


Date of event	Page	Sponsor	Location
Sept 24	1	GBC/ACM	Hynes
Oct 3	4	GBC/ACM	Harvard University
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Oct 17	4	GBC/ACM	Umass-Boston
Oct 22	3	IEEE/CS	Mitre
Oct 31	5	GBC/ACM	Umass-Boston

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The Real Times

Vol.37 No.1

www.acm.org/chapters/gbc

Sept. 1998

GBC/ACM Monthly Meeting
September 24, 1998 at Hynes Auditorium
at Web98 Design and Development Conference
See www.mfweb.com for conference details

XML and Distributed Web Applications
with Jeremy Allaire

Meeting starts at 6:30 pm with refreshments
Presentation begins at 7:00pm

Abstract

The Web is rapidly moving into its next phase as a computing platform. Shifting from an isolated model where Web browsers and Web application servers are islands of data, to a rich distributed model where every node on the network becomes a leverage point for every other node. Driven by the requirements of the new Internet Economy, XML will play a central in forming the glue between disparate systems and nodes on this network. Jeremy will discuss this emerging landscape, and provide insight into an XML-based model that Allaire is developing for building distributed Web applications across any Web language or platform.

Speaker Info

Jeremy Allaire is a principal & director of technology strategy at Allaire Corp. As VP of Technology, Jeremy spearheads the company's future product direction and is responsible for establishing key strategic partnerships within the Internet industry. Jeremy has been a regular author and analyst on Internet

technologies for the past seven years.

Related session

Those interested in this talk will want to look into the first of the fall Professional Development Seminars, to be held Oct. 3, at the Science Center of Harvard University, Auditorium C.

This session is "XML and XLink", with Steve DeRose. More details can be found later in this issue.

This meeting is being held at **Hynes Auditorium**, instead of our usual location at Bolt, Beranek & Newman.

It is being held at the Web Design and Development Conference, by arrangement with the conference organizers. Details of the conference may be found at www.mfweb.com. You should register in advance for the Expo only portion of the conference at <http://www.mfweb.com/register/> (this is free in advance); or call (781) 821-6723 Mon-Fri 8:30am-5:30pm. Or you pay to register for the complete conference, see www.mfweb.com for details. Speakers will include Bruce Eckel, Larry Constantine, Jared Spool, and others on a variety of topics.

From the www.mfweb.com web site: "Web '98 has been designed from the ground up to be the ultimate conference for web professionals. The web designers who attend this conference are among a select group who influence technology and culture in a rapidly changing marketplace. Web '98 has quickly become the source for web professionals to meet, learn, and define the industry's future. "

Real Times Acting Editor

Jim Byrd (617) 628-6859(home), byrd@acm.org

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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:

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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.

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

New Officers Elected

New officers for the Greater Boston Chapter were elected at the regular monthly meeting on June 18, 1998. They are:

President: James S. Ganino, jsganino@acm.org

Vice-President: Jim Byrd, byrd@acm.org

Secretary: Ed Bristol, ebristol@foxboro.com

Treasurer: Stephanie Collins, jsmcollins@neu.edu

We Need an Editor!

Did you notice that perhaps the current Acting Editor isn't doing a good job on this issue? Did you look at it and say "Gee, I could do a better job than that."? If you would like to tackle this, please help us! We need an editor to handle the Real Times, and the PDS brochures. We currently use PageMaker and Acrobat, and can get you set up with those tools if necessary. Contact the current Acting Editor at byrd@acm.org. The acting editor offers apologies for the obvious mistakes in this issue, but it was considered more important to get this issue out as soon as possible rather than take the time to fix everything.

As you may have noticed, we are having trouble getting monthly meetings arranged on time, particularly arranging speakers. You can help! We need committee members to plan monthly meetings. Here is a chance for you to help us get our act together.

We have several other jobs that need doing. For example, we have a lot of historical material on paper. An archivist would be very useful.

SPIN meetings

This issue of *Real Times* is getting out too late to include the Septemter meeting of the Software Process Improvement Network, but you can keep track of future meetings at <http://www.cs.uml.edu/Boston-SPIN>. For SPIN info, contact Johanna Rothman, 781-641-4046, or jr@jrothman.com

For an enlightening look at current dangers of computer systems, it is worthwhile to follow comp.risks. This series is available either on comp.risks on usenet, or by email. To subscribe by email, send an email to risks-request@cs1.sri.com with the single word SUBSCRIBE in the message. Here are some recent items that have appeared in comp.risks:

Subject: Re: USS Yorktown

Last year, the Navy selected Microsoft Corp.'s Windows NT 4.0 for an automation program intended to reduce the need for sailors. Before the incident, the Navy called the Yorktown experiment a success that eliminated the need for 44 enlisted sailors and four officers and saved as much as \$2.7 million a year. After the incident, Navy officials blame the problem on human error and the database system, not Windows NT, and say no computer system is failure-free. (Navy officials also said future Smart Ships will have backup computers for use during a failure.) [PGN-ed abstractions from the *Wall Street Journal* (via NewsEdge Corp) "Was it Windows or human error?"]

Points that scare me:

1. Blaming the crash on human error (as if that will ever go away).
2. Having a single point of failure that can leave the ship dead in the water for hours. That would be fatal in combat.
3. Having the damage control functions depend

Seminar & Book Titles	Advance Registration	Walk-in	Enter Amount
XML and XLink	\$75	\$85	
<i>The SGML FAQ Book</i>	\$55	\$55	
Real-time System Design: Current Issues and challenges	\$75	\$85	
<i>Real-Time Systems Design and Analysis</i>	\$55	\$55	
COM and DCOM	\$75	\$85	
<i>The Essence of COM with ActiveX</i>	\$35	\$35	
International ACM#_____		Subtotal	
GBC ID#_____ or \$10 (required)		\$10	
Pay to GBC/ACM with Check or money order: Only		Total	
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on something as fragile as Windows NT. As late as 1985 the Navy was using sound powered phones for interior communications during combat because they were very robust and easy to repair. I doubt you can say the same about this new system.

4. "The system responded as it should." Can Capt. Hamilton really be that ignorant? The system was supposed to crash?

There are only three reasonable numbers in software engineering:

- 0 - You can't have it
- 1 - You can have one
- Infinity - You can have as many as your system can handle

Subject: Consultant is sued for expected Y2K computer malfunction

The clothing retailer J. Baker Inc. is demanding reimbursement from Andersen Consulting for the cost of a computer system installed in 1991, anticipating its Y2K malfunction. Andersen asked the court to rule that it met all of its contractual obligations. This is considered a landmark case, especially if it is determined that Baker never specified Y2K compliance when it specified the system requirements. [Source: Melody Petersen, Consultant Is Sued for Expected Computer Malfunction in 2000, *The New York Times*, 31 Aug 1998, PGN Abstracting]

Subject: DARPA leads fight against domain-name hackers

The Defense Advanced Research Projects Agency (DARPA) has awarded a \$1.4 million contract to Network Associates to develop a cryptographic authentication system for the Internet's domain-address system. The new system will enable the Net's routing points to verify the origin of any given Web page, preventing hackers from corrupting Web page caches or rerouting domain traffic altogether. It will not, however, prevent hackers from breaking into individual Web servers and changing pages. "That's not part of this particular approach," says the director of Network Associates' TIS Labs. The company is working with the Internet Software Consortium, which will distribute the security system to Unix vendors when it becomes commercially available. Beta versions are expected to be ready in about six months, with a final product on the market in about 18 months. (*TechWeb*A, 26 Aug 1998; Edupage, 27 August 1998)

Fall 98

XML and XLink

With Steve DeRose

October 3, 1998 (Saturday)

Harvard University, Science Center, Auditorium C

(not sponsored by the Science Center or Harvard University)

OVERVIEW:

This tutorial presents XML and XLink. Familiarity with the ideas of descriptive markup and basic hypertext concepts is assumed; however, no deep knowledge of the syntactical details is necessary. XML provides a way to define tag-sets for particular purposes as needed. XLink provides added functionality for hypermedia.

WHO SHOULD ATTEND:

People interested in a novice-to-intermediate tutorial in XML and XLink.

SEMINAR TOPICS:

- Principles of XML
- Comparison of XML to SGML, HTML, etc
- XLink
- XPointer
- XLink proper
- Latest work and visions from the XLink group

LECTURER:

Steve DeRose has worked on several hypermedia systems, starting with FRESS at Brown University. He co-founded Electronic Book Technologies and designed DynaText, DynaWeb, and other products. He is now Chief Scientist at Inso, and also Adjunct Associate Professor and Visiting Chief Scientist at Brown University's Scholarly Technology Group. He is active in standards including SGML, HyTime, DSSSL, the Text Encoding Initiative, and SGML Open.

SESSION CHAIR:

Ernesto Guerrieri, guerrieri@acm.org

Seminar Book Offer

The SGML FAQ Book: Understanding the Foundation of HTML and XML.

Steve DeRose

List: \$68.00 PDS Price: \$55.00

Fall 98

Real-Time System Design: Current Issues and Challenges

With Phil Laplante

October 17, 1998 (Saturday)

UMass, Boston Campus, Science Building, Lipke Auditorium

OVERVIEW:

Real-time systems have been the subject of study, debate and misunderstanding for over 40 years. For too long the chasm between theorists and practicing engineers has been wide, though slowly shrinking. In this course we look at what a real-time system really is, what special challenges a real-time system poses to those building them, and practical techniques for building real-time systems. A special look at usable research results is also included.

WHO SHOULD ATTEND:

This seminar will be especially useful to programmers involved with real-time systems.

SEMINAR TOPICS:

- Applets and applications
- Object-oriented programming
- Graphics
- Graphical User Interfaces (GUIs)
- Exceptions
- Multithreading
- Multimedia: Images, image maps, animation and audio
- Files and Streams - Networking
- Server communication

LECTURER:

Phil Laplante is President of the Pennsylvania Institute of Technology, and was the founding Dean of the BCC/NJIT Technology and Engineering Center. He has authored dozens of technical papers and ten books. He is a founding co-editor-in-chief of the journal, Real-Time Imaging (published by Academic Press) and the co-editor-in-chief of the IEEE Press book series on Engineering of Complex Computer Systems.

SESSION CHAIR:

Yaz Shaghaghi, yshaghaghi@draper.com

Seminar Book Offer

Real-Time Systems Design and Analysis

Phil LaPlante

List: \$69.95 PDS Price: \$55.00

Fall 98

COM and DCOM

With David S. Platt
October 31, 1997 (Saturday)

UMass, Boston Campus, Science Building, Lipke Auditorium

OVERVIEW:

COM (Component Object Model) is a binary standard for constructing software components, and knowledge of COM will become increasingly important for Windows software. Platt will show how to build COM objects, and will discuss several aspects of COM programming, including interfaces, GUIDs and the registry, MIDL, proxies and stubs, class factories, and ATL. Finally, he will show how to develop applications that run on multiple machines with DCOM (distributed COM).

WHO SHOULD ATTEND:

C++ programmers who are interested in COM and DCOM. Managers may attend but will be lost if they don't speak fluent geek.

SEMINAR TOPICS:

- Interfaces, QueryInterface, IUnknown
- Class IDs and the registry
- Marshalling
- MIDL
- ATL
- DCOM
- Microsoft Transaction Server

LECTURERS:

David S. Platt is the President of Rolling Thunder Computing and an instructor in Computer Science at Harvard University. He has taught several Bay Area ACM PDS sessions, and mentored development teams on COM for client companies all over the world. He has written articles on COM for Microsoft Systems Journal.

SESSION CHAIR:

Jim Byrd, byrd@acm.org

General Information

UMASS-BOSTON LOCATION

The seminar is in Lipke Auditorium, in the Science Building.

HARVARD LOCATION

The seminar is in Auditorium C of the Science Center, at Harvard University. Attendees may park in the lot 38 Oxford St. Do not park in other Harvard lots.

Schedule

8:30am - 9:00am	Registration (continental breakfast)
9:00am - 12:15pm	Morning session (break at 10:30am)
12:15pm - 1:30pm	Lunch (provided on-site)
1:30pm - 4:30pm	Afternoon session (break at 2:30pm)

REGISTRATION FEES

Included in the \$75 fee are seminar materials, lunch, and refreshments. Registrants not current members of the GBC/ACM are charged an additional \$10, and become members of the chapter for a year. This is distinct from ACM membership. Surcharge for on-site registration is \$10. Purchase orders, credit cards, faxes and e-mail cannot be accepted. Enrollment is limited and on a first come, first served basis. Early registration must be made by a check or money order at least three weeks in advance of the seminar to receive confirmation from GBC/ACM.

CANCELLATION & REFUND POLICY

Cancellations must be received in writing. The full fee will be refunded if the PDS Registrar receives written notification on or before the day of the seminar, addressed to GBC/ACM, PO Box 465, Lexington MA 02420-0005. Refund requests received after the seminar date will be subject to a \$15 administrative fee. The \$10 membership fee will not be refunded.

Any Questions?

See: <http://www.acm.org/chapters/gbc> or Call (781) 862-1181

Seminar Book Offer

The Essence of COM with ActiveX

David Platt

List: \$49.95 PDS price: \$35.00.

Making the Web Accessible to Blind and Deaf Users

Geoff Freed, CPB/WGBH National Center for Accessible Media

Thursday, October 8, 1998

Lotus, Cambridge, MA

Refreshments at 6:30, meeting at 7:00

<http://www.xensei.com/gbsigchi/>

The presentation will describe the Web Access Project of the CPB/WGBH National Center for Accessible Media (NCAM). Its mission is to develop and test technology to make World Wide Web sites accessible to deaf, hard-of-hearing, blind, or visually-impaired users and to coordinate efforts with other developers, researchers, and advocates.

A major focus of the talk will be the use of screen-reading technology, as used by blind and visually-impaired computer users, and will show how certain types of Web design can make it easier or more difficult for screen readers to navigate Web sites. There will also be a demonstration of recent advances in making multimedia on the Web accessible. Multimedia created with SAMI, SMIL, and QuickTime will be used to show how movie clips can be made accessible to all users, not just those who can see and hear.

Geoff Freed is Manager of External Projects for the CPB/WGBH National Center for Accessible Media. He is currently directing the Web Access Project, which studies ways to make the World Wide Web more accessible to users with disabilities.

Directions

The Lotus building is on the corner of First St. and Rogers St. in Cambridge, a few blocks from the Science Museum. (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.

One possible route: Get on Cambridge Avenue heading east. Cambridge Ave. starts at Sanders Theatre/Memorial Hall in Harvard Square. Proceed until you come to the Lechmere Green Line T stop which is above ground on the left. Turn right onto First St. Go a couple of blocks and watch for the entrance to the Lotus parking garage in the middle of the building on the left. If you need further directions, contact the editor.

PARKING - Parking is available in the Lotus garage provided you arrive before 7:00 p.m. 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. Exit 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.

Does your computer need a hobby?

You can donate unused computer time on your machine to a good cause by joining the Bovine Project, at www.distributed.net. You just install their software, and forget it. It creates a low-priority background process that uses idle CPU cycles on your machine, and cooperates with thousands of other computers around the world on large problems. The current problem being attacked is to break a 64-bit instance of the RC5 encryption code. Future projects under discussion include finding large Mersenne primes and participation in the SETI project. For the current RC5-64 project, if it happens to be your computer that cracks the code, you can win a portion of a cash prize offered by RSA Inc.

IEEE/Computer Society Meeting Announcement
The Promise and Reality of Collaborative Computing
Lucy Deus and Chris Eliopoulos
Thursday, October 22
at The MITRE Corporation

Meeting at 6:30 PM at A-Lobby, The MITRE Corporation, Bedford, MA.

An optional pay your own dinner follows.

For more information, contact Alan Brooks at (617) 271-6497
(abrooks@mitre.org).

Collaborative computing promises to bring together the right people at the right time in the right way to facilitate organizational success at a global pace. But do the promises match reality? We will characterize commercial collaboration tools, including asynchronous information sharing tools, real time conferencing tools that enable distributed meetings, and place-based /virtual community collaboration environments that promise to enable virtual co-location of teams. We will describe an architecture for collaboration services and discuss the role and support for security in collaboration tools. We will conclude with rollout strategies for collaboration technologies and discuss potential obstacles to collaboration.

In order to meet the faster tempo of today's operations and business, organizations need to bring all pertinent assets to bear in an efficient and timely fashion. Access to the right resources and/or people at the right time can make the difference between success and failure. Collaboration technology is now and will continue to be a critical enabler for organizational success. By bridging the historical gaps of distance, time, and organizational structure, collaboration technology allows for innovative rethinking of business processes and practices to better meet the demands of today's global economy.

Initial collaboration offerings predominantly consisted of asynchronous collaboration tools such as information sharing tools, discussion databases, group scheduling, and workflow. Real time collaboration tools such as audio and video conferencing, shared whiteboards, and shared applications are beginning to show a stronger presence and will become more tightly integrated into the desktop environment as vendors begin to supply these services bundled as extensions to the operating environment.

A common problem with many current collaboration technologies is the implementation of an all-or-nothing access control policy. This could leave collaborators' local systems and networks exposed to external information security threats. Although many commercial offerings enhance our collaboration capabilities, cross-organization collaboration can be a risky proposition until security-enhanced collaborative applications built to relevant standards are commercially available. Rollout strategies should include a combination of secure applications and network configurations, operational procedures, and security policies to protect the security of your site's network.

We will present an introduction to collaboration technologies - characterizing commercial offerings including asynchronous collaboration tools, synchronous collaboration tools, and place-based/virtual community collaboration environments. We will describe an architecture for collaboration services and discuss the role and support for security in collaboration tools. We will conclude with rollout strategies for collaboration technologies and discuss potential

Lucy Deus is a Lead Engineer in MITRE's Collaborative Infrastructure and Applications Group. She focuses on performing requirements analysis, technology evaluations, prototyping, and deploying collaboration technologies for the Department of Defense. Ms. Deus has spent the last ten years with MITRE and holds Bachelor of Science in Computer Science from the University of Rhode Island.

Chris Eliopoulos is a Lead INFOSEC Engineer for The MITRE Corporation. She has assisted various Department of Defense sponsors in implementing Information Security protection in mission critical applications and currently supports a number of efforts to architect and deploy secure collaboration environments. Ms. Eliopoulos received a Bachelor of Science degree from Merrimack College and a Master of Science degree from Boston University.

Directions to MITRE

From Rt. 128 (I-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 the road to the Right past the A-Building Lobby to parking on left. Please be prepared to show a photo ID (e.g., driver's license) to the A-Building lobby guard. Non-US citizens should also present a passport, INS card, or similar citizenship credential. Also see <http://www.mitre.org/about/location/b-map.html>.