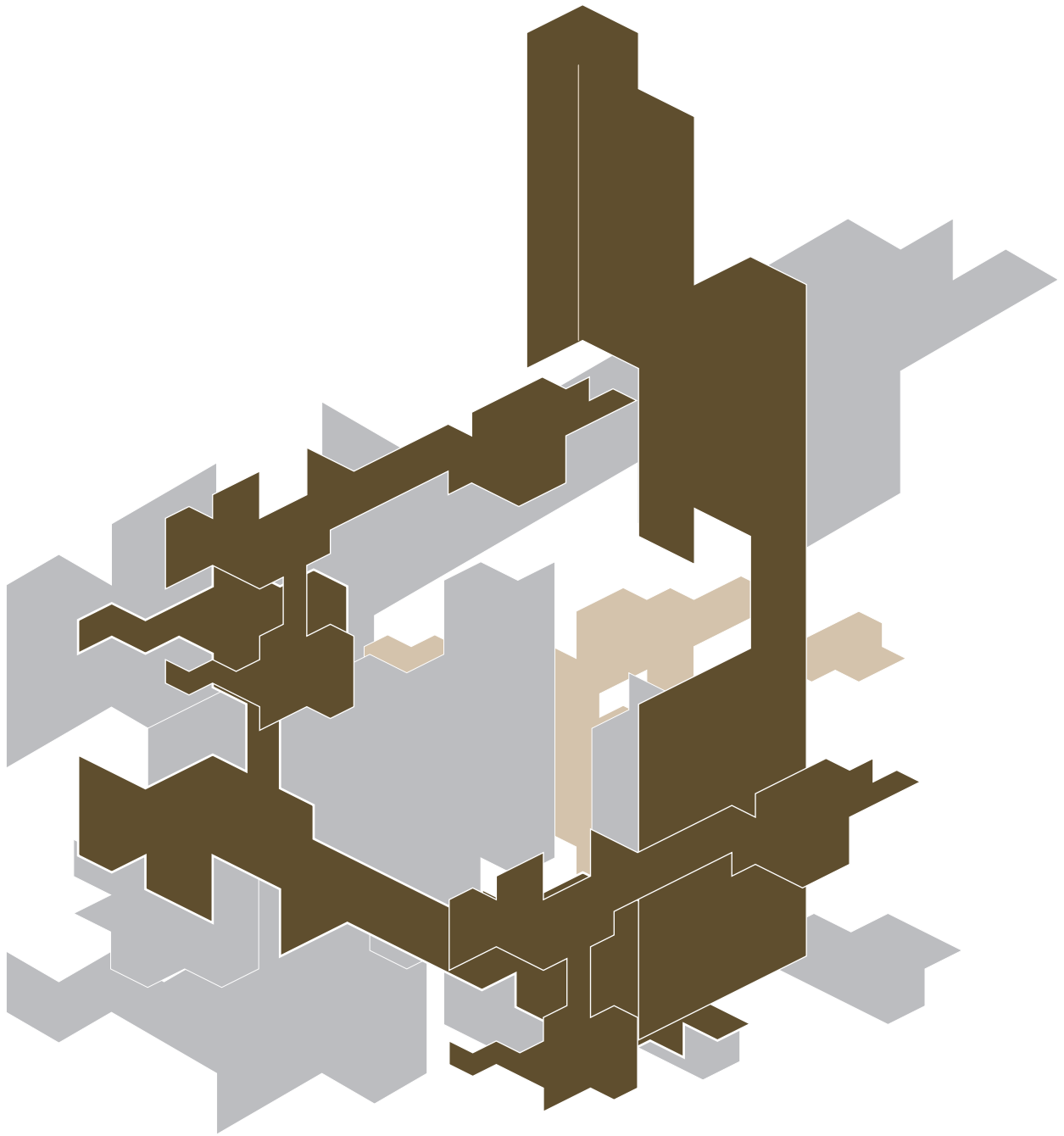
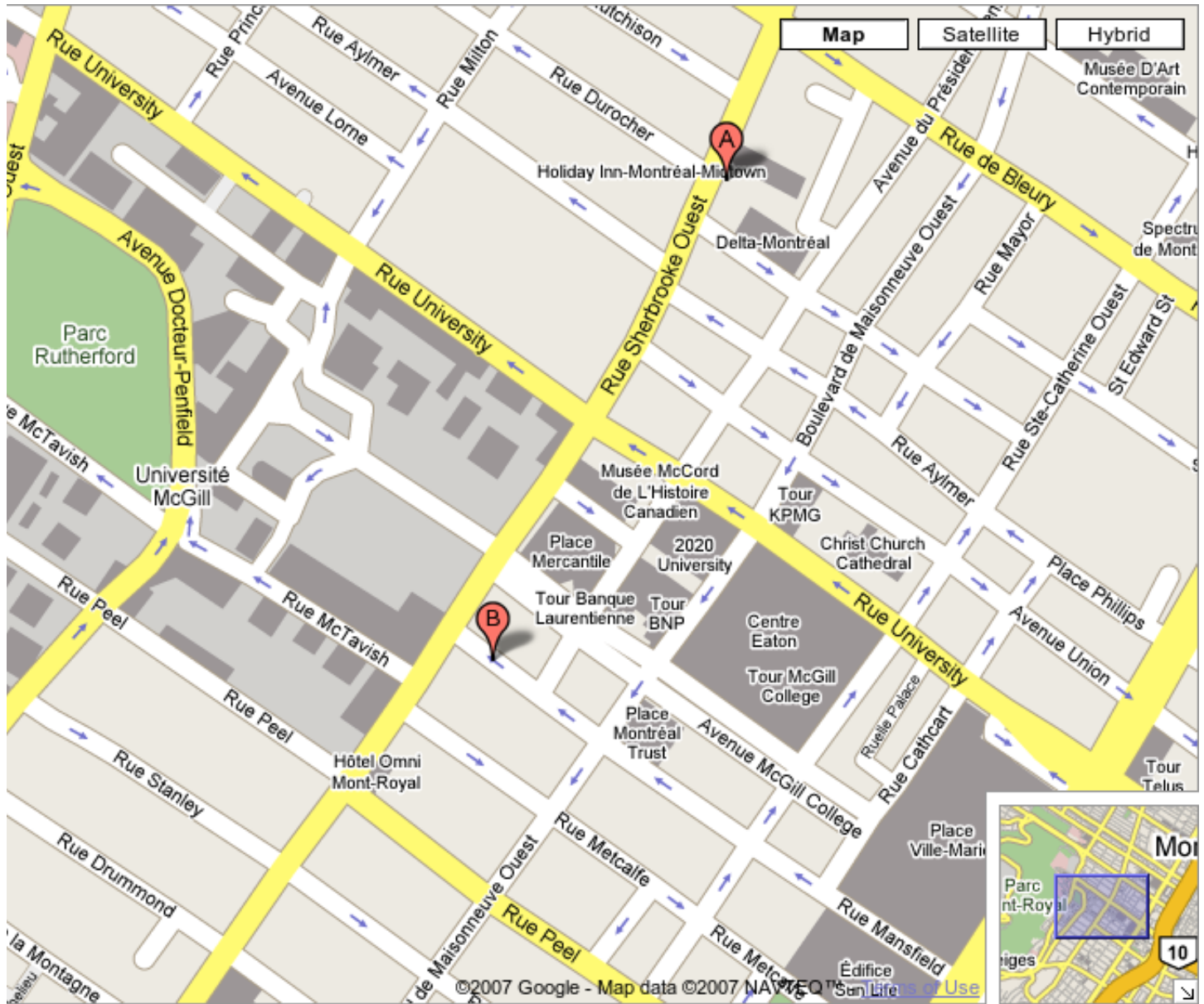


CUSEC 2007



DESIGNING FOR THE FUTURE

Conference Venue



Holiday Inn Montreal Midtown (A)
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Canada
(514) 842-6111

Centre Mont-Royal (B)
2200 RUE MANSFIELD
MONTREAL, QC H3A 3R8
Canada
(514) 844-2000

	Thursday - Day 1		Friday - Day 2		Saturday - Day 3	
9:00	Registration		Career Fair and Coffee		Coffee	
9:15					Opening Event - Megablocks Madness	
9:30						
9:45						
10:00	Introduction/Address		Transition		Transition	
10:15	Keynote 1: Pete McBreen; <i>Software Engineering, Do you want fries with that?</i>		Corporate 3: Dr. Lee McIntyre, Business Objects; <i>Bringing User-centered Design Sensibility to Enterprise Software</i>	Corporate 4: Nickolas Landry, Infusion Development; <i>Extending Enterprise Software Architecture to Windows Mobile Users with Microsoft .NET</i>	Corporate 5: Geoff Guenther, Direct Energy; <i>Energy Forecasting with High Performing Databases</i>	Corporate 6: Speaker TBA, SAP Canada; Title TBA
10:30						
10:45						
11:00	Transition		Transition		Transition	
11:15	Interactive Presentation: Austin Hill; <i>Chasing Billions with Zero Knowledge - Planning for the Unknown When Starting a Company</i>	Academic 1: Nicolas Dubé; <i>Entering the Massive Multi-Processing Age: Implications for the Software Engineer</i>	Keynote 3: Dave Thomas; <i>Fear of Flying</i>		Keynote 5: Dr. Venkat Subramaniam; <i>Practices of an Agile Developer</i>	
11:30						
11:45						
12:00	Lunch		Lunch		Lunch	
1:00	Career Fair		Mini-Open Spaces - Theme Discussions		Academic 4: Dr. Timothy C. Lethbridge; <i>Integrating HCI and Usability into Software Engineering: The Imperative and the Resistance</i>	Academic 5: Dr. Michael Godfrey; <i>Adaptation, Selection, and Intelligent Design: The Forces Behind Software Evolution</i>
2:00						
2:15						
2:30	Infusion Presents: Greg Brill, Infusion Development; <i>Soft Skills</i>		Academic 2: Dr. J. Cooperstock; <i>From Teleoperation to Teleimmersion: Design Challenges for Distributed Interaction</i>	Academic 3: Dr. G. Murphy; <i>Task-focused programming with Mylar</i>	Academic 6: Dr. Mourad Debbabi; <i>Chasing Security Flaws in Software</i>	Interactive Presentation: Kokoromi; <i>Let's Make Sweet Games Together: Game Art in Montreal</i>
2:45						
3:00						
3:15	Transition		Transition		Transition	
3:30	Keynote 2: James Cordy, P.Eng.; <i>Dreaming in a Straight Jacket: on professions, engineering and creativity</i>		Keynote 4: Ralph E. Johnson; <i>The Closing of the Frontier</i>		Closing Remarks	
3:45						
4:00						
4:15	Corporate 1: Michelle Levesque, Google; <i>Bits of Change</i>	Corporate 2: Thomas Wieberneit, SAP R&D; <i>Quality Management at SAP</i>	Panel Discussion		Free	
4:30						
4:45						

	Thursday - Day 1	Friday - Day 2
5:00	Transition	
5:15		
5:30	Activity - Intro to Mini-Open Space	
5:45		
6:00	Free	Free
7:00	DemoCampCUSEC	
8:00		CUSEC Proudly Presents: Banquet night at Casa Greque
9:00	Free	
10:00	SESS Pub night	Free

Conference Schedule

Thursday, January 18th

- 9:00 – 10:00 Registration
- 10:00 – 10:15 Introduction
- 10:15 – 11:00 Keynote: Pete McBreen – Software Engineering: Do you want fries with that?
- 11:15 – 12:00 Interactive Presentation: Austin Hill; Chasing Billions with Zero Knowledge - Planning for the Unknown When Starting a Company
Academic: Nicolas Dubé – Entering the massive multi-processing age: implications for the software engineer
- 13:00 – 14:00 Career Fair
- 14:15 – 15:00 Infusion Presents: Greg Brill - Soft Skills
- 15:15 – 16:00 Keynote: James R. Cordy – Dreaming in a Straight Jacket: on professions, engineering and creativity
- 16:15 – 17:00 Google: Michelle Levesque – Bits of Change
SAP: Thomas Wieberneit – Quality Management at SAP: a solid base for the Future of Quality at SAP
- 17:15 – 18:00 Activity – Intro to Mini-Open Space
- 19:00 – 20:00 DemoCampCUSEC
- 22:00 SESS Pub Night

Friday, January 19th

- 9:00 – 10:00 Career Fair and Coffee
- 10:15 – 11:00 Business Objects: Dr. Lee McIntyre – Bringing User-centered Design Sensibility to Enterprise Software
Infusion Development: Nickolas Landry – Extending Enterprise Software Architecture to Windows Mobile Users with Microsoft .NET
- 11:15 – 12:00 Keynote: Dave Thomas – Fear of Flying
- 13:00 – 14:00 Mini-Open Spaces
- 14:15 – 15:00 Academic: Dr. Jeremy Cooperstock – From Teleoperation to Teleimmersion: Design Challenges for Distributed Interaction
Academic: Dr. Gail C. Murphy – Task-focused programming with Mylar
- 15:15 – 16:00 Keynote: Ralph E. Johnson – The Closing of the Frontier
- 16:15 – 17:00 Panel Discussion
- 17:15 CUSEC Proudly Presents: Banquet night at Casa Greque

Saturday, January 20th

- 9:00 – 9:30 Breakfast
- 9:30 – 10:00 Opening Event: Megeblocks Madness
- 10:15 – 11:00 Direct Energy: Geoff Guenther – Energy Forecasting with High Performing Databases
SAP: Thomas Wieberneit – Quality Management at SAP: a solid base for the Future of Quality at SAP
- 11:15 – 12:00 Keynote: Dr. Venkat Subramanian - Practices of an Agile Developer
- 13:15 – 14:00 Academic: Dr. Timothy C. Lethbridge; Integrating HCI and Usability into Software Engineering: The Imperative and the Resistance
Academic: Dr. Michael Godfrey – Adaptation, Selection, and Intelligent Design: The Forces Behind Software Evolution
- 14:15 – 15:00 Let's make sweet games together: Game Art in Montreal
Academic: Dr. Mourad Debbabi; Chasing Security Flaws in Software
- 15:15 – 16:00 Closing Remarks

Contents

Conference Schedule 6

CUSEC 2007 Organization Team	8
What is CUSEC?	9
Chair's Remarks	10
CUSEC History	11

Sponsors

Gold Sponsors	16
Silver Sponsors & Friends	18

Keynote Speakers

Fear of Flying	21
Software Engineering: Do you want fries with that?	22
The Closing of the Frontier	23
Dreaming in a Straight Jacket: on professions, engineering and creativity	25
Practices of an Agile Developer	27

Corporate Presentations

Bringing User-centered Design	29
Sensibility to Enterprise Software	29
Extending Enterprise Software Architecture to Windows Mobile Users with Microsoft .NET	30
Bits of Change	31
Energy Forecasting with High Performing Databases	32
Soft Skills	33
Quality Management at SAP: a solid base for the Future of Quality at SAP	34

Academic Speakers

Chasing Security Flaws in Software	36
From Teleoperation to Teleimmersion:	37
Design Challenges for Distributed Interaction	37
Task-focused programming with Mylar	38
Integrating HCI and Usability into Software Engineering: The Imperative and the Resistance	39
Adaptation, Selection, and Intelligent Design: The Forces Behind Software Evolution	40
Entering the massive multi-processing age: implications for the software engineer	41

Events & Tutorials

DemoCamp	43
Mini-Open Space	44
Magnetix Madness	44
Career Fair	44
Let's make sweet game together: Game Art in Montreal, Presented by Kokoromi	44
Chasing Billions with Zero Knowledge - Planning for the Unknown When Starting a Company	45
Attractions in Montréal	46

CUSEC 2007 Organization Team

Chair Neeraj Mathrani
Director of Finance John Sloboda
Director of Presentations Hugo Levasseur
Director of Academic Presentations Walid Koleilat
Director of Keynotes Orlando Marquez
Director of Corporate Presentations Michelle Chua
Director of Interactive Events Kalu Kalu
Art, Website and Registration Director Richard Shih
Director of Promotions Karen Widish
Social Events Director Gagandeep Kaur
Sponsorship Directors George Gao
Linda Wang
Rami Ayyad
Volunteer Mitra Nami

Head Delegates

Bishop's University Edward Ocampo-Gooding
Carleton University Karen Widish
Concordia University Hugo Levasseur
École de technologie supérieure Louis Philippe Huberdeau
École Polytechnique de Montréal Benoit Lapensée
McGill University Kevin Wong
McMaster University Abdullah Salim
Royal Military College Louis Lemaire
Université Laval Georges-Etienne Legendre
Université de Moncton Julie Hache
University of Toronto Igor Fook
University of Waterloo Julian Spillane
University of Western Ontario Victoria Odeyemi

What is CUSEC?

The Canadian University Software Engineering Conference (CUSEC) is an annual gathering of the future of Software Engineering. Students passionate about Software Engineering from all over Canada gather under one roof for three intense days of picking the brains of industry leaders and teachers flown in from across the world. Likewise, CUSEC is a massive networking event between students, professors, researchers, and professionals. CUSEC is a chance to share your ideas and passion with peers and friends.

Presentations

Assuming you don't have a Slashdot IV-drip, carpal tunnel from checking your RSS reader, or serious thoughts about overclocking your optical nerve just so you can read SoEn journals "a little faster", you might have missed out on a few of the finer points regarding the field.

Our solution: have the folks who wrote the articles, who started the revolutions, who had those dreams that turned into standard buzzwords, come talk to you about exactly those things.

Wondering what the whole "engineering" part of your future career is really about? We've got a professional engineer to talk about just that. Think it's more of a craft than anything else? The author of "Questioning Extreme Programming" is here. Curious about the more esoteric corners of design patterns? We brought in Ralph Johnson, one of the authors of "Design Patterns: Elements of Reusable Object-Oriented Software". Yes, that book.

Interested in all the "pragmatic programmer" fuss? Come listen to Dave Thomas, *the* pragmatic programmer.

Keynotes aside, we've lined up a great line of corporate speakers, including Google, SAP, as well as hand picked academic speakers who've come back from the bleeding edge of the field to let us in on what's happening 5 years down the road.

Interaction with the Software Engineering community

CUSEC is full of people as crazy and smart as you. Chatting with speakers and other attendees is guaranteed to be interesting.

Extremely good time

Not interested in sleep? The party suite is prepped and ready for rocking. Join the organizers and speakers after-hours in a little reverlry. Our goal is to make sure you remember CUSEC, come back, and spread the word.

Chair's Remarks

Welcome to the Canadian University Software Engineering Conference 2007!

It gives me great joy to welcome you to an event that is anticipated by Software Engineering students from across Canada. Where else can you meet world class keynotes, learn about cutting-edge research, and find out about the happenings in the corporate world? Not to mention, meeting and networking with passionate individuals just as yourselves!

We've added all new interactive events to CUSEC, including DemoCamp Montreal and Mini-Open Space. These events will give you the opportunity to apply your creativity in new ways, and to get to know people from outside your school (we have 15 schools in attendance from across Canada!).

We have also brought back the highly successful Career Fair from CUSEC 2006, with a larger array of companies, so you can explore all the amazing opportunities that await.

All this would not have been possible without the incredible CUSEC organization team that we have this year. So, if you get a chance, be sure to thank the organizers for the countless number of hours that they have put into organizing this incredible event. Also, a special thank you to our Advisors.

Lastly, I would like to thank you all for attending CUSEC 2007. After all, we organize this conference just for you, and I hope that every moment you spend at CUSEC 2007, will be a memorable one.

But wait! It doesn't end at CUSEC 2007. Be sure to keep up-to-date with our blog (<http://blog.cusec.net>) to find out about new events that CUSEC will be rolling out in the near future.

Best,

Neeraj Mathrani

Chair – Canadian University Software Engineering Conference 2007

CUSEC History

CUSEC's Glorious History (the one we advertise)

In 2001, on a dark and gloomy night, a small group of passionate software engineering students from Concordia University held a private meeting on the top floor of one of Montreal's tallest buildings. Their purpose: to scheme about the future of software engineering students' education in Canada.

Not much is known of the meeting. Everyone who attended the meeting was sworn to secrecy and all the notes that were taken were burned. What is known though, is that at the end of the meeting, it was decided that starting in 2002, an annual conference would be held. This conference would bring the most passionate software engineering students from across Canada together under one roof to listen to and learn from the smartest and the greatest software engineers the world has ever seen.

During the private meeting, nothing was ever mentioned about the great events around the conference. We had no idea about the amazing new friendships and relationships you would forge over the best three days of your school year. Nothing was ever mentioned about the amazing parties held in John Kopanas' suite, which took place until the wee hours of the morning; where the attendees got the opportunity to play poker and exchange horror stories with some of our famous keynote presenters.

CUSEC History Redux (don't talk about CUSEC history)

In 2001, an undergrad (who remains nameless) attended a university technology conference as a head delegate for Concordia University. Starting out extremely excited to go but fell discouraged after the second day. While it was good to have the opportunity to meet with some of the brightest CEOs in business today, what he really wanted to do was meet with people he aspired to become; the Dave Thomases, David Heinemeier Hanssons, Kent Becks, Kathy Sierras and Joel Spolskys of the world.

He foolishly thought that it couldn't be that hard to organize a university conference that catered to people who were looking for the same things as him in a conference. After mentioning this to a few people who shared his excitement, the founding team that brought to you CUSEC 2002 was formed. The rest is history.

A Little Bit From Column A, and a Little Bit From Column B

Both stories have a lot of truth to them (assuming the 7th floor of Concordia University's main building was both the top floor of the building and the tallest building in Montreal).

Either way, CUSEC has become what it is today because of Canadian students passion for software engineering, and nothing beats the feeling of following your passion.

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Department of Engineering and
Computer Science

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Agnes - Employee and Student, Vancouver

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We are always on a lookout for enthusiastic students to join our exciting and rigorous summer internship and co-op programs. We also offer full-time new grad internship and leadership development programs with the opportunity to gain exposure to the following areas:

Finance

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Project Management

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Engineering

Information Technology

****Attention CUSEC delegates****

We will have our booth available throughout the conference and look forward to telling you about career opportunities for Software Engineers at TELUS. We are planning on interviewing any CUSEC delegates interested in our more than 25 new grad vacancies that include our Business Transformation Leadership Development Program, Business Intelligence Developer, and Technology Networks & operations Quickwins. Check out our website for more information, and don't forget your resume! Visit telus.com/careers to explore our high-energy student, co-op, and new grad opportunities.

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We're looking for individuals who are driven to succeed and willing to surge their careers forward within a dynamic, challenging, rewarding and innovative organization. We would not be where we are today without the commitment and dedication of our employees who make our company a success. This is your opportunity to focus on career progression and personal development.

This career opportunity is open to technology students who will be graduating with a related undergraduate or graduate degree before September 2007. This opportunity will have you working on three (3) rotational assignments over a 2-year period. During your assignment will have an opportunity to learn from and interact with many of our various lines of business; Energy Services, Home Services, Business Markets, Upstream Gas and Power and our Energy Management Group (EMG), solving problems and implementing solutions from day one.

You will also get to experience four (4) mini rotational assignments. These mini-rotations involve shadowing different areas of Direct Energy, both inside and outside of the IS department ie) IS Finance, Infrastructure Operations, EMG, Marketing, Finance etc. The overall program experience ensures that the graduates build both strong technical and business skills.

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Located in the heart of downtown Montreal, Quebec, Electronic Arts Montreal is a growing studio in all ways imaginable!

- Conceived in 2003, this studio is run by Alain Tascan, Vice President and Studio General Manager
- EA Montreal is one of Quebec's leading game studio and is growing!
- There are approximately 200 employees based out of EAM with aggressive hiring plans for the next few months
- The studio is located in Place Ville Marie, which is in beautiful downtown Montreal. Recently several million dollars was spent to renovate the 25,000 sq. foot studio to make it a state-of-the-art facility
- EA Montreal originally worked on titles such as SSXTM on Tour for the PSPTM, GoldenEye, Medal of Honor, and NHL's Current Gen
- Currently EA Montreal is pleased to be developing SSX Wii as well as Army of Two
- To learn more about the Montreal Studio, please visit our website: www.eamontreal.com



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Members of our "Justice League" typically work together in small teams, but must also be comfortable working individually, because occasionally it's "Wonder Woman" or "Superman" alone who rights the wrongs of evil-doers.

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WHAT ARE CS GAMES?

It's not about your IQ. Nor is it about your hacking talents or how you own everyone at gaming. It's not about being resourceful in a different environment or being able to work with gurus from across the continent. It's about ALL of the above, and more importantly, it's about having a great time in a great city! So read on and find out how to be involved with CS Games!

CS Games are an inter-university competition involving Computer Science, Computer Engineering and Software Engineering students from across North America. For an entire weekend, you will be challenged both individually and cooperatively in a medley of interdisciplinary competitions targeted at students of any undergraduate year, including first years!

A LIL BIT OF HISTORY

The games were first held in 2003, at McGill University. They stayed at McGill for 2 years, and then went to Laval University (Quebec) and Ecole de Technologie Superieure (Montreal). Now they are back to their home-base to celebrate their 5th anniversary! Twenty-three teams are already registered to participate (some 220 students)!

PARTICIPATE IN CS GAMES

Are you excited about CS Games after what you've heard about them? Then find out on our website if your university has already assembled a team to participate. If they have, we can put you in touch with them. If they haven't, then what are you waiting for?! Create a team of 7 to 10 undergraduate students, and register it online!

VOLUNTEER FOR CS GAMES

We can't run the games without an awesome team of volunteers, and they don't even need to have a technical background! To be one of our on-site volunteers during the CS Games weekend, and run the show with us, email us at volunteer@csgames.org.

DONATE TO CS GAMES

It takes a lot of effort, time, but also money to put such a large-scale event together, and we need support! We have a sponsorship package which we would be more than happy to forward to your company if they are interested in collaborating with us. Just drop us a line at sponsors@csgames.org. We also accept personal donations!

CONTACT US

Website: www.csgames.org
Email: info@csgames.org

Keynote Speakers

Fear of Flying

Software Engineering: Do you want fries with that?

The Closing of the Frontier

Dreaming in a Straight Jacket:
on professions, engineering and creativity

Practices of an Agile Developer

Fear of Flying

Dave Thomas
The Pragmatic Programmer

Abstract

Terrorists multiplying fear; they manipulate our reality to make the everyday suddenly seem frightening. And we react, or overreact, but trying to re-establish a feeling of safety. Terrorism works because we let ourselves become terrorized.

What has this to do with software development? Everything, as it turns out.

Biography

Dave Thomas is a programmer. He writes some books, and publishes others.

The Pragmatic Programmer, Andrew Hunt and David Thomas, 1999, Addison Wesley, ISBN 020161622X.

Programming Ruby: A Pragmatic Programmer's Guide, David Thomas and Andrew Hunt, 2000, Addison Wesley, ISBN 0201710897

Pragmatic Version Control Using CVS, David Thomas and Andrew Hunt, 2003, The Pragmatic Bookshelf, ISBN 0974514004

Pragmatic Unit Testing in Java with JUnit, Andrew Hunt and David Thomas, 2003, The Pragmatic Bookshelf, ISBN 0974514012

Pragmatic Unit Testing in C# with Nunit, Andrew Hunt and David Thomas, 2004, The Pragmatic Bookshelf, ISBN 0974514020

Programming Ruby (2nd Edition), Dave Thomas, Chad Fowler, and Andrew Hunt, 2004, The Pragmatic Bookshelf, ISBN 0974514055

Agile Web Development with Rails, Dave Thomas, David Heinemeier Hansson, Andreas Schwarz, Thomas Fuchs, Leon Breedt, and Mike Clark, 2005, Pragmatic Bookshelf, ISBN 097669400X

Agile Web Development with Rails (2nd edition), Dave Thomas, with David Heinemeier Hansson, Mike Clark, Justin Gehtland, James Duncan Davidson, 2006, Pragmatic Bookshelf, ISBN 0-9776166-3-0

Software Engineering: Do you want fries with that?

Pete McBreen
President, *Software Craftsmanship Inc.*

Abstract

Software engineering seems to be trying to design an inappropriate future. Rather than embracing talent, it seems to be striving to deskill software development. Certification and Best Practices will inevitably lead to stagnation and deskilling, where practitioners are focused on following the procedures rather than thinking about appropriate actions.

My design for the present is to create a working environment that embraces craftsmanship in software development so that we call all employ our creativity, artistry and coding skills to deliver applications that delight our users.

Rather than designing a future where software engineers are working at the level of “Do you want fries with that?” we should be designing a future that enables software developers to enjoy using their talents over a career at least as long as enjoyed by virtuoso musicians, artists and architects.

Biography

Pete McBreen is the author of *Software Craftsmanship* and *Questioning Extreme Programming*. He is an independent consultant who actually enjoys writing and delivering software. Despite spending a lot of time writing, teaching and mentoring, he goes out of his way to ensure that he does hands-on coding on a live project every year. Pete specializes in finding creative solutions to problems that software developers face. After many years of working on formal and informal process improvement initiatives, he took a sideways look at the problem and realized, “Software development is meant to be

fun. If it isn’t, the process is wrong.” Pete lives in Cochrane, Alberta, Canada and has no plans to move back to a big city.

His specialty is in assisting small teams in the development of object-oriented software. With over 22 years of experience, Pete started working with C++ in 1989 and has specialized in helping teams transition into object technology. He is a course designer, teacher, and coach in object technology. Pete has delivered tutorials at TOOLS USA and OOPSLA and regularly teaches Use Case and OO Design courses.

Every year Pete works as a developer in a project team to ensure that what he talks about actually works in practice. In recent years this has included enhancing an airline’s website to increase the volume of reservations made over the web, writing message oriented middleware and being the technical lead for a stock exchange workstation. These experiences have confirmed for him the value of well written use cases, test driven development and frequent releases to the user community.

Over the course of his career Pete has worked in many different mission and performance critical domains including Credit Card Authorization, Stock Exchange workstations, Airline Websites for reservations, Manufacturing Resource Planning and Job Scheduling, Time and Attendance and Payroll Systems. Mr. McBreen has been quoted as saying “Software development is meant to be fun. If it isn’t, the process is wrong.” This reflects his personal philosophy that “the software development process must support the ways that people naturally work.” Software systems are such a fundamental part of any corporation that the sustained ability to enhance and extend systems is what matters most. Truly incremental object oriented development processes are a means of achieving this goal.” His new book, *Software Craftsmanship* is Pete’s contribution to the ongoing debate about how to improve software development. *Questioning Extreme Programming* continues this exploration, but along a slightly different track.

The Closing of the Frontier

Ralph E. Johnson
Research Associate professor,
University of Illinois

Abstract

Software design is usually discussed as if the system is being created “de novo”, but most programmers are working on systems that have already been released. This is a sign of success, since software is now good enough to keep and is worth improving. But the way we talk about design and the way we teach it is stuck in the twentieth century. The software frontier is closing.

Although there are still new projects, it is more accurate to say “there are no new software projects” than it is to say “all software projects are new”. What would the world be like if there were no new software projects?

If a software project has been going for fifty years then a programmer who has been on the project for twenty years will be more valuable than someone who is new to the project. Old programmers will be more valuable than young programmers.

If a software project is going to last another fifty years and will be actively developed during that time then it is worthwhile to keep it in good shape. It is worth fixing pesky bugs that only appear once every year. It is worth spending some time improving the documentation. It is worth rewriting parts of the system that are complex and buggy.

If a software project is on version 129 then it is clear that software development is program transformation. Each iteration transforms version N into version $N+1$. Although user requirements are important, version $N+1$ depends

more on version N than it does on the latest requests from the users. Fortunes can be made both on the frontier and in cities. The frontier and cities are different, however, and some of the rules of success of the frontier must change for the cities.

Biography

For the past 10 years I have been studying object-oriented technology and how it changes the way software is developed. In particular, I have been interested in how to use and develop frameworks, which I have come to believe is a key way of reusing designs and code using objects. I have been involved in the development of an object-oriented operating system (Choices), compiler (Typed Smalltalk), structured drawing framework (HotDraw), music synthesis system (Kyma), and am currently working on frameworks for business transaction process (i.e. accounting, payroll, inventory) and other business computing.

Not surprisingly, this caused me to develop some opinions about how to develop reusable software, which in turn motivated me to write some papers. Designing Reusable Classes (with Brian Foote) has a set of design heuristics and was the first paper in which I talked about frameworks. Frameworks are a way of reusing the design or architecture of a system using object-oriented technology. Reusing Object-Oriented Design (with Vince Russo) describes frameworks in more detail. Recently, Don Roberts and I have have been trying to document the process by which people create frameworks.

Frameworks led me to work on patterns, which are a way of documenting design expertise. You can use them to document how to use a framework, how a framework is designed, and how to

The Closing of the Frontier (continued)

extend it. This led to the Design Patterns book. For examples of how to document frameworks with patterns, see Documenting Frameworks with Patterns, Patterns Generate Architectures, and A Framework for Network Protocol Software. Last year I organized a seminar on patterns and frameworks at UIUC, and the students wrote some papers as part of it. I also teach a course on patterns for various companies.

Working on frameworks made me appreciate the need for better support for refactoring. Bill Opdyke wrote a PhD thesis on refactoring, and then we wrote a couple of papers on refactoring, one on refactoring inheritance hierarchies and one on refactoring component hierarchies. We are currently working to build a Smalltalk refactory, and have an early version you can use.

Recently my interests have shifted to patterns of business software. As a result, I helped organize a workshop on business transaction processing as part of the OOPSLA midsummer workshops.

I have a course on frameworks and how to write reusable OO software that I often give to companies.

Dreaming in a Straight Jacket: on professions, engineering and creativity

James R. Cordy
P.Eng., Professor and Director
School of Computing, Queen's University

Abstract

What's all this profession nonsense about? What is a profession anyway? Isn't it something like a craft?

And what's up with all these processes, rules and procedures? Doesn't it all just get in the way of creativity? I feel like I'm in a straight jacket – I need to move fast. Won't that make my users happy? Isn't that what they want?

And anyway, so what's engineering got to do with software? What is this engineering stuff, and why should a programmer be a software engineer? What difference does it make anyway, and why does it matter?

Let's explore these and other interesting questions about software engineering and its relation to House, Facebook, Second life, Windows, eXtreme programming, A320's, brain surgery and the Sydney Opera House.

Biography

Jim Cordy is Director of the School of Computing and Professor of Computing and of Electrical and Computer Engineering at Queen's University, Kingston, Ontario, Canada. In 1985 Dr. Cordy co-founded Holt Software Associates (HSA), a Toronto-based company specializing in educational software systems, and from 1995 to 2000 he was vice president and chief research scientist at Legasys Corporation, a software technology company specializing in legacy software system analysis and renovation.

Dr. Cordy is a founding member of the Software

Technology Laboratory at Queen's University. From 1991 to 1997 he led the Software Design Technology project, a multi-university research project in software architecture research funded by the Information Technology Research Centre (ITRC, now CITO, an Ontario government Centre of Excellence). As project leader Dr. Cordy was winner of the 1994 ITRC Bank of Montreal Innovation Excellence Award and the 1995 ITRC Chair's Award for Entrepreneurship in Technology Innovation.

Prof. Cordy is the author or co-author of numerous contributions in computer software systems, including the PL/I subset compiler SP/k (1977), the Toronto Euclid compiler (1980), the S/SL compiler technology (1980), the Concurrent Euclid programming language (1981), the Turing programming language (1983), Turing Plus (1985), Object-Oriented Turing (1992), the orthogonal code generation compiler technology (1986), the TXL programming language (1991), the TXL source transformation system (1995), the LS/2000 year 2000 conversion system (1996), and the LS/AMT software analysis and migration system (1999). He has published more than 75 refereed academic and technical papers in software engineering, programming languages, user interfaces and compiler technology, including the books "Introduction to Compiler Construction Using S/SL" (Queen's, 1986) and "The Turing Programming Language: Design and Definition" (Prentice-Hall, 1988).

Dr. Cordy received his BSc in computer science and mathematics from the University of Toronto in 1973 and his MSc in computer science in 1976. After serving several years as chief programmer and senior research associate at the Computer Systems Research Institute of the University of Toronto, he returned to school and

Dreaming in a Straight Jacket (continued)

received his PhD from the University of Toronto in 1986.

Dr. Cordy is a past member and chair of the Natural Sciences and Engineering Research Council of Canada (NSERC) grant selection committee in Computing and Information Science and an elected member of the International Federation for Information Processing (IFIP) Working Group 2.4, “software implementation technology.” He is a registered professional engineer, a senior member of the IEEE, a member of the Association for Computing Machinery and an IBM Center for Advanced Studies Faculty Fellow.

He is the program co-chair of the IEEE 2005 International Workshop on Program Comprehension (IWPC 2005), program co-chair of the 2005 Centre for Advanced Studies Conference (CASCON 2005), industrial co-chair of the IEEE 2005 International Conference on Software Maintenance (ICSM 2005) and co-organizer of the Dagstuhl International Seminar on Transformation Techniques in Software Engineering (2005). He served as industrial chair of the IEEE 2004 International Conference on Software Maintenance (ICSM 2004), as industrial co-chair of ICSM 2002, as program co-chair of the IEEE 2nd International Workshop on Source Code Analysis and Manipulation (SCAM 2002) and program chair of the IEEE 4th International Conference on Computer Languages (ICCL’92). He serves on the program committees of numerous conferences and workshops in software systems and languages, on the editorial board of several journals, books and special issues, and as session chair at many conferences.

In 1990-91 Dr. Cordy was invited to be guest researcher at GMD (now part of the Fraunhofer Institute), the German National Institute for

Computer Science, in Karlsruhe, Germany, and 2004-05 he was again invited as guest researcher, at the Automated Reasoning Systems Division of ITC-IRST in Trento, Italy.

Practices of an Agile Developer

Dr. Venkat Subramanian

Adjunct Professor, Director of Undergraduate
Studies CS, *University of Houston*

Abstract

You have worked on software projects with varying degree of success. What were the reasons for the success of your last project? What were the reasons for those that failed? A number of issues contribute to project success – some non-technical in nature. In this presentation the speaker will share with you practices in a number of areas including coding, developer attitude, debugging, and feedback. The discussions are based on the book with the same title as the talk.

Biography

Dr. Venkat Subramaniam, founder of Agile Developer, Inc., has trained and mentored more than 3000 software developers in the US, Canada, and Europe. Venkat helps his clients effectively apply and succeed with agile practices on their software projects, and speaks frequently at international conferences and user groups. Venkat is also an adjunct professor for the practice of computer science at University of Houston and teaches at Rice University School for Continuing Studies.

He is author of “.NET Gotchas” (O’Reilly) and coauthor of “Practices of an Agile Developer” (Pragmatic Bookshelf).

Corporate Presentations

Bringing User-centered Design Sensibility to Enterprise Software

Extending Enterprise Software Architecture to Windows Mobile Users with Microsoft .NET

Bits of Change

Energy Forecasting with High Performing Databases

Soft Skills

Quality Management at SAP:
a solid base for the Future of Quality at SAP

Bringing User-centered Design Sensibility to Enterprise Software

Dr. Lee McIntyre
Business Objects Corporate Speaker
www.businessobjects.com

Abstract

Business Objects makes Business Intelligence software for Enterprise customers. Historically, business intelligence software was typically designed by engineers, who understood the complexity of the back-end systems that business intelligence software requires. The emphasis was on complex features, but not on the usability of the end user experience.

For the past 3 years, Business Objects has been expanding a new User Experience team, whose role is to bring user-centered design principles to the product life cycle, so that the Business Objects software is not only feature rich, but easy-to-use.

This talk will focus on some methodologies that the User Experience team employs to understand our users and their tasks better, and how we apply that data to enhancing the usability of the UI in our products. How you can get to a win-win situation – where the needs of the user are balanced with the needs and constraints of the cross-functional development team – will also be discussed.

Biography

Lee McIntyre has been designing award-winning software for the past 16 years. Currently, Lee is the Manager for the North American User Experience team at Business Objects, located in the Vancouver, BC office. Since joining Business Objects two years ago, Lee has built the UE team in North America from the ground up, evangelizing user-centered design within the company to gain acceptance and “a place at the table” for

the UE team, where the emphasis is on making Business Intelligence software easier for the average business user.

Prior to joining Business Objects, Lee spent 5 years as Senior User Interaction Designer FileMaker, Inc. (an Apple Computer subsidiary). While at FileMaker, Lee was the original UI Architect for the FileMaker Mobile product line for Palm, Pocket PC and iMode phones, as well as for the FileMaker Developer/FileMaker Advanced products. Lee also led the redesign of the FileMaker Instant Web Publishing project, creating an easy-to-use experience for customers to bring databases to the web.

In addition to business software, Lee has also worked on the academic side of the fence. Lee was the Associate Director for the award-winning Art and Life in Africa project, designing and programming both an interactive CD-ROM textbook and an associated website. Lee also worked on designing and developing interactive multimedia language software; these projects included templates for language teachers to use, plus a complete interactive video course on Hausa (a language spoken in Nigeria).

Extending Enterprise Software Architecture to Windows Mobile Users with Microsoft .NET

Nickolas Landry
Infusion Development Corporate Speaker
www.infusiondev.com

Abstract

Spurred by technologies like the .NET Compact Framework and platforms like Windows Mobile, a breed of “smart” mobile device client applications is emerging and changing the way we think about software development. These clients are based on best practices learned by merging rich clients and Web development, bringing the best of both worlds to the realm of mobile devices. This presentation covers enterprise applications from a high-level and how they can be extended to support the use of mobile devices. Note that mobile clients should not be treated entirely differently than from regular desktop or laptop-based smart clients; bandwidth, connectivity, security, storage and memory considerations are important to factor in the architecture, but standard architecture principles can be reused when applied in mobility scenarios. This session explores mobile enterprise application development for budding software engineers like you. Learn how to leverage your software development knowledge to develop powerful smart clients that work with elaborate architectures to fulfill the promise of a truly connected world.

Biography

Nickolas Landry is a senior .NET architect and trainer in New York for Infusion Development, a Microsoft Certified Gold Partner which offers quality software development services, developer training and consulting services for large financial firms in the New York and Toronto areas. Known for his dynamic and engaging style, he is a frequent speaker at major software development conferences worldwide, a member of the MSDN Canada Speakers Bureau, a Micro-

soft MVP on Device Application Development (formerly called .NET Compact Framework MVPs), and a former Microsoft Regional Director in Montreal. He is the Vice-President of IASA New York (www.iasahome.org), and is a Founding Member of WWISA (www.wwisa.org). His primary goal is to help businesses connect their information, systems, and people together in a seamless integration to achieve complete enterprise agility. Aside from his work in designing business solution architectures using .NET technologies, Nick provides mentoring services in architecture, design and .NET development, authors and teaches .NET classes, performs system audits, and profiles technologies for various enterprise scenarios. With almost 14 years of professional experience - starting with Visual Basic 1.0 - and a career almost entirely dedicated to Microsoft technologies, Nick specializes in .NET mobility, OOP & SOA, architecture and design patterns, and Web services. He wrote “Mobile CoDe.NET” articles for CoDe Magazine and several .NET mobility coursewares for Microsoft, has been a technical editor for many books titles, and holds several professional certifications from Microsoft and IBM. Nick is also a game aficionado, doing a lot of research in the entertainment software industry, including game production, design, development, and project management, playing a wide variety of games on PC, Xbox 360, mobile devices and in virtual worlds/MMO’s, and is an advocate for mobile gaming and the use of managed code in professional game development. He was the project lead and designer for Mobile Combat, a Windows Mobile game for the attendees of the Microsoft MEDC 2006 conference, was a private beta tester (as a volunteer player) for Star Wars Galaxies expansions Jump to Lightspeed and Trials of Obi-Wan (SOE/Lucas Arts) and wrote online guides for Star Wars Galaxies and Neverwinter Nights.

Bits of Change

Michelle Levesque
Google Corporate Speaker
www.google.com

Abstract

How can software be political? Which components of software make a political statement: is it this function call over here, or is it that while loop over there?

In certain parts of the world today, governments read private e-mail and arrest people based on these random sweeps. New software allows them to do so with amazing efficiency. That software was written by someone like you.

Politics, law and ethics are becoming increasingly intertwined with software engineering. These changes are having drastic consequences in the field of software design; the future of our industry will depend on the the next generation of software engineers and the choices that you make.

Biography

Michelle Levesque is a software engineer at Google where she writes and directs internal educational videos, coordinates the massive posterizing of Google restroom stalls with weekly flyers that promote testing, and interviews potential chefs. Oh yeah, and she writes code too.

Before coming to Google, Michelle worked at the Citizen Lab where she wrote software to study internet censorship around the world. This software is still the leading tool used by researchers to learn more about internet filtering trends and how government and corporate censorship can be circumvented.

Michelle graduated from the University of Toronto last year (2006) with a degree in Software Engineering. She loves her job and can't believe that someone would pay her to code fun things all day.

Energy Forecasting with High Performing Databases

Geoff Guenther
Direct Energy Corporate Speaker
www.directenergy.com

Geoff has a BA in Philosophy from the University of British Columbia as well as a BSc in Computer Science from the same school.

Abstract

As a retail energy provider, Direct Energy must accurately predict its customers power and gas consumption in advance. This paper describes some techniques used to develop an accurate and timely Energy Forecasting system that leveraged some current database technology to minimize temporal complexity and maximize computational performance. Thus enabling Direct Energy to be able to participate in highly volatile North American Energy Markets.

Biography

IS Director – US South, Energy Management Group(EMG) and Growth Markets

Geoff joined Direct Energy in Nov 2002, and is based in Calgary, AB. He is responsible for the Energy Trading and Risk Management Groups in both Houston and Calgary. This group's responsibilities include retail responsibilities such as developing load forecasting systems to estimate customer consumption as well as retail pricing systems.

Prior to joining, Geoff had founded an offshore development company, which developed Risk Management and Trading systems for companies such as Enron and New Power. This was an early foray into the combination of natural gas and power commodities in trading, as well as managing both wholesale and retail risk. He also worked in an artificial intelligence company which did case law searches as well as in a biomedical firm in the field of cardiac electrophysiology.

Soft Skills

Greg Brill
Infusion Development Guest Speaker
www.infusiondev.com

Abstract

Building a business is no singular pursuit. It requires a number of different skills that must be learned, practiced, and applied over time. But even before you sell your first software app to your first user, you have to sell something more important to acquire that vital support to build your business. You have to sell yourself. In this session, Gregory Brill, CEO and Founder of Software Consulting company, Infusion Development, and Partner of Angel investment firm, Infusion Angels, will discuss the principal ingredients involved in presenting and selling yourself and your idea as a viable business concept. He'll teach you what you need to know to deliver an effective elevator pitch, and how to position yourself and your idea in the face of uncompromising venture capitalists and your competition.

Biography

Gregory is a graduate of the University of Rochester and holds a masters of computer science from R.I.T. A look at his career reveals a background of successful entrepreneurship. He is co-founder and CEO of Infusion Development, a multi-million dollar IT consulting business he co-founded with his wife, DeBorah Johnson. He is also General Partner and co-founder of Infusion Angels (www.infusionangels.com), an angel investment firm based out of the Accelerator Center at the University of Waterloo. Additionally, Greg is the author and creator of the Random House book series, CodeNotes™ (www.codenotes.com), which is launched in every major book chain in the US and Canada. Greg is not only an author and successful entrepreneur, he is also a much sought after speaker on the subjects

of technology and entrepreneurship. He is a keynote speaker at major Microsoft industry events, and never fails to draw a crowd when he speaks about entrepreneurship at University campuses across North America.

Quality Management at SAP: a solid base for the Future of Quality at SAP

Thomas Wieberneit
SAP Corporate Speaker
www.sap.com

Abstract

Each software company that targets the delivery of mission critical software to business customers needs to make sure that the software works as expected. While this is a very long stretch it is shown, using SAP as an example, how a development process can be set up that enables this. Starting from a brief history the key concept of a working model are presented. At the end of the presentation the concepts used at SAP are briefly brought into a context of agile methodologies.

Biography

Thomas is heading the Montreal based CRM development department of SAP. Prior to his assignment in Montreal he worked for SAP in various leadership positions in development and quality management. Prior to joining SAP he worked for a consultancy that developed sales force automation software for international companies, as a developer, project manager and team lead.

Thomas holds a degree in computer science from the German Armed Forces University in Munich.

Academic Speakers

Chasing Security Flaws in Software

From Teleoperation to Teleimmersion: Design Challenges for Distributed Interaction

Task-focused programming with Mylar

Integrating HCI and Usability into Software Engineering: The Imperative and the Resistance

Adaptation, Selection, and Intelligent Design: The Forces Behind Software Evolution

Entering the massive multi-processing age: implications for the software engineer

Chasing Security Flaws in Software

Dr. Mourad Debbabi
Concordia University

Abstract

In this talk, we will address the security aspect of software throughout the entire lifecycle. In this regard, we will discuss the important issues and the needed practices/techniques that contribute to a better engineering, deployment and maintenance of secure software. We will highlight the relevant research proposals that could be used to improve software security at all these stages. In particular, we will address the security hardening of software and show it could be done in a more scientific and systematic way. Finally, we will discuss the post-deployment forensic aspect that consists of investigating a cybersecurity incident. Accordingly, we will show how techniques from software engineering, program analysis and verification could be used to reach conclusive descriptions about the incident in question.

Biography

Dr. Debbabi is affiliated with the Concordia Institute for Information Systems Engineering, CIISE at Concordia University. His titles are:

Full Professor
CIISE Associate Director
Concordia University Research Chair Tier I

Among his personal activities are:

Specification Lead of 4 Java Specification Standards i.e. Java Specification Requests:

JSR 164: JAIN SIMPLE Presence (based on the IETF SIP/SIMPLE Protocol)

JSR 165: JAIN SIMPLE Instant Messaging (based on the IETF SIP/SIMPLE Protocol)

JSR 186: JAIN Presence (protocol agnostic)

JSR 187: JAIN Instant Messaging (protocol agnostic)

Expert Group Member for the following Java Standards:

JSR 123: JAIN PAM

JSR 125: JAIN SIP Lite

JSR 139: CLDC 1.1

JSR 180: SIP for Java 2 Micro Edition (J2ME)

JSR 185: Java Technology for Wireless Industry

JAIN Council member

JAIN IP Focus Team Member

Participated in the Executive Committee of the Java Community Process (representing Matsushita)

From Teleoperation to Teleimmersion: Design Challenges for Distributed Interaction

Dr. Jeremy Cooperstock
McGill University

Abstract

Teleoperation is the control of a machine at a distance, while teleimmersion combines audio and video conferencing with collaborative virtual reality technologies. The goal of the latter is to recreate the dynamics of face-to-face interaction within a computationally enhanced virtual environment. Despite the hype, such systems generally fail to deliver a convincing level of co-presence (the feeling of “being together”) between users and come nowhere close to supporting any of the expressive cues and manipulation capabilities we take for granted with objects in the physical world.

Several research efforts have made significant progress in overcoming these shortcomings in isolation, leading to technologies for immersive visualization, high-definition videoconferencing, and two-handed gestural interaction. However, combining these technologies into a unified framework that allows distributed participants to work or play together with the same naturalness as being in the same space seems far in the horizon. We call this ideal a “Shared Reality”.

This talk begins with the design of a teleoperation application for an undersea video observatory 100m below sea level in the Saanich Inlet and proceeds to compare its technical and perceptual challenges with those of Shared Reality. Along the way, several videos will be presented, illustrating some of the interesting results we have obtained, in particular for low-latency distributed music.

Biography

Dr. Jeremy Cooperstock (Ph.D., University of Toronto, 1996) is an associate professor in the department of Electrical and Computer Engineering, a member of the Centre for Intelligent Machines, and a founding member of the Centre for Interdisciplinary Research in Music Media and Technology at McGill University. He directs the Shared Reality Lab and leads the technical development of the Ultra- Videoconferencing system, for which he was recognized by an award for Most Innovative Use of New Technology from ACM/IEEE Supercomputing and a Distinction Award from the Audio Engineering Society. Cooperstock's past accomplishments include the Intelligent Classroom, the world's first Internet streaming demonstrations of Dolby Digital 5.1, uncompressed 12-channel 96kHz/24bit, multichannel DSD audio, and three simultaneous streams of uncompressed high-definition video. Cooperstock is a member of the ACM and chairs the AES Technical Committee on Network Audio Systems.

Cooperstock's research interests focus on computer mediation to facilitate high-fidelity human communication and the underlying technologies that support this goal. His Ph.D. thesis investigated the use of computer control over a state of the art videoconference environment, resulting in a reactive room that responds to the activity of users. Following his doctoral studies, Cooperstock spent a year as a visiting researcher at the Sony Computer Science Laboratory in Tokyo, Japan, where he developed a prototype VCR interface that responds to speech and pointing commands, so natural that “even your mother can use it.” He has also conducted research with IBM at the Haifa Research Center, Israel, and the T.J. Watson Research Center in Yorktown Heights, New York.

Task-focused programming with Mylar

Dr. Gail C. Murphy
University of British Columbia

Abstract

Software developers are inundated with information: the systems on which developers work often comprise hundreds of thousands of lines or more of source code, developers' email inboxes are clogged with notifications of new bugs reported and so on. Many of the tools developers use have been engineered to present and deliver this information as fast as possible. The work in our research group aims to reverse this trend by presenting just the information a developer needs when they need it by exploiting structure and patterns in the ways developers work. In this talk, I will present the results of our Mylar project (www.eclipse.org/mylar) that is changing the way developers work by focusing the UI of the Eclipse IDE to show only the information relevant to the task-at-hand.

Biography

The focus of Dr. Murphy's research and teaching is software engineering. She is part of the Software Practices Laboratory.

Her research focuses on developing methods and tools to help software developers manage, evolve and collaborate on the structure of the systems they are developing at design time and in source code. Some current and recent projects with which Dr. Murphy has been involved are Mylar, bug triage, Hipikat and Concern Graphs.

Current and upcoming professional activities include being a member of the program committee for ICSE 2007, and tutorials chair for AOSD 2007. Recent professional activities include co-guest editing a special issue of IEEE Software on Aspect-oriented Programming (Jan/Feb 2006).

In 2006, Dr. Murphy received a NSERC Steacie Fellowship and the CRA-W Anita Borg Early Career Award. In 2005, She received the Dahl-Nygaard Junior Prize from AITO and a UBC Killam Research Fellowship.

Integrating HCI and Usability into Software Engineering: The Imperative and the Resistance

Dr. Timothy C. Lethbridge
Ottawa University

Abstract

In this presentation I will defend the assertion that the area of knowledge most lacking in software engineering practice is knowledge about usability and human factors. Furthermore I will suggest that the best way to improve the situation is through a combination of improved education and industrial certification. I will start the presentation by reviewing the concept of usability and why improving it can have such a large effect. Then I will describe why there has been resistance to focusing on this area. Next I will present steps that are being taken to rectify the situation: Notably, an increased emphasis on the topic in the SE 2004 curriculum, and moves to better incorporate it into SWEBOK. Finally I will propose a potential maturity model that corporations can use to improve their capabilities in this area.

Biography

Dr. Lethbridge is of dual Canadian / British citizenship, having immigrated to Canada in 1975. Dr. Lethbridge received a Bachelor of Science in Computer Science from the University of New Brunswick in 1985 and an MsC(CS) from the same University in 1987. While in New Brunswick, Dr. Lethbridge worked for the Government of New Brunswick (Data processing division) on a variety of projects, both as a Co-op student and later as a consultant. His master's thesis was entitled "Perceived Animate Motion by Deterministic Rules of Inter-Object Behaviour" – it was an early work in what is today called Artificial Life. While writing his MSc thesis Dr. Lethbridge taught university courses in Fortran programming and Interactive Computing.

From 1987 to 1989 Dr. Lethbridge worked at Nortel (then called Bell-Northern Research) in Ottawa, where he designed database applications in the CAD group.

From 1989 to 1994, Dr. Lethbridge worked on his PhD (see below) at the University of Ottawa. This was funded by an NSERC Scholarship as well as consulting contracts (with BNR, and Boeing Aircraft Corporation) and teaching. After defending his thesis, in November 1994, Dr. Lethbridge worked at the University of Ottawa as an Assistant Professor.

Since 1991, at the University of Ottawa, Dr. Lethbridge has taught courses in Object Orientation, Software Engineering, Software Evolution and User Interfaces. Most of his work until 1997 was with the Institute for Government Informatics Professionals, a program whereby Ottawa University's School of Information Technology and Engineering department upgrades the education of computing professionals.

Dr. Lethbridge's research has focused on systems to help people manipulate complex information and on software engineering education. He has done research with Mitel Corporation, QNX Corporation and IBM Canada. Dr. Lethbridge has been a full professor since May 2005, and served a term as Acting Associate Dean, starting in January 2005. Dr. Lethbridge published the textbook *Object Oriented Software Engineering: Practical Software Development Using UML and Java*, in its second edition as of 2005. Dr. Lethbridge also was a leader in the development of the Software Engineering 2004 curriculum, sponsored by the IEEE and ACM.

Adaptation, Selection, and Intelligent Design: The Forces Behind Software Evolution

Dr. Michael Godfrey
University of Waterloo

Abstract

The common view of software maintenance is that it consists mainly of fixing bugs and occasionally adding new features; in industry, maintenance is often seen a low ranking job, fit only for new hires and company deadwood. However, the forces that shape how software systems change over time are rich, complex, and subtle, and the subject of software evolution is now being studied carefully by the research community. In this talk, I will discuss some recent findings of the software evolution research community, and I will examine some of the similarities — and differences — between how evolution operates in software and in biology.

Biography

Michael W. Godfrey is an assistant professor in the David R. Cheriton School of Computer Science at the University of Waterloo, where he held an NSERC Industrial Research Associate Chair in Telecommunications Software Engineering sponsored by Nortel Networks between 2001 and 2006. His research interests include software evolution, software cloning analysis, software architecture extraction and modelling, software reverse engineering and design recovery, and program comprehension. His research often involves building tools to perform specialized analyses on large industrial software systems. During the academic year 2003-04, he was a visiting professor at Sun Microsystems Research Labs in Mountain View, CA where he worked on the Jackpot project with James Gosling, and the SALSA project with John Crupi.

Entering the massive multi-processing age: implications for the software engineer

Nicolas Dubé
Université Laval

Abstract

Multi-cores, Multi-sockets, multi-boards: as supercomputing technology comes to the desktop, how does it affect software developers everyday life? This talk will present recent hardware paradigm shifts and trends to come. It will discuss the many shortcomings now unavoidable relating to inter-processor communications, memory bandwidth, interconnect and disk storage. Adding to the widening performance gap between components, the aggregated system complexity makes efficient parallel programming even harder. Various librairies and utilities trying to address these shortcomings from the multi-core desktop to the worldwide Grid will therefore be presented. The talk will conclude outlining best practices in the design, developement and debugging of parallel programs.

Biography

Nicolas Dubé is an Assistant Professor and Ph.D. Candidate at Université Laval. He has taught Software Engineering courses and is currently outlining a new curriculum for Operating Systems, Networking and High Performance Computing.

As an active member of TECC (Technical Experts of Compute Canada, <http://tecc2006.c3.ca>) and CLUMEQ (Consortium Laval, UQAM, McGill, Eastern Québec), he has been involved in the recently approved National Platforms Fund proposal to CFI for High Performance Computing. Nicolas is now working on the implementation of CLUMEQ's share of that proposal.

He also works as a Software Engineering consultant for many niche industries and shares this experience in his courses to complement the academic content.

Nicolas' research interests involve High Performance Computing, Supercomputers, Grids, Networking, OSs and Security. His thesis investigates economic models for compute cycles, brokering algorithms and software infrastructure to foster a reliable Grid Economy.

He is a FQRNT fellow and a two time recipient of the Hydro-Québec Ph.D. excellence fellowship.

Events & Tutorials

DemoCamp

Mini-Open Space

Magnetix Madness

Let's make sweet game together: Game Art in Montreal

Chasing Billions with Zero Knowledge - Planning for the Unknown When Starting a Company

DemoCamp

Want to demo your project? Want to get feedback and get people excited about your project? Want to see what your peers are up to? Or do you just want to meet other people who are as passionate about building products that make a difference in people's lives as you are?

When: Thursday, January 18th, 2007 @ 6:30 PM - 8:30 PM

Where: Centre Mont-Royal, 2200 Mansfield corner Sherbrooke

Language: Francais ou/or English

Who: People who want to show off their projects and get feedback as well as those who just want to see what other people are up to. Students, entrepreneurs, hobbyists, students and professionals are all welcome... demo or not.

Why: To support innovation amongst Software Engineers

Details

DemoCampCUSEC is being held at the same location as CUSEC (the Canadian University Software Engineering Conference) and open to all including students, entrepreneurs, hobbyists and professionals.

It is a great opportunity for you to get people interested (buzz) in what you are working on, to get valuable feedback and a great way to attract people to join your project (if you need help). Plus, it is a great opportunity to practice your presentation skills!

There are only two rules for presenters:

Rule #1: No powerpoints allowed. Why no .ppt? Well, do you have working software or don't you?

Rule #2: Demos are not a second over 15 minutes each. Short and sweet!

Sign up at <http://groups.google.com/group/montreal-tech-events>, to keep track of upcoming events for tech geeks in Montreal. If you want to advertise on this mailing list or have any further inquiries, please contact john@kopanas.com

Mini-Open Space

What is Mini-Open Space you ask? Simply put, Open Space Technology is a process where attendees choose their own discussion topics and lead their own discussions. There are often entire conferences designed around this concept, so we've decided to name the event Mini-Open Space.

What are you passionate about? Mobile Devices? Entrepreneurship? Video Games? User Interfaces?

For our Mini-Open Space, everyone will be given an opportunity to form their own small groups and discuss topics they are passionate about with others who share their passion.

Be sure to check out the "Mini-Open Space" agenda in the registration area before lunch on Friday to see where your discussion area is. When it's time for the event, go directly to your discussion area and get ready to add your heap of creativity to mix!

Magnetix Madness

Got building skills? We've got 4000 Magnetix from Megabloks and we're holding a Magnetix building contest! In groups of 5 you'll be given a set of Megablok magnetix blocks to create the coolest thing you can dream up. Unleash your inner craftsmanship and show us what you've got.

Let's make sweet game together: Game Art in Montreal, Presented by Kokoromi

We often consider the universe of a videogame to be completely distinct from our own. But what if videogames were an extension of who you are? Your music? Your surroundings? Your culture? Join us for this interactive session where we'll explore creative, experimental videogames and be sure to participate our live demos!

Career Fair

Looking for a job? Graduating soon? Just curious? Then the career fair is for YOU!

What?

The Career Fair will give you a chance to meet and mingle with our sponsors. Be sure to bring your CV with you.

When?

The Career Fair will be held on Thursday 19th January at 1:00pm – 2:00pm and Friday 20th January at 9:00am – 10:00am. The booths for most of the sponsors will remain set up throughout the conference events for some one on one time.

Where?

The Career Fair will be held at the main lobby. You just can't miss it!

Chasing Billions with Zero Knowledge – Planning for the Unknown When Starting a Company

Austin Hill
Angel Investor & Entrepreneur

Abstract

Think you're ready to start your own company? Be sure to attend this tutorial for advice from Austin Hill on how to plan for the unknown to ensure you avoid common pitfalls when building your own company.

Biography

Austin Hill is an accomplished entrepreneur who has been creating technology startups for 15 years. He was a founder of Zero-Knowledge (now called Radialpoint) and as its President helped the company raise \$75 million between 1997 and 2001.

He served as the Chief Technology Officer for Zero-Knowledge Systems, the CEO of Synomos Inc. (a subsidiary of Zero-Knowledge Systems) and as the Executive-Vice President of Research for Radialpoint.

He was honored as a technology pioneer of the World Economic Forum in Davos (2002) and was awarded the Ernst & Young Entrepreneur of the Year Award (Quebec 2001– Emerging Entrepreneur).

He was a founder of the Internet provider Total. Net and built its Canadian network as its Chief Technology Officer. He was also the founder of security consulting firm Cyberspace Data Security.

He is an advisory board member of the Electronic Privacy Information Center, and a past board member of Information Technology Association of Canada. He also serves on the advisory boards of the Atwater Library Digital Literacy

project, is a research fellow for Coburn Ventures and through his angel investment firm Brudder Ventures advises a number of Canadian startups and entrepreneurs.

His work on Internet privacy has been profiled on 60 Minutes, and covered in Time, Newsweek, the Wall Street Journal and The NY Times.

Austin is currently working on a new project (Project Ojibwe) focused on building a new Internet community service.

Attractions in Montréal

Hotel and Conference Center

Conference Center – Mount-Royal Center
2200 Rue Mansfield
Hotel – Holiday Inn
429 Rue Sherbrooke

Restaurants

L'Academie
Bring your own wine restaurant serving Italian and French cuisine
4051 Rue St-Denis
L'Express
The French bistro to hit before a night on the town
3927 Rue St-Denis
Le Continental
A favourite spot among local celebrities
4169 Rue St-Denis
House of Jazz
Great jazz, great food, great atmosphere, all at an affordable price
2060 Rue Aylmer

Restaurants (Less than \$15 a meal)

Schwartz's
Original World Famous Smoked Meat and Steakhouse.
3895 Boulevard St-Laurent
Santropol
Sandwiches, soups, salads, hot and cold drinks. The milkshakes are a must.
3990 Rue St-Urbain
Frite Alors!
The best French fries and poutine in town with many other choices.
1710 Rue St-Denis
Rotisserie Italienne
Small Italian restaurant with great food at affordable prices.
1933 Rue Ste-Catherine
Le Cartet
An Old Montreal breakfast spot.
106 Rue McGill
Le Tarot
North African themed restaurant.
500 Rue Marie-Ann
Stash's
A great inexpensive Polish eatery.
200 Rue St-Paul

Reuben's Deli

A classic smoked meat joint.

888 Rue Ste-Catherine

Le Clafouti

Wonderful little sandwiches at fair prices.

2122 Rue Drummond

Bars and Nightclubs

Le Pistol

Bar co-owned by the brother of Sam Roberts with cheap eats and drink catering to the collegiate crowd

3723 Boulevard St-Laurent

Exit Nightclub and Lounge

3553 Boulevard St-Laurent

Orchid Nightclub and Lounge

3556 Boulevard St-Laurent

Club Opera

32 Rue Ste-Catherine

Club Vatican

1432 Rue Crescent

System Nightclub

2020 Rue Crescent

Club Opium

2100 Rue Crescent

St-Sulpice

The biggest bar by far with three floors, pool tables and a dance floor

1680 Rue St-Denis

Jello Bar

Some of the best martinis in town are served here

151 Rue Ontario

Hurley's Irish Pub

1225 Rue Crescent

John Sleeman's Pub

Tonnes of exotic and local beers on tap for low prices

1454 Rue Peel

Newtown

1476 Rue Crescent

