Peter J. Nürnberg
Curriculum vitae

Personal

Work address:	The University of Texas at Austin	Private address:	3604 Leadville Dr.
	University of Texas Libraries		Austin, TX 78749 USA
	1 University Station S5400	Private phone:	+1 512 992 0344
	Austin, TX 78712	Private mobile:	+1 832 474 2623
Email:	peter.nuernberg@austin.utexas.edu	Citizenship:	USA

Education

PhD, Computer Science, Texas A&M University (Aug 97)
> Dissertation: *HOSS: An Environment to Support Structural Computing*

MS, Computer Science, Texas A&M University (Dec 94)
> Thesis: *Implications of an Open, Extensible, and Distributed Hypermedia Information System Architecture for Inter-process Communication Subsystem Design*

BS, Computer Science, Texas A&M University (Dec 90)

Professional experience

Neosententia, LLC
Managing Partner (Apr 01–)
> manage software and consulting company

Aalborg University Esbjerg
Assistant Department Head, Department of Software and Media Technology (Oct 05–Aug 06)
> developed computer science curricula; manage hiring and budget for software engineering faculty of department

Associate Professor, Department of Software and Media Technology (Aug 99–Aug 06)
> participated in/directed hypermedia, digital libraries and knowledge management research; developed computer science curricula; taught graduate and undergraduate courses

Center for Knowledge Technology
Director (Jan 03–Aug 06)
> managed research center; coordinated affiliated researchers

Technical University of Graz
Visiting Professor, Inst. for Information Processing and Computer Suppported New Media (Feb 03–Feb 04)
> participated in/directed knowledge management research; taught graduate and undergraduate courses

University of Houston–Clear Lake
Visiting Professor, School of Natural and Applied Sciences (Aug 01–Dec 01)
> taught graduate and undergraduate computer science courses

Adjunct Professor, School of Natural and Applied Sciences (Jan 01–Aug 01, Jan 07-May 07)
> taught graduate and undergraduate computer science courses

Aarhus University
Research Assistant Professor, Department of Computer Science (Aug 97–Aug 99)
> participated in/directed object-oriented WWW backend and collaborative hypermedia research

University of Texas
Graduate Teaching Assistant, Graduatue School of Library and Information Science (Jun 96)
> taught lab sections of a graduate-level information systems course

Texas A&M University
Research Associate, Center for the Study of Digital Libraries (Jan 95–Jun 97)
> participated in and directed hypermedia and digital libraries research

Research Associate, Hypermedia Research Laboratory (Jun 94–Dec 94; Jan 91–Dec 92; Jun 90–Dec 90)
> participated in and directed hypermedia research; maintained lab equipment; implemented research prototypes of hypermedia systems

Assistant Lecturer, Department of Computer Science (Sep 94–Dec 94; Sep 93–May 94)
> taught data structures course and lab sections of programming and operating systems courses

IBM
National Marketing Representative (Jan 88–Aug 89)
> solved customer and systems field engineer hardware and software problems; team leader

Publications

Dissertations and theses

1. **Nürnberg, P.J.** 1997. *HOSS: An Environment to Support Structural Computing.* PhD dissertation, Department of Computer Science, Texas A&M University, College Station, TX, US.
2. **Nürnberg, P.J.** 1994. *Implications of an Open, Extensible, and Distributed Hypermedia Information System Architecture for Inter-process Communication Subsystem Design.* MS thesis, Department of Computer Science, Texas A&M University, College Station, TX, US.

Proceedings

1. **Nürnberg, P.J.**, Rubart, J. Wiil, U.K. (eds) 2006. *Proceedings of the Seventeenth ACM Conference on Hyertext and Hypermedia (HT 2006)*, ACM Press, New York.
2. **Nürnberg, P.J.**, Wiil, U.K., Hicks, D.L. (eds) 2006. *Proceedings of the Metainformatics Symposium 2005*, ACM International Conference Proceedings Series vol. 214, ACM, New York.
3. Wiil, U.K., Hicks, D.L., **Nürnberg, P.J.** (eds) 2005. *Proceedings of the Metainformatics Symposium 2004*, LNCS vol. 3511, Springer Verlag, Heidelberg.
4. Hicks, D.L., Wiil, U.K., **Nürnberg, P.J.** (eds) 2004. *Proceedings of the Metainformatics Symposium 2003*, LNCS vol. 3002, Springer Verlag, Heidelberg.
5. **Nürnberg, P.J.** (ed) 2003. *Proceedings of the Metainformatics Symposium 2002*, LNCS vol. 2641, Springer Verlag, Heidelberg.
6. Shipman, F.M., Anderson, K.M., **Nürnberg, P.J.**, Hicks, D. (eds.) 2000. *Proceedings of the Eleventh ACM Conference on Hypertext and Hypermedia (HT 2000)*, ACM Press, New York.
7. Furuta, R., Anderson, K.M., Hicks, D.L., **Nürnberg, P.J.** (eds.) 2000. *Proceedings of the Fifth ACM Conference on Digital Libraries (DL 2000)*, ACM Press, New York.
8. **Nürnberg, P.J.** (ed.) 1999. *ACM Hypertext 1999 Doctoral Consortium Final Report*.
9. **Nürnberg, P.J.** (ed.) 1999. *Proceedings of the First Workshop on Structural Computing (SC 1)*.
10. Larsen, D., **Nürnberg, P.J.** (eds.) 1999. *Proceedings of the First CyberMountain Colloquium*.

Refereed journal articles

1. Atzenbeck, C.A., **Nürnberg, P.J.** 2006. Realistic binding metaphors for structural computing. *New Rvw Hypermedia & Multimedia 12*.
2. Wiil, U.K., **Nürnberg, P.J.**, Hicks, D.L. 2003. Structural computing: Research directions, systems and issues. *J Net & Comp Appl 26*(1) (Jan).
3. **Nürnberg, P.J.**, Schraefel, M. 2002. Structural computing and its relation to other fields. *J Net & Comp Appl 25*(4) (Oct).
4. **Nürnberg, P.J.** 2001. Extensibility in component-based open hypermedia systems. *J Net & Comp Appl 24*(1) (Jan).
5. **Nürnberg, P.J.**, Grønbæk, K. 1999. A component-based open hypermedia approach to integrating structure services. *New Rvw Hypermedia & Multimedia 5*.
6. Reich, S., Wiil, U.K., **Nürnberg, P.J.**, Davis, H.C., Grønbæk, K., Anderson, K.M., Millard, D.E., Haake, J. 1999. Addressing interoperability in open hypermedia: the design of the Open Hypermedia Protocol. *New Rvw Hypermedia & Multimedia 5*.
7. **Nürnberg, P.J.**, Wiil, U.K., Leggett, J.J. 1999. Hypermedia research directions: an infrastructure perspective. *ACM Comp Surv 31*(4) (Dec).
8. Hicks, D.L., Leggett, J.J., Schnase, J.L., **Nürnberg, P.J.** 1998. A hypermedia version control framework. *ACM Trans Inf Sys 16*(2) (Apr).
9. **Nürnberg, P.J.**, Leggett, J.J. 1997. A vision for open hypermedia systems. *BCS J Dig Inf 1*(2) (Nov).
10. **Nürnberg, P.J.**, Schneider, E.R., Leggett, J.J. 1996. Designing digital libraries for the post-literate age. *J Universal Comp Sci 2*(9) (Sep).
11. Schnase, J.L., Leggett, J.J., Hicks, D.L., **Nürnberg, P.J.**, Sánchez, J.A. 1992. Design and implementation of the HB1 hyperbase management system. *Electronic Publishing: Origination, Dissemination and Design 6*(2) (Jul).

Refereed conference papers

1. Madsen, F.H., **Nürnberg, P.J.** 2005. Calliope: Supporting high-level documentation of open source projects. *Proc MIS 05* (Esbjerg, DK, Nov).
2. **Nürnberg, P.J.**, Kristoffersen, K.C., Wiil, U.K., Hicks, D.L. 2005. EAD revisited: First experiences. *Proc MIS 05* (Esbjerg, DK, Nov) .
3. Atzenbeck, C., **Nürnberg, P.J.** 2005. WildDocs – emerging metainformation support. *Proc IKNOW 05* (Graz, AT, Jul).

4. Mohamed, O.I.E., **Nürnberg, P.J.**, Hicks, D.L. 2005. An analysis framework for evaluation and comparison of Open Hypermedia Systems. *Proc IMB 05* (Taipei, TW, Mar).
5. Mohamed, O.I.E., **Nürnberg, P.J.**, Wiil, U.K., Hicks, D.L. 2005. Hypermedia devised/enabled educational applications. *Proc IMB 05* (Taipei, TW, Mar).
6. **Nürnberg, P.J.**, Krestova, S. 2004. Managing Ontological Complexity: A case study. *Proc MIS 04* (Salzburg, AT, Sep).
7. Atzenbeck, C., **Nürnberg, P.J.** 2004. Looking beyond computer applications: investigating rich structures. *Proc MIS 04* (Salzburg, AT, Sep).
8. Lyon, K., **Nürnberg, P.J.** 2004. Applying information visualisation techniques to spatial hypertext tools. *Proc MIS 04* (Salzburg, AT, Sep).
9. Mohamed, O.I.E., **Nürnberg, P.J.**, Wiil, U.K., Hicks, D.L. 2004. Towards a generic building block for component-based open hypermedia systems. *Proc MIS 04* (Salzburg, AT, Sep).
10. **Nürnberg, P.J.**, Wiil, U.K., Hicks, D.L. 2004. Rethinking structural computing infrastructures. *Proc ACM HT 04* (Santa Cruz, CA, USA, Aug).
11. Hicks, D.L., Wiil, U.K., **Nürnberg, P.J.** 2004. Towards a structural diversity space. *Proc ACM HT 04* (Santa Cruz, CA, USA, Aug).
12. Atzenbeck, C., **Nürnberg, P.J.** 2004. Approaching structure interoperability. *Proc IKNOW 04* (Graz, AT, Jul).
13. **Nürnberg, P.J.**, Krestova, S., Tzagarakis, M., Vaitis, M. 2003. Bringing computational linguitics to knowledge management. *Proc IKNOW 03* (Graz, AT, Jul).
14. **Nürnberg, P.J.** 2003. Building metainformatical bridges. *Proc MIS 02* (Esbjerg, DK, Aug).
15. **Nürnberg, P.J.**, Hicks, D.L. 2002. Models for academic hypertext publishing. *Proc Elpub 02* (Carlsbad, CZ, Oct).
16. **Nürnberg, P.J.** 2002. Structural computing and metadata management. *Proc IKNOW 02* (Graz, AT, Jul).
17. Hicks, D.L., **Nürnberg, P.J.** 2002. *Proc IKNOW 02* (Graz, AT, Jul).
18. Ong, T., Leggett, J.J., Wilson, H., Hatch, S., Reed, M., Maini, G., Schneider, E., **Nürnberg, P.J.** 2002. A Web-based run-length encoded map generating system. *Proc EDMEDIA 02* (Denver, CO, US, Jun).
19. Wiil, U., Hicks, D., **Nürnberg, P.J.** 2001. Multiple open services: a new approach to service provision in open hypermedia systems. *Proc ACM HT 01* (Århus, DK, Aug).
20. **Nürnberg, P.J.**, Wiil, U.K., Tochtermann, K. 1999. Implications of open hypermedia research for the World Wide Web. *Proc IMSA 99* (Nassau, BS, Oct).
21. **Nürnberg, P.J.**, Wiil, U.K., Tochtermann, K. 1999. A comparison of hypermedia architectures for educational applications. *Proc IDPT 99* (Dallas, TX, US, Jun 00).
22. Wiil, U., **Nürnberg, P.J.** 1999. Evolving hypermedia middleware services: Lessons and observations. *Proc ACM SAC 99* (San Antonio, TX, US, Mar).
23. **Nürnberg, P.J.**, Ashman, H. 1999. What was the question? Reconciling open hypermedia and World Wide Web research. *Proc AM HT 99* (Darmstadt, DE, Feb).
24. **Nürnberg, P.J.**, Leggett, J.J. 1998. Navigating at warp factor five: Plotting a World Wide Web research course. *Proc WebNet 98* (Orlando, FL, US, Nov).
25. **Nürnberg, P.J.**, Wiil, U.K., Leggett, J.J. 1998. Structuring facilities in digital libraries. *Proc ECDL 98* (Crete, GR, Sep).
26. **Nürnberg, P.J.**, Leggett, J.J., Wiil, U.K. 1998. An agenda for open hypermedia research. *Proc ACM HT 98* (Pittsburgh, PA, US, Jun).
27. **Nürnberg, P.J.**, Leggett, J.J., Schneider, E.R. 1997. As we should have thought. *Proc ACM HT 97* (Southampton, UK, Apr).
28. **Nürnberg, P.J.**, Schneider, E.R., Leggett, J.J. 1996. Designing digital libraries for post-literate patrons. *Proc WebNet 96* (San Francisco, CA, US, Oct).
29. **Nürnberg, P.J.**, Leggett, J.J., Schneider, E.R., Schnase, J.L. 1996. Hypermedia operating systems: A new paradigm for computing. *Proc ACM HT 96* (Washington, DC, US, Mar).
30. **Nürnberg, P.J.**, Furuta, R., Leggett, J.J., Marshall, C., Shipman, F.M. 1995. Digital libraries: issues and architectures. *Proc DL 95* (Austin, TX, US, Jun).
31. Schnase, J.L., Leggett, J.J., Hicks, D.L., **Nürnberg, P.J.**, Sánchez, J.A. 1994. Open architectures for integrated, hypermedia-based information systems. *Proc HICCS-27* (Maui, HI, US, Jan).

Refereed short papers

1. Atzenbeck, C.A., **Nürnberg, P.J.** 2005. Constraints in spatial structures. *Proc ACM HT 05* (Salzburg, AT, Sep).
2. Wiil, U.K., **Nürnberg, P.J.**, Hicks, D., Reich, S. 2000. A development environment for building component-based open hypermedia systems. *Proc ACM HT 00* (San Antonio, TX, US, Jun).
3. Reinert, O., Bucka-Lassen, D., Pedersen, C., **Nürnberg, P.J.** 1999. CAOS: A collaborative and open spatial structure service component with incremental spatial parsing. *Proc ACM HT 99* (Darmstadt, DE, Feb).

Refereed workshop papers

1. Krestova, S., **Nürnberg, P.J.** 2004. Multilingual Dictionary of Lexicographical Terms. *Proc Papillon 04* (Grenoble, FR, Aug).
2. Atzenbeck, C.A., Wiil, U.K., Hicks, D.L., **Nürnberg, P.J.** 2003. Investingating structure domain interoperability. *Proc Spatial HT Wkshp, ACM HT 03* (Nottingham, UK, Apr).
3. **Nürnberg, P.J.**, Hicks, D.L. 2001. Peer-reviewed, publishable hypertexts: a first look. *Proc OHS 7* (Århus, DK, Aug), Springer LNCS 2266.
4. **Nürnberg, P.J.**, Schraefel, M. 2001. Structural computing and its relation to other fields. *Proc SC 3* (Århus, DK, Aug), Springer LNCS 2266.
5. **Nürnberg, P.J.** 2000. Repositioning structural computing. *Proc SC 2* (San Antonio, TX, May), Springer LNCS 1903.
6. Haake, J., Wiil, U.K., **Nürnberg, P.J.** 1999. Combining open collaboration and open hypermedia services. *Proc OHS 5.5* (Esbjerg, DK, Sep).
7. **Nürnberg, P.J.** 1999. Realizing the potential of hypermedia as a collaborative artistic medium. *Proc Cyber-Mountain Colloquium* (Denver, CO, US, Apr).
8. **Nürnberg, P.J.**, Leggett, J.J. 1998. Assessing the current state of open hypermedia standardization. *Proc OHS 4* (Pittsburgh, PA, US, Jun).
9. **Nürnberg, P.J.**, Leggett, J.J. 1997. And now for the tricky part: Broadening the applicability of open hypermedia research. *Proc OHS 3* (Southampton, UK, Apr).

Invited papers

1. Wiil, U.K., **Nürnberg, P.J.**, and Hicks, D.L. 2002. Structural computing: Research directions, systems and issues. *J Net & Comp Appl 25*(4) (Oct).
2. Leggett, J.J., **Nürnberg, P.J.**, Schneider, E.R. 1996. Digital libraries: Issues of scholarship and literacy in the 21st century. *Proc CRICS III* (Rio de Janeiro, BR, Oct).
3. Leggett, J.J., **Nürnberg, P.J.**, Schneider, E.R. 1995. Principles of human centered information systems. *Proc ICAT/VRST 95* (Tokyo, JP, Nov).

Selected invited keynotes, courses, panels, and talks

Keynotes

1. Opening Keynote (MIS 05, Esbjerg, DK, Nov 05)
2. Opening Keynote (ACM HT 03, UK, Aug 03)

Courses

1. Lectures on Structural Computing (U Patras, GR, Oct 01)
2. Metadata management through open hypermedia (ACM HT 01, Århus, DK, Aug 01)
3. Contemporary open hypermedia systems (U Oulu, FI, Dec 99)

Panels

1. Multidisciplinarity in hypermedia research (ACM HT 05, Salzburg, AT, Sep 05)
2. Knowledge sharing in research and higher education (I-KNOW 04, Graz, AT, Jul 04)
3. Achieving practical development (ACM HT 00, San Antonio, TX, US, May 00)
4. Heresies and reformations (ACM HT 99, Darmstadt, DE, Feb 99).
5. The WWW and hypertext research: (ACM HT 97, Southampton, UK, Apr 97)

Talks

1. Knowledge modeling technology in the 21st century media sector (U Manchester, UK, Nov 05)
2. --- (Tech. U Graz, AT, Jun 05)
3. Computer science and the humanities: connections (U Houston–Clear Lake, TX, US, Nov 02)
4. Hypermedia and epistemology (Tech. U. Graz, AT, Oct 02)
5. WWW: Past, present, and future (ITEC 1999 Conference, Austin, TX, US, Apr 99)
6. Reading the hypermedia tea leaves (STG, Brown U, Providence, RI, US, Apr 99).
7. Hypermedia research: Current state and future trends (Southampton U, UK, Apr 98)
8. --- (Nottingham U, UK, Mar 98)
9. Structural computing and component-based hypermedia: (FAW, Ulm, DE, Nov 97)
10. An introduction to structural computing (HIM 97, Dortmund, DE, Oct 97)
11. HOSS and future hypermedia research directions (OHS 2, Washington, DC, US, Mar 96)
12. Hypermedia operating systems and IPC subsystem design (GMD-IPSI, Darmstadt, DE, Aug 95)
13. Optimal exhaustive constant partial ordering of grammars for context-free languages (Spring Linguistic Colloquia, Texas A&M U, College Station, TX, US (Mar 93)

Selected project experience

Workshop series organizer – KM in governmental institutions
Principal investigator (Nov 04–)
   received DKK145,000 to fund two workshops
Coconut (Danish National Center for IT Research and TeleDanmark Internet
Team Leader (Aug 97–Aug 99)
   coordinated navigational structure services task and actively participated in the hypermedia storage engine task;
   supervised four programmers
Center for the Study of Digital Libraries Startup (Texas Engineering Experiment Station)
Participant (Jan 95–Dec 95)
   coordinated hypermedia research infrastructure setup
Engines for Innovation (Illustra Information Technologies)
Participant (Jan 94–Dec 94)
   designed and implemented a hypermedia storage engine
Structuring Flexible and Efficient Shared Information Spaces for Digital Libraries (TX Higher Ed. Coord. Board)
Participant (May 94–Aug 95)
   designed and implemented taxonomic hypermedia infrastructure for botanical digital libraries
Advanced Hypermedia Systems and Hyperbase System Architectures (CRSS Architects, Inc., Houston, TX)
Participant (May 91–May 93)
   designed and implemented prototypic hypermedia environments
Development of a Distributed Hypermedia System Architecture (IBM Adv. Workst. Div., Austin, TX)
Programmer (Jan 90–Dec 92)
   implemented prototypic hypermedia environments

Selected professional service

Metainformatics Symposium Organizing Committee
Member (Aug 02–)
ACM Transactions on the Web (ACM Press)
Editorial Board Member (Jun 05–)
Journal of Network and Computer Applications (Academic Press)
Editorial Board Member (Jun 99–)
ACM Special Interest Group on Hypermedia and the Web (SIGWEB)
Chair (Aug 03–Aug 06)
ACM SIG Governing Board
Member (Aug 03–Aug 06)
Sixteenth ACM Conference on Hypertext and Hypermedia (HT 06)
Program Chair (Sep 05–Sep 06)
Metainformatics Symposium 2005 (MIS 05)
Program Chair, Organizing Committee Member (Nov 05–Jun 06)
Metainformatics Symposium 2002 (MIS 02)
Program Chair, Organizing Committee Member (Aug 01–Aug 02)
Fifth ACM Conference on Digital Libraries (DL 01)
General Chair (Feb 99–Jan 01)
Eleventh ACM Conference on Hypertext and Hypermedia (HT 01)
General Chair (Dec 98–Dec 00)
Ninth ACM Conference on Hypertext and Hypermedia (HT 99)
Associate Papers Chair, Doctoral Consortium Chair (Jun 98–Feb 99)
Eighth ACM Conference on Hypertext and Hypermedia (HT 98)
Workshops Chair (Nov 97–Jun 98)

Graduate students supervised

PhD students

1. **Omer Ishag Eldai Mohamed**
   PhD Computer Science, Aalborg U Esbjerg, Jan 05
   Dissertation: *BB/CB-OHS: A Building Block for Component-based Open Hypermedia Systems*
2. **Claus Atzenbeck**
   PhD Computer Science, Aalborg U Esbjerg, May 06
   Dissertation: *Investigating Rich Structures to Support Users' Knowledge Work Tasks*
3. **Kirstin Lyon**
   PhD Computer Science, Aalborg U Esbjerg, projected Spring 07
   topic: spatial hypermedia systems
4. **Fredrik H. Madsen**
   PhD Computer Science, Aalborg U Esbjerg, projected Spring 08
   topic: knowledge representation in intelligence work

MS students / student groups

1. **Dirk Bucka-Lassen, Claus Ågård Pedersen, Ólavur Reinert**
   MS Computer Science, Aarhus U, Jan 99
   Thesis: *Cooperative Authoring using Open Spatial Hypermedia*
2. **Fredrik H. Madsen, Jens E. Meldgaard, Mads T. Toustrup**
   MS Computer Science, Aalborg U Esbjerg, Mar 05
   Thesis: *Calliope: A Post-structural Approach to Augmenting Documentation in Open Source Projects*
3. **Jeppe Moritz Hansen, Jens Iwan Jørgensen**
   MS Computer Science, Aalborg U Esbjerg, Mar 05
   Thesis: *Sherlock: Design of a Fuzzy Logic Querying Framework*
4. **Søren Kolind**
   MS Computer Science, Aalborg U Esbjerg, Jan 06
   Thesis: *Investigating Lost in Space Problems and User Distraction in Relation to Spatial Navigation*
5. **Ulrich Nicolaisen**
   MS Computer Science, Aalborg U Esbjerg, May 06
   topic: computer-supported collaborative work
6. **Henrik Hansen, Christoffer Hansen**
   MS Computer Science, Aalborg U Esbjerg, projected Jan 07
   topic: information visualization

Selected community service

Bay Area Habitat for Humanity
   Volunteer (Apr 08)
Bay Area Meals on Wheels
   Substitute driver (Jun 01–Dec 01)
House of Prayer Lutheran Church
   Sunday school teacher (Sep 01–Dec 01)
Delta Phi Alpha German Honorary Society
   President (Sep 93–Sep 94)
Texas Environmental Action Coalition
   President (May 91–Dec 91)
   Vice-President (Jan 91–May 91)
   Treasurer (Jun 90–Dec 90)
Texas Association of German Students
   President (Mar 92–Mar 93)
   Vice-President (Dec 91–Mar 92)
Texas A&M University German Language Club
   President (Sep 91–Aug 93)
   Vice-President (Sep 90–Sep 91)
Aggie Lutherans
   Member, Steering Committee (Oct 92–Feb 93)