARADKAR, U., **FRANCISCO-REVILLA, L.**, FURUTA, R., SHIPMAN, F., ARORA, A., "Supporting Multilingual Paths over the WWW" in *Proceedings of the 3rd International Conference of Asian Digital Libraries (ICADL 2000)*, Seoul, Korea, December 6-8, 2000, pp. 177-184.
15. KARADKAR, U. P., **FRANCISCO-REVILLA, L.**, FURUTA, R., HSIEH, H., AND SHIPMAN, F. M., "Evolution of the Walden's Paths Authoring Tools" in *Proceedings of WebNet 2000 – World Conference on the WWW and Internet*, San Antonio, TX, October 30-November 4, 2000, ACM Press, New York, USA, pp. 299-304. (Also in *Computers in the Social Studies Journal*, Vol. 9, No. 1 (January 2001), www.cssjournal.com)
16. KARADKAR, U., **FRANCISCO-REVILLA, L.**, FURUTA, R., SHIPMAN, F., "Structuring Access to a Dynamic Collection of Digital Documents: The Walden's Paths Virtual Directories" *Digital Documents and Electronic Publishing (DDEP00)*, Munich, Germany, September 13-15, 2000. Published as *Digital Documents: Systems and Practices*, Lecture Notes in Computer Science (LNCS) 2023, Springer-Verlag, Berlin, Germany, 2004, pp. 91-103.

17. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. “Adaptive Medical Information Delivery: Combining User, Task and Situation Models” in *Proceeding of the 2000 ACM Intelligent User Interfaces Conference (IUI 2000)*, New Orleans, January 9-12, 2000, ACM Press, New York, USA, pp. 94-97.
18. FURUTA, R., SHIPMAN, F.M., **FRANCISCO-REVILLA, L.**, HSIEH, H., KARADKAR, U., AND HU, S. “Ephemeral Paths on the WWW: The Walden's Paths Lightweight Path Mechanism” *WebNet (1) 1999*, pp. 409-414.
19. SHIPMAN, F.M., FURUTA, R., HSIEH, H., **FRANCISCO-REVILLA, L.**, KARADKAR, U., RELE, A., SHENOY, G., AND BRENNER, D.A. “Using the Internet in the Classroom: Variety in the Use of Walden's Paths” in *Proceedings of the World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media 1999)*, Seattle, Washington, June 19-24, 1999, pp. 335-340. (Also in *Computers in the Social Studies Journal*, Vol. 9, No. 1 (January 2001), www.cssjournal.com)

OTHER PUBLICATIONS

1. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. “Shared Readings in Spatial Hypermedia” in *Fourth Workshop on Spatial Hypertext*, Santa Cruz, CA, August 9, 2004. available at <http://www.csd.tamu.edu/~shipman/SpatialHypertext/SH4/luis.pdf>
2. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. “MASH: A Framework for Adaptive Spatial Hypermedia” in *Third Workshop on Spatial Hypertext*, Nottingham, UK, August 26, 2003. available at <http://www.csd.tamu.edu/~shipman/SpatialHypertext/SH3/luis.pdf>
3. **FRANCISCO-REVILLA, L.**, AND SHIPMAN, F.M. “Adaptive Medical Information Delivery: Combining User, Task and Situation Models” in *SIGWEB Newsletter*, Vol. 8, No. 1, February 1999, ACM Press, New York, USA, pp. 18-20.
4. **FRANCISCO-REVILLA, L.** “Adaptive Medical Information Delivery” in *ACM Hypertext '99 Doctoral Consortium*, Darmstadt, Germany, February 1999, pp.6-7.

PROFESSIONAL SERVICE

Program Committee	IVICA 2006, College Station, TX.	2006
Program Committee	ACM: CIKM 2006, Arlington, VA.	2006
Reviewer	ASIS&T: IA Summit 2006, Vancouver, BC. Canada.	2006
Program Committee	ACM: Hypertext 2006, Odense, Denmark.	2006
Reviewer	ACM: Transactions on the Web (TWEB)	2005 - present
Student Volunteer	ACM-IEEE: JCDL 2003, Houston, TX.	2003
Chair for Student Volunteers	ACM: Hypertext 2002, College Park, MD.	2002
Student Volunteer	ACM: Hypertext 2001, Aarhus, Denmark.	2001
A/V Coordinator	ACM-IEEE: JCDL 2001, Roanoke, VA.	2001
Student Volunteer	ACM: Hypertext 2000, San Antonio, TX.	2000
Student Volunteer	ACM: Digital Libraries 2000, San Antonio, TX.	2000

ACADEMIC SERVICE

Faculty Council	University of Texas, Austin, TX.	2006 - present
UT Libraries Committee	University of Texas, Austin, TX.	2006 - present
Curriculum Steering Committee	School of Information. University of Texas, Austin, TX.	2006 - present
Core Class Committee: “Serving and Understanding Users”	School of Information. University of Texas, Austin, TX.	2006 - present
Core Class Committee: “Organization of Information”	School of Information. University of Texas, Austin, TX.	2006 - present
Strategy Committee: IA/Usability/HCI	School of Information. University of Texas, Austin, TX.	2006 - present

PROFESSIONAL SOCIETIES

Association for Computing Machinery

1997 - present

LANGUAGES

English (fluent)

Spanish (fluent)

German (intermediate)

HOBBIES & ACTIVITIES

Mountain/Rock Climbing

Hiking

Swimming

Biking

Racquetball

Traveling

REFERENCES

Dr. Frank M. Shipman, III

*Associate Professor, Department of Computer Science
Associate Director of the Center for Study of Digital Libraries
Texas A&M University*

E-mail: shipman@cSDL.tamu.edu
Phone: +1(979) 862-3216
Department of Computer Science
H. R. Bright Building,
Texas A&M University, 3112 TAMU
College Station, TX 77843-3112, USA

Dr. Richard K. Furuta

*Professor, Department of Computer Science
Director of the Center for Study of Digital Libraries
Texas A&M University*

E-mail: furuta@cSDL.tamu.edu
Phone: +1(979) 845-3839
Department of Computer Science
H. R. Bright Building,
Texas A&M University, 3112 TAMU
College Station, TX 77843-3112, USA

Dr. John J. Leggett

*Professor, Department of Computer Science
Associate Dean of Digital Initiatives Research with the
Texas A&M University Libraries
Texas A&M University*

E-mail: leggett@cSDL.tamu.edu
Phone: +1 (979) 845-0298
Department of Computer Science
H. R. Bright Building,
Texas A&M University, 3112 TAMU
College Station, TX 77843-3112, USA

Dr. Donald H. House

*Professor of Visualization Sciences
Department of Architecture & Visualization Laboratory
Texas A&M University*

E-mail: house@viz.tamu.edu
Phone: +1 (979) 845-3456
College of Architecture
Texas A&M University, 3137 TAMU
College Station, Texas 77843-3137, USA