January 1997 Monthly Events Chronology			
Date of the Event	Event Sponsor	Location of Event	Web Site: http://v
January 8	Boston Siggraph	BBN	v-site.net/siggraph-ne
January 16	***GBC/ACM***	BBN	acm.org/chapters/gbc
January 21	Web Tech	MIT	acm.org/chapters/webtech
January 23	SPIN	GTE	cs.uml.edu/Boston-SPIN
January 23	IEEE/CS	MARCAM	
January 27	IEEE/CS	MITRE	
January 28	SIGCHI	LOTUS	

ARE YOU EXPIRED ?

If the top line of your mailing label below reads **EXPIRED**, please renew your membership at the very affordable rate of $10/yr. Please consider renewing for more than one year at time. It saves all of us some labor. For that $10 you get your very own copy of this newsletter/local event calendar. And, not to worry, we know our database can handle the century boundary because at least one member has paid through the year 2000! Thank you.

The Greater Boston Chapter of the acm

P.O. Box 465
Lexington, MA 02173

GBC/ACM is a non-profit educational and scientific society.

First Class
Presorted
U.S. Postage
PAID
Boston, MA
Permit Number
56536

First Class:
Dated Materials

The Official Newsletter of the Greater Boston Chapter of the acm

The Real Times

Vol.35 No.5 www.acm.org/chapters/gbc January 1997

The Paradigm Shift from Algorithms to Objects and Interaction
Peter Wegner, a professor of computer science at Brown University
Thursday, January 16, 1997

Time Light refreshments and informal discussion from 6:30 to 7:00 PM.
The formal part of the meeting starts at 7:00 PM.
The Newman Auditorium at Bolt Beranek and Newman (BBN), 70 Fawcett Street, Cambridge, MA

Overview

The paradigm shift from algorithms to objects and interaction captures the technology shift from mainframes to workstations and networks, from number-crunching to embedded systems and graphical user interfaces, and from procedure-oriented to object-based and distributed programming. Interaction is shown to be more powerful than rule-based algorithms for computer problem solving, overturning the prevalent view that all computing is expressible as algorithms. The radical notion that interactive systems are more powerful problem-solving engines than algorithms is the basis for a new paradigm for computing technology built around the unifying concept of interaction.

Biographical Information:

Peter Wegner, a professor of computer science at Brown University, was educated at London and Cambridge Universities, and taught at Cornell, Penn State, and the London School of Economics before coming to Brown. His research interests include programming languages and software engineering. His books include the first book on Ada and edited bookson research directions in software engineering and object-oriented programming. His research has included language design, concurrency, and type-theory issues in object-oriented programming. He is currently exploring component-based software technology as an integrating multiparadigm framework for object-oriented, distributed, and database technology.

Future Meetings

February 1997
Guaging the True Work Effort while Eliminating Defects by Paul Newcum

March 1997
Distributed Java Programming by Ken Arnold

For information please contact:
Prakash Govindarajulu,
(617) 621-0800 x109 (work)
(617) 329-5797 (home),
e-mail: Prakash_Govindarajulu@braintech.com

Directions to Bolt Beranek and Newman (BBN)/Recorded directions: (617) 873-4567

From Route 128, Lexington: Take Route 2 inbound. The four-lane highway narrows to two lanes near Route 16. At the traffic light bear right onto Alewife Brook Parkway. Proceed past shopping centers to the Fresh Pond Rotary. Take the first right onto Concord Avenue. Fawcett Street is one block down Concord Avenue, on the right.

From the Mass. Pike: Take the Pike inbound to the Cambridge/Allston exit. Exit onto the Cambridge off-ramp and take Cambridge Street. Turn left onto either Storrow or Memorial Drive. (Storrow Drive is on the Boston side of the Charles River and Memorial Drive.)

From Storrow and Memorial Drives: Take Storrow or Memorial Drive west: follow signs to Route 2,3,16. Remain on 2. The road will become narrow and winding. This is the Fresh Pond Parkway. Several car dealerships and Fresh Pond Seafood will be on the right. At the 1st rotary, take the third right onto Concord Ave. Continue straight at the second rotary. Fawcett is one block futher on right. Once on Fawcett St. the Newman Auditorium is about ½ block, on the right. Park in the lot on the right side of the street; the lot is adjacent to the auditorium building.

Public Transporation: Take the T to Harvard Square. From Harvard Square take the Concord Ave./Belmont Center bus. Get off at Fawcett St.

Real Times Managing Editor
Robert Epolito, (617) 438-1954 (home), epolito@tiac.net

GBC/ACM Officers(1996 -1997)

President
Ann Warren, (617) 495-5100 x267(work)
(617) 484-3428(home), warren@rmf.harvard.edu

Vice President
David Rosenberg, rosenberg@mit.edu

Secretary
Ed Bristol, ebristol@foxboro.com

Treasurer
Stephanie Collins, (603) 437-4868(home), jsmcollins@neu.edu

Past President
Jay Conne, (617) 776-0339 (home), conne@acm.org

Local Special Interest Group Chairs

GB/SIGCHI
Jim Abbott, jabbott@world.std.com

SIGGRAPH/Boston
Olin Lathrop, (508) 392-0881, olin@cognivis.com

GB/WEB TECH
Dennis McCarthy, (617)894-1964, maccarthy@acm.org

Standing Committee Chairs

PDS Committee
Peter Barzdines, (617) 924-4072 (home), peterbar@world.std.com

Monthly Meeting Committee
Prakash Govindarajulu, (617) 621-0800 x109(work)
(617) 329-5797 (home), Prakash_Govindarajulu@braintech.com

Publicity Committee
Frank Schwartz, (617) 862-7478 (work), schwartz@ccs.neu.edu

Membership Committee
Aaron Seidman, (617) 734-7820 (work)/(home)
image@world.std.com, http://world.std.com/~seidman/image.html

Network Services Committee
Michael Ciaraldi, ciaraldi@ciaraldi.com, http:www.acm.org/chapters/gbc

The Real Times is published ten times per year (September through June) and is the official newsletter of the Greater Boston Chapter of the Association for Computing Machinery, First or third-class postage paid at Boston, MA 02101, Lexington, MA 02173, and other post offices.

Timely notices of events, meetings, and other activities of interest to the Chapter's Membership should be submitted by the 10th of the month Before the intended issue and sent, with attention to the Managing Editor to:

GBC/ACM, P.O. Box 465, Lexington, MA 02173.

The Chapter's mailing list is available to related professional organizations or for commercial use. Please contact the Membership Chair at the address above when requesting mailing lists.

Subscriptions: Annual subscription cost is included in the Chapter Membership dues of $10.00. See top line on mailing label for membership expiration date. Library subscriptions are free. Please send orders for copies to the Chapter mailing address above.

Postmaster: Address changes should be sent to the mailing address above. Allow eight to ten weeks for changes to address or membership renewal to become effective. Send old label with address modifications.

SIGGRAPH/Boston
9th Annual Film and Video Show
Wednesday, Jan 8, 1997

PLEASE NOTE: We are holding this meeting on the second Wednesday instead of our regular first Wednesday.

Wednesday, January 8, 1997 6:30 PM
BBN Corporation Newman Auditorium
70 Fawcett Street Fresh Pond
Cambridge, MA Recorded directions: (617) 873-4567

Free admission Wheelchair accessible
Contacts:
http://www.v-site.net/siggraph-ne
Julie Satterfield julies@world.std.com (617) 325-5351
9th Annual SIGGRAPH/Boston Film and Video Show

Come and see the latest from production/animation houses, educational institutions, corporate, scientific/medical imaging, and more from the international SIGGRAPH 96.

Submissions from all the major players as well as lots of lesser known people working on interesting projects will be shown.
And be sure to come early: Seating is limited!

SIGGRAPH/Boston maintains a mailing list for e-mail announcements of meetings. Send e-mail to siggraphdistrib-request@cs.umb.edu if you want be added or dropped from this list.

ACM books listed on the WWW

by Robert Epolito, Managing Editor for the RealTimes

ACM Books Best Sellers List (alphbetical)

Advanced Animation and Rendering Techniques
by Alan Watt, Mark Watt

Computer Related Risks
by Peter G. Neuman

Computers Under Attack: Intruders, Worms and Viruses
by Peter J. Denning

Design Patterns for Object Oriented Software Developers
by Wolfgang Pree

Distributed Systems, 2nd Edition
by Sape Mullender

Graphic Design for the Electronic Documents and User Interfaces
by Aaron Marcus

Multimedia Systems
by John F. Koegel Buford

Software Process Improvement Network
(SPIN) January Meeting Announcement

Panel: Achieving Higher Maturity Practices

Guest Speakers:
Dan Nash - Raytheon
Bob Spillane - IBM
Stu Jeans - Lockheed Sanders
Albert Soule - Arthur D. Little

Tuesday, January 21, 1997
6:30pm (refreshments), 7:00-8:30pm (meeting)

HOST: Boston area Software Process Improvement Network (SPIN) (Admission Free)

LOCATION: GTE, Building #5, 77 A Street, Needham, MA (Wheelchair accessible)

INFO: Maureen Harris (617) 455-3393, harris.maureen@mail.ndhm.gtegsc.com or Ken Oasis (617) 563-4197, ken.oasis@fmr.com

UPCOMING MEETINGS:
February- Panel: Process Improvement Experiences

Overview

A growing number of organizations are achieving higher levels of maturity based on the Software Engineering Institute Capability Maturity Model for Software. These companies are proving that with higher maturity they have improved their software development productivity, cycle time, and quality. This panel session will focus on:

- what was necessary to achieve high maturity levels
- the basis for improvement prioritization?
- how software process improvement initiatives are linked with business goals
- how external organizations are affected
- how bottom line benefits were calculated

Take advantage of their lessons learned to move your organization toward higher maturity practices.

Panel Biographies

Dan Nash is a senior member of the SEPG at Raytheon Electronic Systems Software Laboratory - a 1300 person software development organization. In 1995 the SEPG won the 1995 IEEE Computer Society Process Achievement Award. Dan has had a variety of line and project management roles in his 22 years at Raytheon.

Stu Jeans manages the Software Engineering Process Department (SEPD) of Sanders, a Lockheed Martin Company. He has held this position since December 1994. Prior to that role, Stu was a Software Consultant for Digital Equipment Corporation focusing on process and software engineering environment issues.

Bob Spillane has spent 31 plus years with IBM. His vast experience covers software development, quality, and management development training. Bob has played various roles in process evolution at IBM's System 390 Software Design Center (S/390-SDC) in New York. Bob is currently with the OS/390 Software Program Office at S/390-SDC. Bob is the technical manager of S/390-SDC Quality Management System which includes maintaining our ISO9001 certification.

The panel moderator, Albert Soule, is a senior consultant at Arthur D. Little, Inc. where he provides clients with advice and training in program management best practices.

Directions: To get to GTE, Building #5:

From Route 128 in Needham, take exit 19A onto Highland Avenue East. At first traffic light turn RIGHT onto Second Street. Go 1/4 mile (passing hillside Sheraton entrance on right) and turn RIGHT onto A Street. Go 1/5 mile and immediately after GTE HQ building on left (multi story glass facade), turn LEFT into Visitor Parking lot. Go around to the back of the building and you will see the entrance. The security guard will direct you to the cafeteria.

WebTech

Building Portable User Interfaces in Java with Layout Managers

WebTech

Dan Jacobs, Tech Tonics Netsystems
January 21, M.I.T. 1-390

Overview

Building portable user interfaces in Java is made possible by the proper use of layout managers. This presentation addresses what layout managers are, how to use them and how to write them, focusing on the roles played by containers and platform peers. We will also compare and contrast the process of building interfaces using layout managers to using last year's wysiwyg form building tools.

Speaker Biography

Dan Jacobs is an independent consultant who specializes in Java. He has developed user interfaces in Java for several commercial products.

Directions

The meeting will be held on Tuesday, January 21, at 7pm. We will meet at M.I.T., in building 1, room 390 (Bechtel Lecture Hall). Building 1 is at the northeast corner of Massachusetts Ave. and Memorial Dr.

(IEEE continued from page 3)

Martin (Sanders), responsible for internal research in integrated information systems technology. Anna is currently with SKY Computers tasked to architect middleware for parallel environments.

Meeting is 6:00-9:00 PM at the A Lobby of The MITRE Corporation, Bedford, MA. Refreshments will be provided. For more information, contact Arkady Kanevsky at (617)-271-5352 or email arkady@mitre.org.

Directions to MITRE
From Rt. 95 -Take exit 32 (Rt. 3 north). Take exit 26 (Rt. 62). Right on Rt. 62. Left at the first light onto MITRE grounds. Follow road to the Right past the A-Building Lobby to parking on left. Please show a photo id to the guard in A-Building Lobby.
Also see URL <http://www.mitre.org/about/location/b-map.html>.

For Information contact
David M. Rosenberg
email: rosenberg@mit.edu
1-617-253-8054

JANUARY GB/SIGCHI MEETING ANNOUNCEMENT

Graphic Design 101: What Every Web Designer Should Know (but was afraid to ask)

Suzanne Watzman, Watzman Information Design

Tuesday, January 28, 1997
Time: Refreshments at 6:30, meeting at 7:00
Location: Lotus, One Rogers St., Cambridge, MA
(directions & parking info below)

Free and open to the public. Wheelchair accessible. For more info: Please contact Ron Perkins at rperkins@shore.net (email preferred) or (508) 465-6083.

Overview

Today's world is a truly visual one, with incredible amounts of new technologies and media available and bombarding us constantly. Ah, the joy of it all! The opportunity to publish anything, anytime, anywhere is upon us. However, all these possibilities are not without liabilities. These days, less is more, more is often less and too much is worse than none at all. As the need for "well-packaged" information increases (e.g. useful, understandable web sites), the requirement for quality design and presentation of information is even more critical. But before one looks at the Big (design) Picture, a fundamental understanding of visual design basics is necessary to provide a conceptual framework and improve visual design skills.

This session will be divided into two parts:

PART A: DESIGN PRINCIPLES will focus on design concepts that are the building blocks for making your design solutions useful, useable as well as attractive. This part will be the short form of Graphic Design 101, as we understand the whys and hows of creating successful design solutions that solve business problems, as well as look good and are easy and fun to use. The talk will cover topics such as:

- design process and planning—how to define, direct and quantify a good design process
- typography in context
  basics for the medium
- messages and meaning of color
- layout and page/screen design basics
  effective and efficient use of space
- organizational identity, standards and guidelines
- real world examples of design in context
- Design Checklist for Web Designers
- Napoleon's impact on typographic history**

**and those other design answers to questions you were always afraid to ask

PART B: The Good, the Bad and the Ugly will be a lively, web connected interactive Design Principles in Context session, complete with audience participation and critiques of your favorite and least favorite sites. Don't forget to come with your bookmarks. If possible, email your site URL ahead of time to Ms. Watzman at watzman@tiac.net. Continued on page 5

(continued from page 4)

Speaker Biography

Suzanne Watzman is founder and President of Watzman Information Design, a communication design and consulting firm whose work over the past 15 years has focused on making things easier to use and understand. Her work focuses on the effective and efficient presentation of information through analysis, design and planning, and implementation as applied in the context of today's business problems and other communication issues. Ms. Watzman's experience and work reflect the dynamic growth and pervasive nature of technology, as it impacts our ability to communicate and understand things easily. Ms. Watzman pioneered her methodology of Information Design, the presentation of information based on functional requirements and business goals of the company/products, as her work evolved from traditional graphic design projects to its current focus on presentation of visual interaction design, human interfaces, online information design and electronic publishing.

Ms. Watzman holds a B.F.A. in Graphic Design from the Rhode Island School of Design, with additional work at the Visible Language Workshop at MIT and Massachusetts College of Art. She has been advisor to the Bentley College Program in Business Communications, Datapro Reports on Electronic Publishing, a staff member of the M.I.T. Technical Communication Program and Executive Board Member of the Special Interest Group on Computer Human Interaction (SIGCHI) as well as founder and chair of their Visual Interaction Design Special Interest Group. In addition to her project work and consulting, Ms. Watzman teaches tutorials on Graphic Design for the Web and Human Interfaces for such groups as SIGCHI, IEEE, and Influent Technology Seminars.

Directions:
The Lotus building is on the corner of First St. and Rogers St. in Cambridge. (Note that there is another Lotus building on Cambridge Parkway next to the Sonesta hotel. Don't go to that one.) The meeting will be held in Auditorium A, on the first floor.

Directions from the West:
Take the Mass Pike East to Cambridge/Allston (Exit #18). Take Right Lane at the Fork and stay in right lane. Take right on to Storrow Drive. Once on Storrow Drive, stay in left lane to the end. Now follow the signs for Cambridge/Somerville. You will go 2/3 around Rotary. You are now on the McGrath/O'Brien Hwy. (Rte. 28). Go past the Museum of Science, which will be on your left. Follow directions from the Museum of Science, below.

Directions from North:
>From Rte. 1 & 93 South, take Exit 26, the Storrow Drive Exit. Now follow the signs for Cambridge/Somerville. (Stay to the right — don't go under tunnel). Take a left at the light onto Nashua St. Under the bridge, take right at light onto the McGrath/O'Brien Hwy. (Rte. 28) Go past the Museum of Science, which will be on your left. Follow directions from the Museum of Science, below.

Directions from South:

Take Route 3 to 93 North, and go past Airport Exit. Take 2nd exit after Airport (Exit 26 Cambridge/Somerville). Go down the ramp. (Stay to right — don't go under tunnel). Now follow the signs for Cambridge/Somerville. Under the bridge, take right at light onto the McGrath/O'Brien Hwy. (Rte. 28) Go past the Museum of Science, which will be on your left. Follow directions from the Museum of Science, below.

From the Museum of Science:
Go thru light and bear left (road will fork, do not go under the bridge). At the next light, take a left onto First Street. Go past the Galleria Shopping Mall on your left, past the traffic lights. The Lotus garage is on your left just before Rogers St. The entrance to the Lotus building is on First St. You go under an archway between two sides of the building and enter the lobby to the left.

PARKING - Drive up to the garage entrance on First St. and tell the guard over the speaker that you are there for the SIGCHI meeting and they will let you park in the Lotus garage.

MBTA Directions:
Ride the Green Line to the Lechmere stop. If you are switching from another line, get off at Haymarket or before and be sure to catch a Lechmere train (outbound direction). Exit the train at Lechmere station, walk to the right about 100 feet and turn right to walk through the tunnel. When you exit the tunnel, continue walking straight across through the traffic light and down First street. Go past the Galleria Shopping Mall on your left and past the traffic lights. The entrance to the Lotus building is on First St. You go under an archway between two sides of the building and enter the lobby to the left.

For information contact:
Ron Perkins, Principal Design Perspectives,
Usability Consulting and Design
O. St. Plum Island
508-465-6083 office Newburyport, MA. 01950
508-465-1041 fax

(...continued from page 2)

The Object Advantage: Business Process Re-Engineering with Object Techology
by Ivar Jacobson, Maria Ericsson, Agneta Jacobson

Object-Oriented Concepts, Databases and Applications
by Won Kim, Frederick H. Lochovsky

Object-Oriented Software Engineering: A Use Case Driven Approach
by Ivar Jacobson, Magnus Christerson, Patrik Jonsson, Gunnar Overgaard

User Interface Design
by Harold Thimbley

New from ACM Press Books:

Concurrent Programming in Java: Design Principles and Patterns
by Doug Lea, Sun Microsystems, Inc.

The Java Application Programming Interface, Vol. I and Vol. II
by James Gosling and Fank Yellin, Sun Microsystems, Inc.

The Java Class Library: An Annotated Reference
by Patrick Chan and Rosanna Lee, Sun Microsystems, Inc.

The Java Programming Language
by Ken Arnold and James Gosling, Sun Microsystems, Inc.

The Java Language Specification
by James Gosling, Bill Joy, and Guy Steele, Sun Microsystems, Inc.

The Java Tutorial: Object-Oriented Programming for the Internet
by Mary Campione and Kathy Walrath, Sun Microsystems, Inc.

The Java Virtual Machine Specification
by Tim Lindholm and Fank Yellin, Sun Microsystems, Inc.

IEEE Standards Survey
From: astowers@sei.cmu.edu (Alexis Stowers)

The IEEE Computer Society invites our readers to participate in a survey of its software engineering standards. If you are currently using IEEE software engineering standards, or have used them in the past, please visit the website at URL httpd://www.btg.com/IEEE to participate.

The survey will be conducted from January 1 - March 31, 1997. The IEEE Technical Council on Software Engineering has initiated a strategic review of IEEE Software Engineering Standards. Standards are the backbone of industry and trade. Practically all IEEE Software Engineering standards are adopted as the U.S. national (ANSI) standards. IEEE is world's largest professional organization, with over 300,000 members. It's largest part is the Computer Society; in turn, CS's largest part is Technical Council on Software Engineering - a body that stands behind all IEEE Software Engineering Standards.

The results of this survey will be presented in the Users of Software Standards workshop at the Third International Symposium and Forum on Software Engineering Standards (ISESS 97) to be held June 1-6, 1997 at the Mariott Hotel in Walnut Creek, CA and on the above URL. The recommendations from the workshop will be presented to the IEEE Software Engineering Standards Committee (SESC). ISO/IEC SC7 plenary meetings hosted by USA follow ISESS97 and the results of the workshop will also serve as input into the strategic planning sessions of SC7. The symposium consists of tutorials, paper presentations, and workshop sessions. The goal of the symposium is to capture users experience with IEEE software engineering standards in order to improve software engineering standards for the benefit of government, trade and industry. To find out more about the symposium and to read the call for papers visit the IEEE website at URLhttp://www.computer.org, contact the General Chair, John Harauz, at John.Harauz@hydro.on.ca, or contact the Program Chair, Dennis Lawrence, at Lawrence2@LLNL.GOV.

IEEE Computer Society Talk One

Thursday, January 23, 1997, 6:30 PM
at Marcam Corporation, Newton, MA

Architecting Client/Server Applications for the Intranet/Internet
Narayanan Krishnakumar, Ph.D., Fidelity Investments

Overview
Client/server computing has gained a significant following in the industry and many applications have used this model to architect scalable, highly available, and reliable applications. Client/server computing faces its next major challenge in coping with the internet. While there has been lively discussion about the pros and cons of thin clients versus fat clients in the client/server world, the internet and browser-based computation seems to encourage a thin client model. This is in line with the advent of network computers which can download all the software that is required. We will explore the conventional wisdom about thin versus fat clients in this context.
We will also examine the various developments with respect to computing on the Internet such as CGI, the various Web Server APIs, Java and its associated access models, ActiveX and CORBA. We will discuss whether the architecture of a high-performance system is impacted by the requirement for a Web-accessible application. We will examine how existing applications could migrate to Internet or Intranet-based clients and will cover some of the tools provided by vendors to support application migration.

Speaker Biography
Narayanan Krishnakumar (KK) received a B.Tech degree in Computer Science from the Indian Institute of Technology, Madras in 1987 and the M.S. and Ph.D. degrees in Computer Science from the State University of New York at Stony Brook in 1989 and 1992 respectively. Dr. Krishnakumar has been a research scientist at Bellcore and is currently a systems architect at Fidelity Investments. His interests are in high-performance transaction processing architectures, distributed object computing, workflow systems, and mobile computing. He has actively participated in several conferences and workshops, and was recently a guest editor for the Distributed and Parallel Databases Journal special issue on Databases and Mobile Computing.

Date: 23 January 1997, 6:30 PM, at Marcam Corporation. Coffee at 6:15 PM. A no-host dinner follows. More Info: Marcia Nizzari at (617) 563-3569 (Marcia.Nizzari@FMR.com).

Directions:
Take Route 128 to the Highland Avenue, Needham exit (the Muzi Ford exit). Turn left at the first light onto Hunting Road. Turn left at the first light onto Kendrick Street. Cross over 128, turn right at the first light onto Wells Avenue. Go about 0.2 miles to Marcam Corporation at 95 Wells Avenue. Turn right into the second entrance driveway.

IEEE Computer Society Talk Two
Computer Society & IEEE /TC
Complexity in Computing
Monday, January 27

Real-Time Message Passing Interface (MPI/RT) Standard
Anthony Skjellum, Mississippi State University Arkady Kanevsky, MITRE Corporation
Anna Rounbehler, SKY Computers

Overview
The demand for a portable, real-time parallel programming paradigm has grown with the increased popularity of parallel architectures. MPI/RT offers a middleware solution for programmers to create portable real-time applications. MPI/RT is a proposed set of extensions and restrictions to the existing MPI standard, designed to provide predictable, scheduled message-passing with quality of service for real-time parallel applications. This lecture presents the proposed standard and solicits feedback from the public. The target audience for MPI/RT includes programmers and system developers of embedded and high-performance real-time systems that include parallelism and/or distributed computing as part of their solution.
The proposed MPI/RT standard offers several real-time programming paradigms: time-driven, event-driven, priority-driven, soft real-time, and ad-hoc. Predictable real-time performance is achieved in MPI/RT by establishing user-defined paradigm-specific qualities of service for point-to-point and collective communication channels. The MPI/RT profiles range from tiny embedded profiles for resource-constrained systems to the full functionality of MPI and MPI/RT. Examples of how to use MPI/RT in radar, real-time control and sonar applications will be presented. Various hardware and software vendors participating in the development of the MPI/RT standard will be in attendance.

Speaker Biography
Anthony Skjellum is a graduate of the California Institute of Technology (B.S., M.S., Ph.D.). He is currently an Associate Professor of Computer Science at Mississippi State University, and NSF Engineering Research Center for Computational Field Simulation. He has been involved with message passing software research for eight years, with leading involvement in MPI-1 and MPI-2 Forums, including chairing the MPI Real-Time subcommittee of MPI-2.

Arkady Kanevsky holds B.S., M.S., and Ph.D. degrees in CS from the U. of Illinois. Since joining MITRE in 1993 he has been involved in research and development of real-time systems, high-performance computing and software engineering. He has served on various standard committees and program committees for many conferences that deal with real-time issues (including RTAS, ICECCS).

Anna Rounbehler holds a M.S. CS degree from U. Mass. at Lowell with interests in fast algorithms and parallel architectures. She has worked on advanced radar systems at Raytheon Corporation; and was a principal software engineer at Lockheed

(IEEE continued on page 4)