



2003 ISR Research Forum: *Where Research meets the Real World*

Advance Program

June 17, 2003

University of California, Irvine - McDonnell Douglas Auditorium

<http://www.isr.uci.edu/events/Research-Forum-2003/>

This event brings together researchers, leaders in industry, and technical practitioners in a multi-disciplinary environment to:

- ✧ discuss current research areas and technical trends in the fields of software development and interactive collaborative technologies;
- ✧ showcase current ISR research;
- ✧ formulate visions on strategic future research and technological directions;
- ✧ encourage interaction among academia and industry through exchange of ideas and sharing of experiences.

A major **goal** is to encourage collaborative research and technology transition.

Themes. This year's Forum focuses on joint industry/academia concerns in decentralized applications, software design and architecture, interaction, collaboration, and requirements engineering.

Keynote Speaker: Dr. Alfred Z. Spector, Vice President of Services and Software, IBM Research Division



Abstract: Over the 50 years of modern computer science, computer systems have had a demonstrated capacity to automate an enormous variety of tasks, and per-tasks costs have been greatly reduced. However, there are two key challenges on the horizon: 1. In many areas, further declines in transaction costs by traditional means are subject to the laws of diminishing returns. 2. The complexity of infrastructure management threatens to outweigh the benefits of further automation. In this talk, I shall illustrate these two dilemmas and describe a research agenda aimed at them. One foundation of this agenda is process integration with a heavy focus on continual optimization – the application of mathematical techniques to optimize operations at many systemic level and at varying granularities of time. The other foundation is autonomic computing – work aimed at automating automation. I shall survey some research projects at IBM that are related to these two areas, but attempt also to more broadly describe the overall territory.

Bio: Dr. Alfred Z. Spector is vice president of Services and Software in IBM Research's Division responsible for setting IBM's worldwide research strategy in support of its Services and Software businesses. Recently, Dr. Spector was an Adjunct Professor at Columbia University's Computer Science Dept. and Senior Technical Strategist in IBM's Application and Integration Middleware (AIM) business, which has responsibility for a number of IBM software product families including CICS, WebSphere, MQSeries, and WebSphere Studio and Eclipse. Previously, Spector was the general manager of Marketing and Strategy for IBM's AIM business, and the general manager of IBM's Transaction Systems business. He was also founder and CEO of Transarc Corporation, a pioneer in distributed transaction processing and wide area file systems, and an Associate Professor of Computer Science at CMU. Prior to joining CMU, Dr. Spector was affiliated with the IBM San Jose (now Almaden) Research Laboratory while in graduate school.

Register online. The **Early Registration** deadline is Monday, June 9.

Registration by June 9:	General Admission - \$75	Sponsors - \$50	UC - no cost
Registration after June 9:	General Admission - \$100	Sponsors - \$75	UC - no cost

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- 1:30 - 1:45 **Welcome and Introduction**, Richard N. Taylor, Professor and Director of ISR and UC Discovery Program
- 1:45 - 2:30 **Panel: Web Services vs. Distributed Objects: Architectures for Decentralized Applications**
Chair: Rohit Khare, UC Irvine/ISR and KnowNow, Inc.
Panelists: Henrik Frystyk Nielsen, Microsoft
Additional panelists TBA
- 2:30 - 2:45 **Break**
- 2:45 - 4:15 **Presentations:**
"Toward Naturalistic Programming Systems",
Prof. Cristina Videira Lopes, UC Irvine/ISR

"Aspect Oriented Modeling", Phil Schmidt, The Aerospace Corp.

"Scenarios for Software Specification", Prof. Thomas Alspaugh, UC Irvine/ISR

"Activating the Social Workscape", Danyel Fisher, UC Irvine/ISR
- 4:15 - 4:30 **Break**
- 4:30 - 5:30 **Keynote Address: "On Demand Systems"**
Dr. Alfred Z. Spector, Vice President of Services and Software, IBM Research Division
- 5:30 - 8:00 **Reception at University Club (UClub) with Demonstrations and Posters**



Demonstrations and Posters (partial list)

Market Penetration of Visual Interfaces: An Analysis of Impediments (poster)

Student: Victor Gonzalez, Advisors: Gloria Mark and Alfred Kobsa

Balancing Privacy and Awareness needs in Distributed Software Development (poster)

Student: Sameer Patil, Advisor: Alfred Kobsa

Deployment Support in a Component Platform (poster)

Student: Chris Luër, Advisors: André van der Hoek

Palantir - Distributed Awareness in Configuration Management (poster and demo)

Student: Anita Sarma, Advisor: André van der Hoek

SimSE - A Simulation Environment for Software Engineering Education (poster and demo)

Student: Emily Oh Navarro, Advisor: André van der Hoek

Émigré: An Architecture-Based Framework for Migratory Applications (poster)

Student: Maulik Oza, Advisor: André van der Hoek

MCCM - Modularly Configurable Configuration Management (poster)

Staff: Ronald van der Lingen, Advisor: André van der Hoek

A Tool Set for Change Management and Feature Propagation within a Product Family Architecture (poster and demo)

Students: Akash Garg, Ping Chen, Christopher Van der Westhuizen, Matt Critchlow, Advisor: André van der Hoek

An Approach for Tracing and Understanding Asynchronous Systems (poster and demo)

Student: Scott Hendrickson, Advisor: Richard N. Taylor

Dynamic Architecture-based Adaptation of Distributed Software Systems: Techniques and Tools (poster and demo)

Student: Eric Dashofy, Advisor: Richard N. Taylor

Activating the Social Workscape (poster and demo)

Student: Danyel Fisher, Advisor: Paul Dourish

You've Got IM: Instantaneous Communication Among University Students (poster)

Student: Sophia Liu, Advisor: Paul Dourish

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