

Peter J. Kammer

PO Box 64075
Sunnyvale, CA 94088
USA
+1 408 736 3749

pkammer@ics.uci.edu
<http://www.ics.uci.edu/~pkammer/>

Education

Ph.D., Information and Computer Science

June 2004

University of California, Irvine

“A Distributed Architectural Approach to Supporting Work Practice”

Committee: Prof. Richard N. Taylor (advisor/chair), Prof. Gloria Mark, Prof. David S. Rosenblum

M.S., Information and Computer Science

September 1997

University of California, Irvine

B.S., Magna Cum Laude, Computer Science

May 1992

Minor in Mathematics

St. Mary's University, San Antonio, Texas

Research Interests: Coordination and Collaboration Systems, Peer-to-Peer Technologies, Web-based Applications and Protocols, Software Architecture, Composable and Dynamic Software Systems

Research/Teaching Experience

Research Assistant

August 1995–January 2000

Information and Computer Science, University of California, Irvine

Researched, designed, and developed (in JAVA and ADA) complex large scale systems supporting workflow, process-centered environments, user-interface infrastructures, computer supported cooperative work, and web-based applications

Grants: (contributed to successful proposal, research, and reporting):

Open Technology for Software Evolution: Hyperware, Architecture, and Process (DARPA Evolutionary Design of Complex Systems program. 1997-1999).

Process/Workflow Technology in Support of Computer-Mediated Learning (University of California Microelectronics Innovation and Computer Research Opportunities Grant. 1997, renewed 1998).

Instructor

October–December 1997

University Extension, University of California, Irvine

Fundamentals of Software Engineering — Taught active practitioners fundamental elements of the software development lifecycle, including requirements, design, implementation, testing, and maintenance.

Teaching Assistant

April 1993–June 1995

Information and Computer Science, University of California, Irvine

- *Introduction to Computer Science II* — Abstract behavior of classic data structures (stacks, queues, priority queues, tables, trees), alternative implementations, analysis of time and space efficiency. Recursion. Object-oriented and functional programming. Models of computation.
- *Introduction to Software Engineering* — Introduction to the concepts, methods, and current practice of software engineering. The study of large-scale software production; software life cycle models as an organizing structure; principles and techniques appropriate for each stage of production.
- *Software Tools and Methods* — Concepts and techniques of constructing software in a systematic fashion, including detailed design techniques, specifications, programming methods, quality-inducing procedures, development tools, team techniques, testing, estimation, and performance improvement.

Non-Academic Work Experience

Member of Technical Staff

October 2005–Present

Google Inc., Mountain View, CA

Design, implement, maintain, document, and support internal applications that manage Google's business processes, impacting thousands of employees across international offices. Interact regularly with customers to define new system requirements and deliver new features in a short-cycle development process. Key technologies include JAVA, SQL, TOMCAT, XML, and LINUX.

Senior Software Engineer/Architect

January 2000–September 2005

Endeavors Technology Inc., Irvine, CA

Played a leading role in a software start-up company, taking on multiple functions in a dynamic environment. Designed and developed peer-to-peer infrastructures and applications based on JAVA, servlets, and other web technologies. Led development teams, allocating tasks and managing resources. Identified, researched, and developed new product directions. Presented products to customers and partners in North America and Europe. Worked directly with development partners and clients on system integration. Developed and conducted training sessions on system function and design. Managed patent filings and other intellectual property issues. (on-leave January 2003–July 2004 to complete Ph.D.)

Web-System Administrator

July 1997–January 2000

Associated Graduate Students, University of California, Irvine, CA

Selected, installed, and maintained systems with LINUX, APACHE, and related hardware/software to provide web services and networking capability for mixed platforms.

Student Analyst

October 1991–June 1992

Southwest Research Institute, San Antonio, TX

Designed and implemented configuration software for an industrial robotics application and an x-ray inspection system. Assisted in preparing and making demonstrations to clients. Wrote significant portions of the final documentation.

Programmer

February 1989–May 1990

Sears Telecatalog Center, San Antonio, TX

Designed, implemented, and administered a system to schedule seating of consultants with widely varying schedules at work locations.

Publications

Refereed Journal

P. J. Kammer, G. A. Bolcer, R. N. Taylor, A. S. Hitomi, M. Bergman, "Techniques for supporting dynamic and adaptive workflow," *Computer Supported Cooperative Work*, vol. 9, no. 3-4, 269-92, August 2000.

Refereed Conference

P. J. Kammer, R. N. Taylor, "An Architectural Style for Supporting Work Practice: Coping with the Complex Structure of Coordination Relationships," *2005 International Symposium on Collaborative Technologies and Systems*, 218-227, St. Louis, MO, May 2005.

P. J. Kammer, "Supporting dynamic distributed work processes with a component and event based approach," *22nd International Conference on Software Engineering (2000)*, 710-712, Limerick, Ireland, June 2000 (*Doctoral Workshop*).

P. J. Kammer, G. A. Bolcer, R. N. Taylor, A. S. Hitomi. "Supporting distributed workflow using HTTP," *Fifth International Conference on the Software Process*, 83-94, Lisle, IL, June 1998.

Weakly/Non-refereed

P. J. Kammer, "Distributed Groupware and Web Services," *CSCW 2002 Workshop: Network Services for Groupware*, New Orleans, LA, November 2002.

P. J. Kammer, "Building the Process: Component-Based Workflow Architectures in a Distributed World," *CSCW 2000 Workshop: Beyond Workflow Management: Supporting Dynamic Organizational Process*, Philadelphia, PA, December 2000.

G. A. Bolcer, M. Gorlick, A. S. Hitomi, P. J. Kammer, B. Morrow, P. Oreizy, R. N. Taylor. *Peer-to-Peer Architectures and the Magi Open-Source Infrastructure*. Whitepaper, Endeavors Technology Inc., December 2000.

P. J. Kammer and D. W. McDonald. *Putting Words to Work: Integrating Conversation with Workflow Modeling*. Tech. Report, UCI-ICS-99-30, Information and Computer Science, Univ. of California, Irvine, August 1, 1999.

P. J. Kammer, G. A. Bolcer, M. Bergman. "Adaptive workflow on the world wide web," *CSCW 1998 Workshop; Towards Adaptive Workflow Systems*, Seattle, WA, November 1998.

A. S. Hitomi, P. J. Kammer, G. A. Bolcer, R. N. Taylor. "Distributed workflow using HTTP: An example using software prerequisites." *1998 International Conference on Software Engineering*, Kyoto, Japan, April 1998 (*Formal Demo*).

Invited Presentation

Panelist: Impact of Peer-to-Peer Networking, *9th International Conference on Network Protocols (ICNP 2001)*, Riverside, CA, November 14, 2001.

Honors

Dissertation Fellowship, University of California, Irvine
Chancellor's Fellowship, University of California, Irvine
Society of Mary Scholarship, St. Mary's University

Professional Memberships: Association for Computing Machinery, IEEE Computing Society

Professional Service

Paper Reviewer:

International Conference on Coordination Models and Languages	April 1999
IEEE Transactions on Software Engineering	September/October 2000
ACM Conference on Computer Supported Cooperative Work	November 2004

Judge, Association for Computing Machinery (ACM) JavaQuest 1998, 1999, 2000
Evaluated entrants in international Java programming contest.

Representative, Associated Graduate Students, University of California, Irvine 1992-1999
Represented departmental interests in University-wide organization.

Computer Science Advisory Board, St. Mary's University 1991-1992
Advised on issues of curriculum, course content, and hiring.