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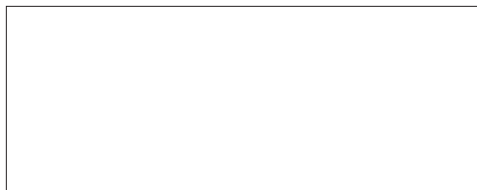


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# The Real Times

Vol.36 No.7

[www.acm.org/chapters/gbc](http://www.acm.org/chapters/gbc)

March 1998

## Nominations for Officers for 1998-99 of the Greater Boston Chapter of the Association for Computing Machinery

### PRESIDENT:

James Ganino is the current Vice-President. He has been active with the GBC's PDS Committee for the last six years as the financial planner for the committee and recently as a session chair for two seminars. James works at TASC, in Reading, MA, as a member of the technical staff both as a software engineer and as systems programmer supporting a variety of systems development, distributed simulations, and networking projects.

### VICE-PRESIDENT:

Jim Byrd has been a volunteer with the PDS committee for four years. Jim is a programmer, working for Atex Media Solutions, in Bedford.

### TREASURER:

Stephanie Collins is the current Chapter Treasurer. Prior to becoming the Treasurer, she was a member of the GBC PDS Committee for many years as analyst for our seminar feedback forms. Until recently, Stephanie was a Professor at Northeastern University in the Business School and is now a Professor at the Graduate School of New Hampshire College. She is also an independent consultant and developer of distributed client/server applications.

### SECRETARY:

Ed Bristol is our incumbent Secretary and a long time IEEE volunteer and leader. Ed is well known for his work and writing on Process Control Systems with some ninety papers published and numerous professional awards. Currently Ed is a Fellow at The Foxboro Co.

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There is no GBC/ACM monthly meeting scheduled at the time of this printing of the Realties.

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## InterChange'98 Conference Call for Papers

Greetings SDP,AMWA,ACM,IEEE Leaders; The Boston and Northern New England Chapters STC and the University of Lowell are hoping you will be able to promote our Regional Conference. We moved it to the fall this year because we were hit with snow 3 of the last 4 years - most recently an April Fool's Blizzard.

We are hoping you might include this in your calendars of upcoming events. Also - if any of your organizations have an e-mail announcement servers - please post this. If you are not the appropriate person, please forward and let me know whom I should contact.

We appreciate your assistance,  
Carol Carol Landers President, Boston Chapter STC  
GTE Government Systems Corp. Communication  
Systems Division Work: [carol.landern@gsc.gte.com](mailto:carol.landern@gsc.gte.com)  
Tel: (508) 880-2248,  
Fax: 880-1633

Set Sail for InterChange'98 - Call for Proposals  
InterChange is an annual two-day regional

conference co-sponsored by the University of Massachusetts Lowell and the Boston and Northern New England Chapters of the Society for Technical Communication. The conference is designed for technical, marketing, and scientific writers, market researchers, editors, managers, graphic designers, educators, and students. At InterChange, you can learn about some of the most important and most timely developments in the profession, and exchange ideas with practicing professionals. The InterChange '98 conference will be held October 19-21 at the Boxborough Woods in Boxborough, Massachusetts. This is the tenth annual InterChange conference and plans are underway to make it an enlightening and exciting three days, which will include pre-conference workshops October 19. To get a copy of the Call for Proposals (due May 1, 1998), check out our web site, or contact one of us. If you have something you would like to share with fellow technical communicators, we would love to hear from you. Mark your calendars now to attend in October and start putting together a proposal for a workshop or panel.  
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**SIGGRAPH/Boston**

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

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(781) 329-5797 (home), Prakash\_Govindarajulu@braintech.com**Publicity Committee**

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

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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:

**GBC/ACM, P.O. Box 465, Lexington, MA 02173.  
(781) 862-1181**

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.

**Software Process Improvement Network (SPIN)****March Meeting Announcement****"Bridging the Gap****With Software Process Automation"****Lawrence Gerard, Rational Software****(www.rational.com)****Neil White, aimware inc (www.aimware.com)****Tuesday, March 17, 1998****at 6:30pm (networking & refreshments), 7:00-8:30pm (meeting)****(Admission Free)****GTE, Building #5, 77 A Street, Needham, MA****(Wheelchair accessible)****Maureen Harris (617) 455-3393,****maureen.harris@GSC.GTE.com;**

Software process automation combines the concepts of process management with project management and workflow. Implementing process is tough enough without having to deal with the disconnect between the process and doing the work. Software process automation bridges this gap and makes process part of the day to day routine of the development team.

Mr. Gerard's presentation and demo will cover a brief overview of Rational's ClearGuide process automation solution. ClearGuide enables process as part of every activity in the project plan, linking the high level plans with how to get the work done. But it doesn't stop there. ClearGuide tracks the files created or changed for each activity and dynamically provides tracking data for all activities in the plan. With ClearGuide, the project plan becomes a dynamic repository with the most current information on what has happened and what needs to happen.

Mr. White's presentation and demo will cover how one software development company has dedicated it's efforts to automate it's own software development processes. aimware inc. has been fortunate enough to start with a clean slate with regard to it's software development practices. Many of the company's defined processes were already drafted prior to hiring staff and, from the beginning, tools were put in place to facilitate distribution and changes to the definition of internal practices. This presentation will show how one company is using software as a means to make life easier for it's development teams and to continually improve their own software development capability.

Lawrence Gerard is the ClearGuide Product Manager at Rational Software Corp. With 17 years in software development, Lawrence has over 10 years of experience consulting & implementing processes for the Software Configuration Management & Project Management disciplines. Neil White is a Software Process Improvement Consultant with aimware inc. a software development company that specializes in creating software for Software Process Improvement. Neil trained at the SEI and presented at the SEPG in San Jose and has delivered classes in Software Process Improvement classes both in the US and Europe.

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(continued from front page)  
 For more information or to volunteer,  
 contact Co-Chairs for InterChange'98,  
 Cindy Currie, e-mail at  
 CurrieC@mail.dec.com or at  
 (603) 884-2305, or Olga Lauterbach, at  
 olauterb@monet.CV.COM at (781)  
 275-1800 ext 1296, or visit the  
 InterChange web site (<http://www.interchangeconference.com>).  
 Maybe In a sidebar:  
 InterChange'98  
 October 19 - 21  
 Call for Proposals - due May 1, 1998  
<http://www.interchangeconference.com>

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**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 before GTE HQ building on left (multi-story glass facade), turn LEFT into Parking lot. Please enter at the cafeteria.

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**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. If you need detailed 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.

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| <b>Seminar &amp; Book Titles</b>                 | <b>Advance Registration</b> | <b>Walk-in</b>  | <b>Enter Amount</b> |
|--|-----------------------------|-----------------|---------------------|
| Concurrent Programming in Java                   | \$75                        | \$85            |                     |
| <i>Concurrent Programming in Java</i>            | \$30                        | \$30            |                     |
| Transaction Processing Overview                  | \$75                        | \$85            |                     |
| <i>Principles of Transaction Processing</i>      | \$30                        | \$30            |                     |
| The C++ Standard Library                         | \$75                        | \$85            |                     |
| <i>The C++ Programmingz Language 3rd edition</i> | \$30                        | \$30            |                     |
| International ACM# _____                         |                             | Subtotal        |                     |
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# Professional Development Seminars - 1998 Spring Series

## Concurrent Programming in Java

With Doug Lea, State University of New York at Oswego  
March 14, 1998  
Northeastern University

### OVERVIEW

The concurrency features of Java introduce opportunities for greater parallelism and problems of thread interaction not found in sequential OO programming. Concurrent OO design patterns provide ways to exploit this parallelism and solve problems caused by thread interdependencies. Doug Lea will present techniques for effective concurrent programming in Java.

### WHO SHOULD ATTEND:

Java programmers and others involved with building multi-threaded systems and applications.

### SEMINAR TOPICS:

- Concurrency features in Java threads, locks, and monitors
- Predefined libraries
- Concurrency control in Applets and the Abstract Windowing Toolkit
- OO Design Patterns:
- Encapsulating representations
- Running asynchronous commands
- Controlling state dependent actions
- Layering concurrency control
- Creating special locking constructs

### LECTURER:

Doug Lea is a professor of Computer Science at the State University of New York at Oswego and the author of Concurrent Programming in Java, Object-Oriented System Development, and many articles and reports. He has written a number of widely used software packages including several library routines (including gnu malloc) distributed by the Free Software Foundation.

### SESSION CHAIR:

Peter Mager, psm@tiac.net

## Transaction Processing Overview

With Phil Bernstein, Microsoft Corporation  
and Eric Newcomer, Digital Equipment Corporation  
March 21, 1998  
Northeastern University

### OVERVIEW:

This seminar describes mechanisms and products that address the stringent requirements of commercial transaction processing systems, including high reliability, predictability, availability and access from the Web.

### WHO SHOULD ATTEND:

Product developers in TP and related areas, such as operating systems and communications. Designers and developers of TP applications will also benefit.

### SEMINAR TOPICS:

- ACID Properties of a transaction
- Two vs. three tier approach
- TP systems performance and the TPC C benchmark
- Servers: Presentation, Transaction, Database & TP Monitors
- Workflow controllers
- Queued transaction processing
- Products: CICS, IMS, MS Transaction Server, Tuxedo, Encina,
- ACMS, Pathway/TS, TOP END
- Standards
- Commoditization of servers
- Merging of TP and OO technology
- Web based transactions

### LECTURERS:

Phil Bernstein, Repository Architect at Microsoft Corporation, has more than 20 years experience in transaction processing. Eric Newcomer is a TP consultant and program manager at Digital Equipment Corporation.

### SESSION CHAIR:

Jay Conne, conne@acm.org

## Seminar Book Offer

Concurrent Programming in Java  
by Doug Lea  
List: \$39.76 PDS Price: \$30.00

## Seminar Book Offer

Principles of Transaction Processing  
by Phil Bernstein & Eric Newcomer  
List: \$39.95 PDS Price: \$30.00

# Professional Development Seminars - 1998 Spring Series

## The C++ Standard Library

With Bjarne Stroustrup, AT&T Labs  
April 4, 1998  
Northeastern University

### OVERVIEW:

The structure, principles, and fundamental uses of the C++ Standard Library will be introduced by the author of the C++ language. Also, newer C++ features will be introduced in the context of library usage.

### WHO SHOULD ATTEND:

C++ programmers who want to learn about the newly ratified C++ Standard Library. A working knowledge of C++ is assumed.

### SEMINAR TOPICS:

- Significance of the standard library
- Simple examples
- Design of the standard library
- Library overview
- Container design
- Iterators, based containers, STL
- Exception safety
- Allocators
- Algorithms and function objects
- Strings and I/O streams

### LECTURER:

Bjarne Stroustrup is the designer and original implementor of C++ and the author of *The C++ Programming Language* (first edition 1985, second edition 1991), *The Annotated C++ Reference Manual*, and *The Design and Evolution of C++*. A graduate of the University of Aarhus, Denmark, and Cambridge University, England, Dr. Stroustrup is currently the head of AT&T's Large-scale Programming Research Department and an AT&T Bell Laboratories Fellow.

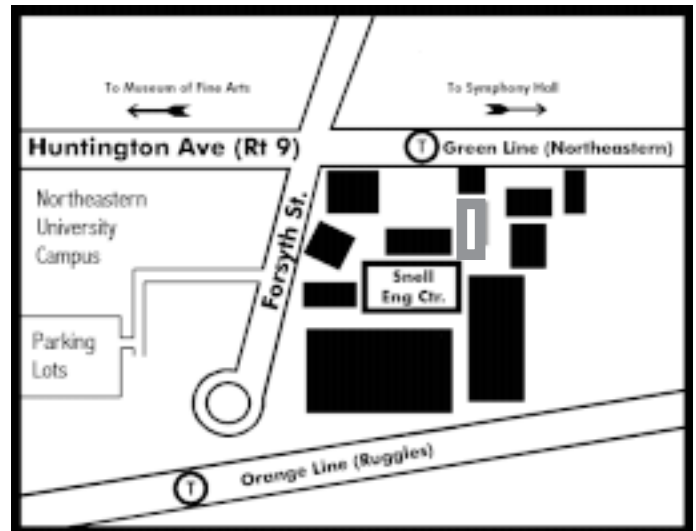
### SESSION CHAIR:

Robert Mathews, [rvm@world.std.com](mailto:rvm@world.std.com)

## GENERAL INFORMATION

### NORTHEASTERN LOCATION

Northeastern University, Boston, is within walking distance of the MBTA Green Line (Arborway/E Train) Northeastern station and the Orange Line Ruggles station. Free parking is also available.



### 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 02173. 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 (617)862-1181

## Seminar Book Offer

The C++ Programming Language, third edition  
(about a 75% rewrite of the second edition)  
by Bjarne Stroustrup  
List: \$42.99 PDS Price: \$30.00

**MARCH GB/SIGCHI MEETING ANNOUNCEMENT**  
**Voice Recognition for Consumer**  
**with Bennett L. Greenstein, Dan Gruen, Candace L. Sidner**  
**at Lotus Development Corp.**  
**on Wednesday, March 25, 1998**  
**Refreshments at 6:30, meeting at 7:00**

Voice recognition technology is finally reaching the point where developers can consider speech as a viable interaction modality for consumer software. Programs like Dragon's Naturally Speaking, IBM's Via Voice, and Kurzweil's VoicePlus, among others, are affordable packages boasting ever-increasing recognition accuracies. In addition to text dictation, these tools provide control of applications though often on a relatively low level, sometimes limited to speaking combinations of menu commands. They do not yet support the more complex conversations or rich descriptions of user goals people engage in with human assistants. The current interest in speech technology raises a number of important questions for the UI designer:

- 1 How does speech add real value as an interaction modality?
- 2 Where can speech recognition be more than just a novelty for people who are currently happy using keyboards and mice?
- 3 What can we learn from how people talk and work together to design speech enabled systems that feel natural and are truly useful?

We'll shed light on these issues through discussion of current Lotus product efforts around speech, and by describing an adventurous research project we are conducting with the Human Language Technologies research group at IBM.

#### PART ONE

Speech and SmartSuite (Bennett L. Greenstein)

Lotus is in the process of adding speech to SmartSuite. We'll discuss issues such as:

- 1 What is Lotus currently doing with speech in SmartSuite, and what are possible future directions?
- 2 What do users expect to be able to say to business applications, and how does this differ depending on the specific application?
- 3 What user interface changes are necessary to enable speech?
- 4 How much will speech really make a difference in business applications?
- 5 How can speech recognition technology help users who are mobile, disabled, or on the telephone?

#### PART TWO

The Conversant Assistant Research Project (Dan Gruen and Candy Sidner)

Lotus and the IBM speech group are working together on a Conversant Assistant, employing both speech and collaborative agent technology, to assist users with everyday tasks including email and calendaring. A crucial component of this effort is understanding how human assistants use speech to collaborate with their human managers, both currently, and in settings we created to allow people to jointly interact with the same tools.

We will describe our initial results from field observations and Wizard of Oz studies aimed at understanding how human assistants help their managers with everyday email and calendaring tasks. These studies support our efforts to construct a speech-enabled conversant assistant that will go beyond traditional command and control speech systems, maximizing the level of support provided by the computer and the benefits of speech as an additional interaction modality.

Bennett L. Greenstein

Bennett Greenstein is a Senior Product Designer for SmartSuite at Lotus Development Corporation, where his responsibilities include designing the user interface for voice integration and for Java and ActiveX support. He has been at Lotus for 10 years and has previously held positions as Business Development Manager for 1-2-3 Team Computing and as a Principal Software Engineer.

Earlier in his career, Bennett had staff positions and a private practice as a psychotherapist. He received an MSW from Simmons in clinical psychiatric social work, and has done other graduate work in computer science and in cognitive science.

Dan Gruen

Dan Gruen is a Research Scientist in the WorkGroup Technologies group at Lotus, where he applies his background in user-centered design and observational methods to a variety of projects, including portable and mobile devices, digital imagery, and the Conversant Assistant project discussed here. Dan received his Ph.D. in Cognitive Science under Don Norman at the University of California at San Diego. His research there, funded in part by Apple Computer, investigated how people manage multiple activities and handle interruptions in their everyday work. His earlier work dealt with tradeoffs in the design of graphical representations. Dan has taught cognitive engineering courses and has consulted on usability and interface design issues for a variety of industries, including interactive television, telecommunications, and computer-aided design. Prior to his doctoral work at UCSD, Dan served as a Vice President at Merrill Lynch, responsible for the design of database and analysis tools for bond traders.

Candace L. Sidner

Candy Sidner has been a research scientist at Lotus Development Corporation since 1993. She has done research in discourse processing especially in models of reference and discourse structure, and she has pursued research on modeling human-human collaboration as well as human-machine collaboration. She has also studied the use of email in organizations. Candy is a past president of the Association of Computational Linguistics (1989), and is a Fellow and past Councilor of the American Association of Artificial Intelligence. She received a Ph.D. from MIT in Computer Science.

(continued on last page)

**SIGGRAPH/Boston Meeting Announcement**  
**Wednesday, March 4, 1998**  
**Alias/Wavefront Introduces Maya**  
**Randy Goux - Kleiser-Walczak Construction Company**  
**Networking time at 6:30pm,**  
**announcements and feature presentation at 7:00pm.**  
**GTE Labs, Waltham, MA.**

#### Abstract

The entertainment industry's adoption of computer graphics as a mainstream content creation tool has fueled an ever increasing appetite for explosive visual effects in films, video, games, location based entertainment and even the web. Having successfully established the value of computer graphics (CG), the industry is now under pressure to create better digital content, faster and more economically than ever before. To meet these increasing requirements, Maya seeks to break down the barriers in both creative use and productivity which exist in today's 3D solutions. With the introduction of Maya, Alias/Wavefront delivers the most powerful integrated 3D software for creating the highest quality character animation and visual effects. Maya introduces a dramatically new approach to character animation and further strengthens Alias/Wavefront's leadership in visual effects technology. In addition, the advanced architecture delivers unmatched system speed and a streamlined workflow resulting in significantly increased artist productivity. Maya also provides an unprecedented level of openness allowing customers to easily extend the system to meet their specific production requirements. Maya is the beginning of an aggressive product development agenda focused on creative individuals which will continue to deliver significant enhancements and innovation in subsequent releases.

#### About the Speaker

Randy Goux is an animator for Kleiser-Walczak Construction Company in Western Massachusetts. KWCC creates digital effects for feature film, television commercials and special venues. Throughout its ten year history, KWCC has been on the forefront of computer graphic production and technology. Today KWCC is design partners with Alias/Wavefront and has been participating in the Maya Beta program since summer 1997. Before joining the team at KWCC, Randy was an animator and producer at WGBH TV Boston, where his responsibilities included creating on-air graphics for local and national PBS productions. Randy has received an Emmy and several BDA and PROMAX awards for his work in the field of animation.

#### Directions to GTE Labs.

From Route 128 (interstate 95), get off at exit 27B, Winter Street, in Waltham.

From I-95 (128) South the exit leads you right onto Winter Street. From I-95 (128) North, turn right at the light at the end of the exit, onto Wyman Street, turn right again at the next opportunity, onto Winter Street and cross over I-95.

Go West on Winter Street through 3 closely spaced traffic lights, staying in the right lane. The Cambridge Reservoir appears on your right and the entrance to GTE Laboratories (40 Sylvan Road) is on the left. About halfway past the buildings, turn right under a pedestrian bridge joining two

## Humor Time

submitted by J. Conne

Scientists at NASA have developed a gun built specifically to launch dead chickens at the windshields of airliners, military jets and the space shuttle, all traveling at maximum velocity. The idea is to simulate the frequent incidents of collisions with airborne fowl to test the strength of the windshields. British engineers heard about the gun and were eager to test it on the windshields of their new high speed trains. Arrangements were made. But when the gun was fired, the engineers stood shocked as the chicken hurtled out of the barrel, crashed into the shatterproof shield, smashed it to smithereens, crashed through the control console, snapped the engineer's backrest in two and embedded itself in the back wall of the cabin. Horrified Britons sent NASA the disastrous results of the experiment, along with the designs of the windshield, and begged the U.S. scientists for suggestions. NASA's one sentence response: "Thaw the chicken."