

Joint Boston/Central New England Chapter of IEEE Computer Society and GBC/ACM Meeting

Thursday, November 20, 2008

Open-architectures for Reading, Writing & Computing with Genomes

Lecturer: Professor George Church, Harvard Medical School

Time: 7:00 pm

Location: Broad Institute Auditorium (MIT building NE-30)

Details: http://www.gbcacm.org/node/147

Overview: Relative to a reference human genome, your personal genome has about 10,000 DNA variations which affect final protein function and 3 million which do not. While "association studies" of common DNA variations with diseases yield, so far, weak predictive power and few causative mutations, researchers expect that this will be soon remedied by genome-wide sequencing. Second-generation sequencing (multiplex cycles of fluidics and imaging) has brought costs down since 2004 by 10,000fold \$300M to \$30K -- and less than \$1000 via targeted sequencing including coding variants (~1% of the genome), regulation, microbes and immune response (quantitated by sequencing). Polonator.org is the only of the second-generation that has open architecture for hardware, software, and wetware - and 4-fold less expensive. Similarly PersonalGenomes.org is a uniquely open effort to integrate the above genomic data with comprehensive sets of medical and non-medical traits. We are collecting over 20 terabytes of raw genomic data or each of 100,000 research subject volunteers -- which boils down to less than a gigabyte each of differences from the reference genomes and quantitative genomic and trait data. Like DNA sequencing, raw DNA synthesis has come down in cost by 7-logs since 1980, but the next challenge currently being met is applying this to "programming" organism-level functions – by developing computer-aided design, new homologous recombination instruments, lab-scale accelerated evolution and personalized stem cells.

Lecturer Bio: George Church is Professor of Genetics at Harvard Medical School and Director of the Center for Computational Genetics. With degrees from Duke University in Chemistry and Zoology, he co-authored research on 3D-software & RNA structure with Sung-Hou Kim. His PhD from Harvard in Biochemistry & Molecular Biology with Wally Gilbert included the first direct genomic sequencing method in 1984; initiating the Human Genome Project then as a Research Scientist at newly-formed Biogen Inc. and

a Monsanto Life Sciences Research Fellow at UCSF with Gail Martin. He invented the broadly-applied

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Please check for any last-minute changes to meeting arrangements by visiting the GBC/ACM website http://www.gbcacm.org before the meeting.

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Timely notices of events, meetings, and other activities of interest to the Chapter's Membership should be submitted by the 15th of the month Before the intended issue and emailed to: editor@gbcacm.org

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The Chapter's annual membership dues is \$10.00 and may be renewed online or via mail. Membership renewals via mail should be mailed to: **GBC/ACM, P.O. Box 465, Lexington, MA 02420**

Online membership status lookup is currently not available. For membership status or any other questions, please email membership@gbcacm.org.

Open-architectures for Reading, Writing & Computing with Genomes

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concepts of molecular multiplexing and tags, homologous recombination methods, and array DNA synthesizers. Technology transfer of automated sequencing & software to Genome Therapeutics Corp. resulted in the first commercial genome sequence (the human pathogen, H. pylori, 1994).

He has served in advisory roles for 12 journals (including Nature Molecular Systems Biology), 5 granting agencies and 24 biotech companies (e.g. recently founding Codon Devices and LS9). Current research focuses on integrating biosystems-modeling with the Personal Genome Project & synthetic biology.

Directions: This joint meeting of the Boston/Central New England Chapter of the IEEE Computer Society and GBC/ACM will be held in the Broad Institute Auditorium (MIT building NE-30). The Broad Institute is on Main St between Vassar and Ames streets. You can view the location on the map found here http://whereis.mit.edu/map-jpg?zoom=level2¢erx=710846 ¢ery=496467&oldzoom=level3&map.x=340&map.y=72. The auditorium is on the ground floor near the entrance.

For more information contact Peter Mager (p.mager at computer. org)

Online chapter membership signup and renewal now available!

We now offer chapter membership signup and renewal payments online using Google checkout. The annual chapter membership fee is still currently \$10.00 and you can pay for multiple years. The membership payment page is located at the following URL.

http://www.gbcacm.org/membership/join

If you have any questions, please contact the membership volunteer at membership@gbcacm.org

IMPORTANT NOTICE - PLEASE READ

Since January 2007 - we have switched from a hard to soft copy of the Real Times. In order to send you notification of the Newsletter posting, we need your email address. We are asking members to send their email address to membership@gbcacm.org.

Please include your first and last name, if you would like to receive email copy/notification of the Real Times soft copy.

The Agile Bazaar Chapter of the ACM as Easy as You Session Information:

Topic: Deep Agile 2008 - Not as Easy as You Thought

Date/Time:Sat-Sun, November 8-9, 2008, 9:00am to 5:00pm

Speaker: James Coplien and Bob Martin

Location: MIT Room E51-345, Cambridge, MA

Overview: The sparks will fly when two passionate professionals - Jim Coplien and Bob Martin - square off to make the world safe for software development. In the corner of architecture, patterns and agile is Jim Coplien. Driving the necessity of test-based design is "Uncle Bob" Martin.

Each will use their long track records, numerous case studies, and success stories to argue that they have the answers you need to deliver successful projects and products. The difference here is that we are presenting both sides of the story, working with Jim and Bob to show how both approaches meet in the arena of professional software development.

Come prepared to be surprised and have your assumptions questioned! Our goal is to get well beyond the buzzwords and introductory agile ideas – and to get you thinking.

Price: Only \$545 at the Earlybird rate. That expires on Oct 14th so don't put off registering! We'll make it even easier when you register – enter this discount code: DA2008BP2FT for a further \$50 off. You'll pay only \$495 – a full \$155 savings off the standard price!

Space is limited to 90 in this MIT seminar room and we are expecting to sell out early. So register early! Go to http://agilebazaar.org/

- What Makes Agile Hard to Deliver? Don't repeat others' mistakes. Find out how the experts handle the recurrent problems that plague Agile initiatives.
- Agile and Architecture: How Much is Enough? Can good design emerge from TDD or should you use patterns to create an architecture upfront?
- Agile and Patterns: As co-founder of the software patterns community, James Coplien has some strong opinions on where Agilistas are going wrong.
- TDD Essential Discipline or Harmful Fad?: Can Test Driven Development create bad habits, or poor design? You can't find two more knowledgeable gurus to debate it than Bob and Jim!
- Evening Pub Session: Patterns on Steroids -Gaze into the depths from whence emerged the patterns concepts where else but at a pub, over beers, with James Coplien!
- Lean vs. Agile: How does a philosophy born in manufacturing guide software architecture? Or should it? Find out where it matches or misses.
- Agile and Professionalism: Good software architecture is at the core of too many essential services and products for us *not* to consider this a profession. But what does that entail?
- Panel Discussion/Open Discussion: Your chance to join in the discussion of the two days content with the speakers and panelists. Test out your new insights!

November 2008 Meetings

BostonPHP

Please note that the Boston PHP November User Group has been cancelled.

New England Java Users Group

Topic: 10 Years of Java and the JVM - Happy Birthday NEJUG

Location: Sun Microsystems 1 Network Way Burlington, MA

Abstract: Come and join us for a review of Java Technologies over the last 10 years as we celebrate our 10th birthday. During this meeting the last 3 NEJUG presidents will get together to review hot technologies we all played/worked/fought with over the last 10 years. Looking at prior NEJUG presentations we will look at why we thought the technology was hot, whether it really worked for us, whether it lasted, and if it did last, how it evolved.

Details: http://www.nejug.org/events/show/79

Call for Volunteers

There are many opportunities to help in the GBC/ ACM. If you are interested in volunteering your time, please review the current volunteer opportunities listed below. If anything appeals to you or if you have a skill you would like to share, please contact Volunteer Coordinator, Jay Conne, M:(617) 470-5038, volunteer@ gbcacm.org

Open opportunities: Membership Committee, Hospitality Committee, and Keeper of the Box

"Never doubt that a small group of thoughtful committed citizens can change the world; indeed, it is the only thing that ever has." - Margaret Mead

ICCA Boston Chapter

Topic: Consultants Chat - Bring your own agenda

Date/Time: November 18th, 2008 6:30 PM

Location: Little India 425 Moody Street Waltham, MA

Overview:

* Want to find out what your fellow consultants are up to?

* Have a question (technical or business) you'd like to discuss with a consultant?

* Have a topic you'd like to discuss with a group of consultants in an informal setting?

Admission: Free, but pay your way for dinner

Boston CHI

Topic:Regular Meeting - Chris Hart of theInstitute for Human-Centered Design

Date/Time: Tuesday, November 11th, 2008 6:30 PM

Location: Sun Microsystems, Burlington, MA

Speakers: Chris Hart

Details: http://www.bostonchi.org

Abstract:	TBA
Directions:	http://www.bostonchi.org/directions.
html	

Software Quality Group of New England (SQGNE)

Topic: Estimating using Wideband Delphi Method -An interactive exercise Speakers: How Dow and Steve Rakitin

Date/Time:	Wednesday, November 12th 2008		
	6:00pm - 6:30pm	Networking	
	6:30pm - 8:00pm	Presentation	
Location: Directions: tions.html	Sun Microsystems, B http://www.swqual.co	•	

November 2008 Meetings (continued)

Boston SPIN

Topic:	Building Your Coaching Skills	
http://www.boston-spin.org/		

Date/Time: 7	uesday, November 18th 2008	
6:00-7:0	0 Networking with pizza	
6:00-6:4	5 Roundtables (also with pizza)	
7:00-7:1	0 Announcements and Elections of	
Officers for 2008-2009		
7:10-8:1	0 Presentation	
8:10-8:2	5 Questions and Answers	
8:25-8:3	0 Raffles and Gifts	
Speaker: Johanna Rothman		
Location: The MITRE Corporation		
S Building		
Bedford, MA		

books:

- 2008 Jolt Productivity award winning Manage It! Your Guide to Modern, Pragmatic Project Management - Behind Closed Doors: Secrets of Great Management (with Esther Derby) - Hiring the Best Knowledge Workers, Techies & Nerds: The Secrets and Science of Hiring Technical People

- Corrective Action for the Software Industry (with Denise Robitaille).

Her book on project portfolio management will be available in early 2009. Johanna is also a host and session leader at the Amplifying Your Effectiveness Conference. Find more of Johanna's articles and her blogs at www.jrothman.com.

Agile Boston

Topic: Self Organization in Scrum - How It Works and When It Doesn't

Speaker: Dr. Jeff Sutherland

Microsoft Waltham 201 Jones Rd., Sixth Floor Waltham, MA 02451

Overview: Scrum was designed for hyper-performing quality of waterfall teams. It is linearly scalable across geographies to any size. High performance depends on the self-organizing capability of teams. Understanding how this works, and how to avoid destroying selforganization, is a challenge. Attend this session to learn about how Scrum teams can best self-organize, and how to enable that process such that the hyperproductive state can be achieved.

Speaker bio: Dr. Jeff Sutherland is the co-creator of the Scrum methodology. His pioneering work is well documented throughout the world. Jeff Sutherland travels the world consulting to executives, managers and development teams. He is a prolific author and one of (if not THE) foremost authority on the Scrum methodology. You can register here: http://www.newtechusa.com/ agileboston/meetings/2008-11-25-Sutherland.htm

Abstract: Coaching is one of the most important - and most difficult - responsibilities of technical people. And the more management responsibilities you have, or the more Agile a team you work with, the more you **Date/Time**: Tuesday, November 25th, 2008 6:30 PM need to coach. Too often, people struggle and fail when it comes to coaching others to excellence. Sometimes, Location: managers make the mistake of trying to coach someone into performing work in a way that doesn't fit for that person. Other times, the coaching isn't explicit about how to perform work in a new and different way. In this presentation, we will explore four practical teams that operate at 5-10 times the velocity and steps to help you assess your team members' skills and recognize when coaching is appropriate. If we're lucky, you'll have a chance to try coaching in one way. Bring your most challenging coaching situation and come prepared to practice! mainstream.

Speaker bio: Johanna Rothman helps managers and leaders solve problems and seize opportunities. She consults, speaks, and writes on managing hightechnology product development. She enables managers, teams, and organizations to become more effective by applying her pragmatic approaches to the issues of project management, risk management, and people management. Johanna publishes The Pragmatic Manager, a monthly email newsletter and podcast, and writes two blogs: Managing Product Development and Hiring Technical People. She is the author of several

November Meetings (continued)

Boston Linux & Unix Users Group Topic: OpenStreetMap Overview

Date/Time: Wednesday, November 19th, 2008 6:30 pm - 9:00 pm

Location: MIT Building E51, Room 376

Speaker: Richard Weait talks about OpenStreetMap, the Free Wiki World Map

Overview: Richard will discuss OpenStreetMap in his engaging and enthusiastic style. You'll learn a bit about the history of OSM, but not so much that you fall asleep. You'll see the amazing growth of OSM since its founding. And Richard will display some of the uses of OSM that already outstrip commercial mapping systems.

You should see this presentation if you find maps at all interesting. He'll cover enough OSM to show you what it is, why you will care, and how you can get started contributing either code or GIS data to OSM. You'll see enough of the basics to take the sting out of the learning curve in a project as far reaching as OSM.

BeanTown.Net INETA User Group Topic: Four Short Talks by Four Speakers

Date/Time: Thursday, November 6th, 2008 6:00 pm - 8:00 pm

Location: Hollister, Inc.

75 State St., 9th Floor Boston, MA

Speakers:

Josh Melvin – "Break Out Of Your Cell: Tableless HTML Layout"

Jerry Feldman – "A 30 Minute Intro To Linux" Benjamin Day – "What I learned at Microsoft PDC 2008"

Thaddeus R. F. Fulford-Jones – "30 Minute Overview Of The Mobile World"

We'll now be hosting our meetings at Hollister

Staffing's offices at 75 State St. in Boston.

A quick word about the RSVP process: Security at 75 State St. is a lot tighter than at Adesso. When we were meeting at Adesso, the RSVP was only for the pizza count. Now, you'll need to RSVP so that we can put your name on the security list to get into the building. I'm working with Hollister to try to find a way around this but until you hear otherwise, please RSVP for the meeting. Even if you're not 100% sure that you're coming, send an RSVP so that we can get you and anyone you bring with you on the security list.

As always, our meeting is open to everyone so bring your friends and co-workers. If you're planning to come, please RSVP via email by 3pm on 11/06/2008. Email address is: benday at benday dot com

December 2008 Preview

BeanTown.Net INETA User Group

Date:Thursday, December 4Topic:"Skinning Silverlight Controls"Time:6:00pmLocation:Hollister, Inc., 75 State St.

Boston CHI

Date:Tuesday, December 09Topic:"TBA"Time:6pmLocation:Sun Microsystems, Burlington

SWQGNE

Date:Wednesday, December 10Topic:"Integrating Agile"Time:6pmLocation:Sun Microsystems, Burlington

IEEE & GBCACM

Date:Thursday, December 11Topic:"Computational Information Design"Time:7pmLocation:Broad Institute Auditorium
MIT building NE-30

Boston Linux & Unix Users GroupDate:Wednesday, December 17Topic:"TBA"Time:6:30pmLocation: MIT Building E51, Room 376

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*** November/December 2008 Events Calendar ***

If your membership has expired, please consider renewing it for one or more years. Currently the membership fee is only \$10/year. Your support helps make possible the wide array of GBC/ACM activities.

Are you a member? Is your membership expired? *

Join! The \$10 annual membership fee offers many opportunities for development through regular and engaging interaction with local contemporaries, in addition to access to our popular PDS seminars. Paying for multiple years can save effort for you and us. Please mail in your membership form today!

Please contact membership@gbcacm.org to find out your membership status.

NEW - Online membership sign-up and renewal available. Please see instructions on Page 2

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