

CUSEC 08

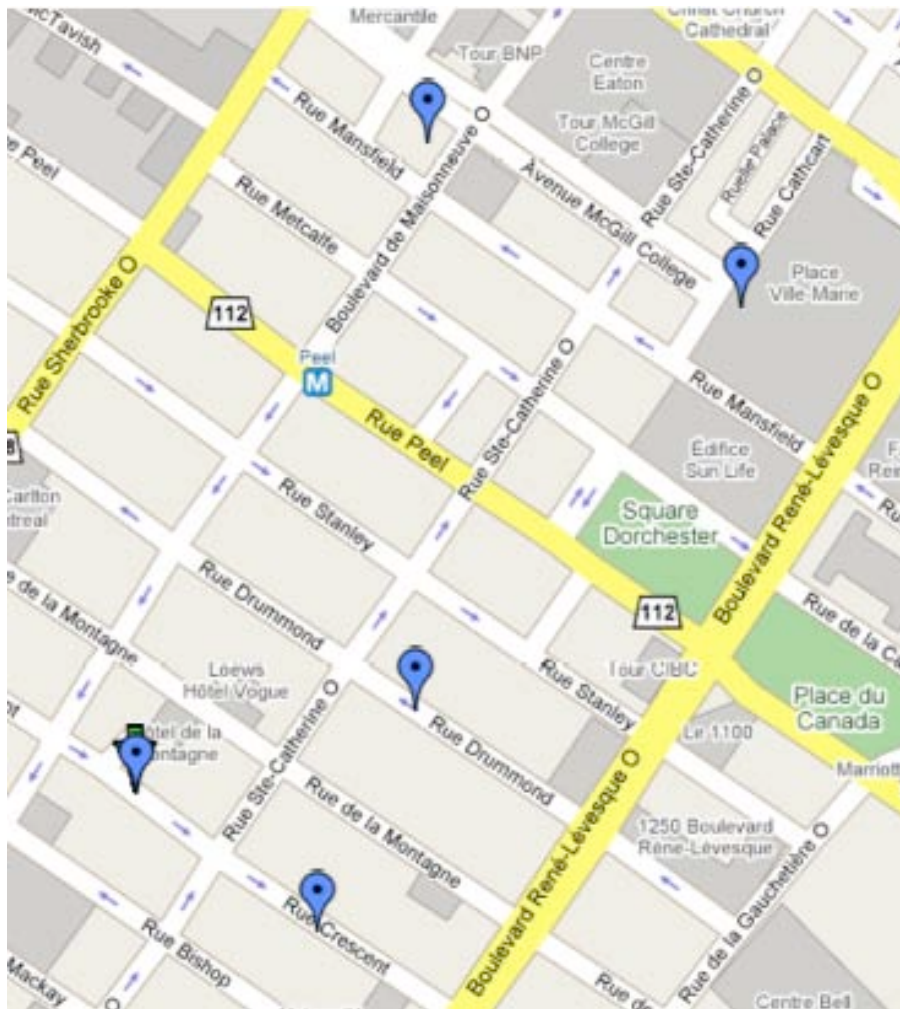
making it fun!

Montreal, Canada
January 17 - 19, 2008



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Relevant Locations



(A) Centre Mont-Royal
2200 Rue Mansfield | 514.844.2000

(B) Best Western Europa-Downtown
1240 Rue Drummond | 514.866.6492

(C) Weinstein and Gavino's – Radialpoint Presents CUSEC 2008 Banquet
1434 Rue Crescent | 514.288.2231

(D) Brutopia – 76design Presents CUSEC 2008 Pub Night
1219 Rue Crescent | 514.393.9277

(E) EA Montreal Studio Tour
1 Place Ville Marie

CUSEC 2008 Conference Schedule

Day 1 - Thursday, January 17, 2008			Day 2 - Friday, January 18, 2008			Day 3 - Saturday, January 19, 2008		
Registration (Direct Energy Lobby)			Free Time			Free Time		
Transition			Tutorial 1: Julian Spillane Microsoft's XNA as a Tool for Rapid Game Prototyping (SAP Room)			Tutorial 2: Sylvain Carle We didn't start the fire (TELUS Room)		
Introduction (MANSEF Keynote Room)			Transition			Transition		
Keynote 1: Tim Bray Hard Problems in Network Computing (MANSEF Keynote Room)			Corporate 1: SAP The Evolution of Large Scale Business Software (SAP Room)			Corporate 2: TELUS Performance Analysis & Tuning Techniques with Enterprise Applications (TELUS Room)		
Transition			Transition			Transition		
Academic 1: Dr. Marsha Chechik Guarding Against Software Accidents (SAP Room)			Keynote 3: Dr. Peter Grogono Living with Concurrency (MANSEF Keynote Room)			Academic 3: Dr. Ettore Merlo Automatic Detection of SQL Injection Vulnerabilities (SAP Room)		
Transition			Transition			Transition		
Lunch			Lunch			Lunch		
Transition			Event: Birds of a Feather (MANSEF Keynote Room)			Event: Birds of a Feather (MANSEF Keynote Room)		
Career Fair (Direct Energy Lobby)			Transition			Transition		
Transition			Career Fair (Direct Energy Lobby)			Keynote 6: Jeff Atwood Is Writing More Important than Programming? (MANSEF Keynote Room)		
Keynote 2: Zed Shaw The ACL is Dead (MANSEF Keynote Room)			Transition			Closing Remarks and Prize Giveaway (MANSEF Keynote Room)		
Transition			Transition			Group Picture (Direct Energy Lobby)		
Event: Direct Energy Presents Bruce Miner Technology, Creativity, Stress and Hockey (MANSEF Keynote Room)			Corporate 3: Idée Building your software start up and having fun doing it (SAP Room)			Free Time		
Free Time			Transition			Free Time		
Free Time			EA Montreal Studio Tour (Limited to 20 attendees. Show up early on Day 2 to sign up) 35-45 minutes			Corporate 4: Google Keeping it fun: Hacking on open source after graduation (TELUS Room)		
Free Time			Free Time			Free Time		
DemoCampCUSEC2 (SAP Room)			Radialpoint Presents CUSEC 2008 Banquet (Weinstein and Gavino's)			Radialpoint Presents CUSEC 2008 Banquet (Weinstein and Gavino's)		
Transition			Free Time			Free Time		
76design Presents CUSEC 2008 Pub Night (Brutopia)			Free Time			Free Time		

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CUSEC 2008 Organization Team

<i>Chairs</i>	Abdullah Salim Hugo Levasseur
<i>Account Managers</i>	Louis-Philippe Huberdeau Rami Ayyad
<i>Director of Presentations and Keynotes</i>	Edward Ocampo-Gooding
<i>Director of Academic Presentations</i>	Aran Donohue
<i>Director of Corporate Presentations</i>	Igor Foox
<i>Website Director</i>	Richard Shih
<i>Director of Events</i>	Julie Hache
<i>Director of Logistics</i>	Linda Wang Michelle Chua
<i>Director of Promotions</i>	Eitan Levi
<i>Director of University Relations</i>	Juan Musleh
<i>Advisors</i>	John Kopanas (President and Co-Founder) Neeraj Mathrani (Vice President) Michel Parisien

Head Delegates

<i>Bishop's University</i>	Abdo Mazloum
<i>Carleton University</i>	Denis Zgonjanin Gerald Orban
<i>Concordia University</i>	Claudiu Scotnotis
<i>École de technologie supérieure</i>	Julien Godin-Viau
<i>École Polytechnique de Montréal</i>	Colin Martel
<i>Université Laval</i>	Steve Fortier
<i>McGill University</i>	Ashton Anderson
<i>McMaster University</i>	Juan Musleh
<i>Université de Moncton</i>	Jacques-Andre Doucet
<i>University of Ottawa</i>	Alex McNamara
<i>Université du Québec en Outaouais</i>	Ngouana Sugewe G. Francis
<i>Queen's University</i>	Tim Ginn
<i>Royal Military College</i>	Robyn Scholes
<i>University of Toronto</i>	Andrew Louis
<i>University of Waterloo</i>	Marieke Talens Yubin Kim
<i>University of Western Ontario</i>	Mila Milojevic Victoria Odeyemi

What is CUSEC?

The Canadian University Software Engineering Conference is an annual three-day conference organized by software engineers for software engineers. CUSEC is a few things: it is an occasion for software craftsmen to congregate and discuss the craft; toss questions at each other; and get answers from some the leading experts in our field, it is also three days of catching up with old friends and a time for making new ones, moreover; it is just about having a good time among fellow craftsmen!

CUSEC saw its humble beginnings in 2001 thanks to a group of passionate Concordia University students led by John Kopanas under the supervision of distinguished academic, Dr. Grogono. The first edition of CUSEC drew a local crowd of approximately 100 students. Today this number has grown to an astounding 300 and the list of delegations has reached far beyond the boundaries of our beautiful province. Although CUSEC has grown and evolved over the years, the teams behind this wonderful event have stuck to the basic driving principles of this conference: To bring you content not marketing, to give you more than what you pay for, to spark or to nourish your passion for software engineering, and to keep you coming for more.

Over the past years we have welcomed some of the great figures of the software engineering world. This year is no exception. For those in search of a little suspense, intrigue, and a touch of controversy, be certain not to miss Zed Shaw's Keynote. For those of you intent on preparing for the "next software revolution", you might want front row seats to Dr. Peter Grogono's Keynote address: "Living with Concurrency". For theoretical matters and how, in theory, theory matters pay close attention during the Keynote address given by Dr. Jeffrey Ullman. If you're interested in the 6 degrees of separation and the networks that allow you to navigate them, be sure to attend Jon Udell's Keynote and, if you thirst for more networking problems and are looking for late night puzzles, go see Tim Bray's. For all the code poets out there do not skip Jeff Atwood's Keynote which is entitled "Is Writing More Important than Programming?" Along with this incredible line-up of speakers we have also the pleasure of welcoming academic, corporate, and tutorial presenters. Have a look at our schedule and choose carefully.

Even though our focus is on content, this does not stop us to build strong ties with the industry and to involve them in this festival of knowledge exchange. In this edition of CUSEC we have the honour of partnering up with companies such as Direct Energy and MANSEF. SAP, TELUS, and the Concordia University Engineering & Computer Science Faculty have showed us their support by becoming our 2008 Platinum Sponsors. Many more companies have supported us in bringing to you this event. Please take the time to attend the incredible corporate presentations given by some of the most talented professional software engineers out there.

CUSEC is for you; therefore take your passion along with you on this adventure. Join the long winded discussions which take place in the hallways and in the foyer between the delegates and presenters. Finally, and above all, "make it fun!"

Chair's Remarks

Welcome to the 7th edition of CUSEC!

As you read these words take a few seconds to look around you, at all those people who are here sharing this wonderful moment with you. Notice their smiles. Notice the anticipation in their eyes as they scan the room to get a glimpse of our very own software engineering stars. Notice how they passionately share their ideas and points of view with one another. This is what the Canadian University Software Engineering Conference is about.

To feed your passion this year we are going beyond what has been done in the past. Not only are we welcoming you with the usual list of suspects: Keynotes, Academic Talks, Corporate Talks, and career fair, we are also bringing you activities such as the DemoCamp, the Pub night, the Game Studio Tour, the Birds of a feather lunches, and the glorious Friday night banquet! Keep in mind that our presentation line-up this year, again, is tremendous. These stars from the four corners of the software world will keep you asking for more. Study the schedule well and show up to the presentations early in order to get a good seat.

Make sure not to miss the career fair as it will be one of our biggest yet. If you are not carrying your CV with you now, find yourself a laptop, connectivity, and a printer because you will not want to miss the opportunities lining up in the foyer. Don't forget to put on your best smile and take with you a firm hand shake.

I would also like to invite you to please take a moment during the course of the conference to thank a few of the organizers without whom all this would not have been possible. Remember, all of the organizers are or have been students, such as yourselves, and they have volunteered their time out of the goodness of their hearts to make it all happen for you.

Finally, every year individuals, such as you, experience CUSEC for the first time. By coming to CUSEC, they realize that it allows them to meet a slew of people who are like minded, driven, and passionate about their craft and who come to this conference to learn and exchange ideas about it. Every year we also welcome back many of you, old friends of CUSEC, bringing with you more knowledge, experience, and enthusiasm. It's up to you, the new comers and the old timers, to ensure that this conference's spirit endures: keep learning, keep sharing, keep coming, and, above all, keep having fun!

Best regards,

Abdullah Salim and Hugo Levasseur
Chairs – Canadian University Software Engineering Conference 2008

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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ABOUT MANSEF

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The kind of person we're looking for does not need to be filtered out of a list of other candidates. After their interview, we will not have to sit around a table wondering who to hire. It will be the person that blows us away with their passion, commitment, and constant drive to innovate that gets the job.

Are you right for us?

If you are passionate about programming, eager to learn new things, and love to push the boundaries of what is possible, if for you, few experiences rival the feeling when your code Just Works(tm), if you don't worry about whether or not you are qualified for the job but worry if the job can keep up with you, then you're a perfect match.

User Applicant Requirements:

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2. You have more plugins in Firefox than you do pairs of underwear
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4. You can spot a bad User Interface from space, with your naked eye, while juggling ninja stars (or pirate swords, we're an equal opportunity employer)
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So if you're a PHP/MySQL/XHTML/CSS/Javascript WIZARD (or if you know you can be), please send your resume and interesting cover letter to Neil Conlan at neil.conlan@mansef.com or drop by our booth to chat, we'd love to hear from you.

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For more information about the program check out our IS Grad website at www.directenergy.com/isldp.



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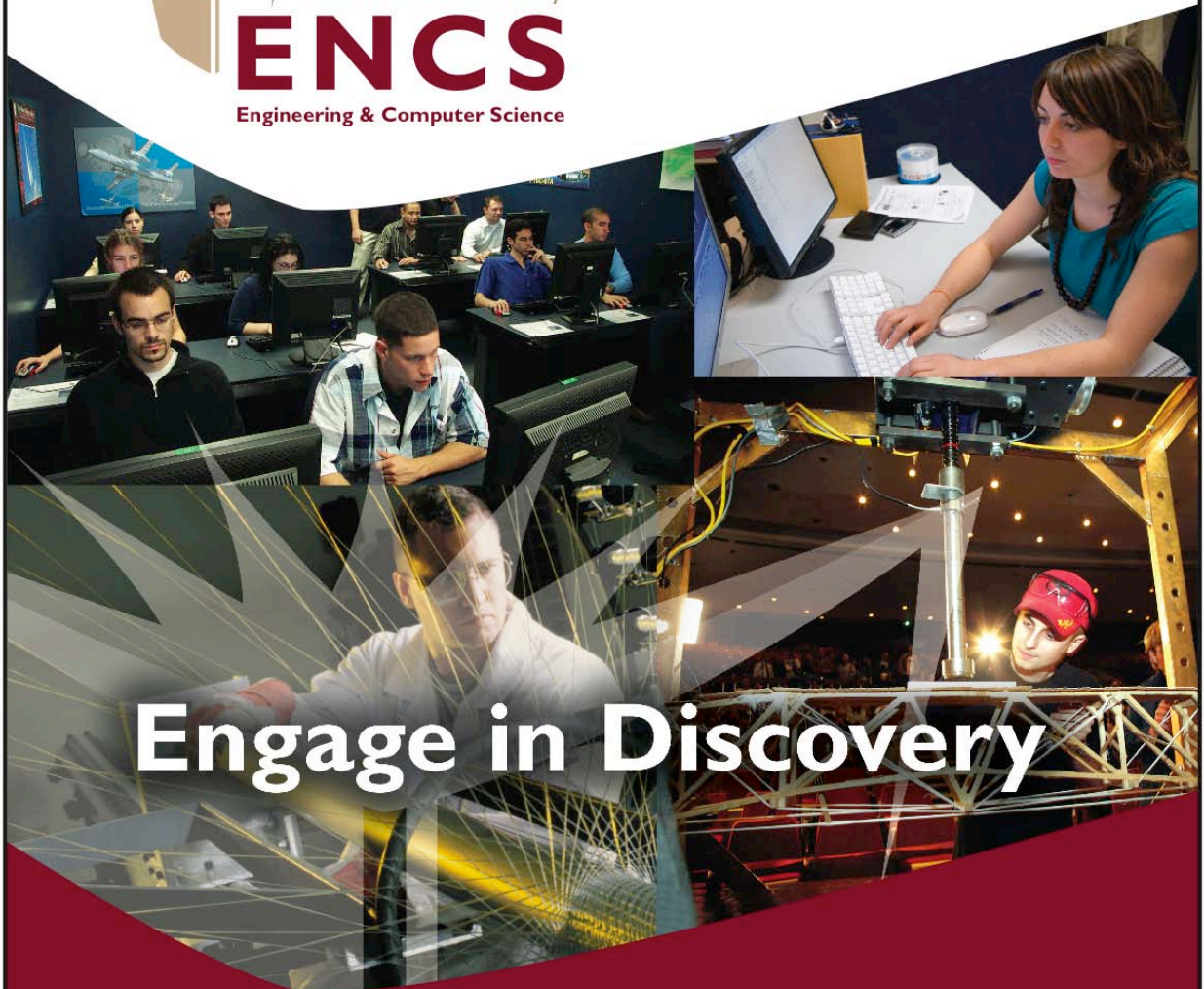
We are always on a lookout for enthusiastic students to join our exciting and rigorous summer internship and co-op programs. We also offer full-time new grad internship and leadership development programs with the opportunity to gain exposure to the following areas:

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- Business Analysis
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- 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 co-op or full time roles that include QA, Development & Support, Business Systems Analysis, Project Management or our Business Transformation Leadership Development Program. Check out our website for more information, and don't forget your resume!

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Meet Vince.

Director of Advanced Software Design for Evertz.



As a 10-year-old kid, he wanted to create video games and started to learn how to program. Computer Science was a natural choice. **Evertz was also a natural choice.**

During his 16-month internship at Evertz, he designed and implemented software/firmware for one of our signature products using technology now referred to as VistaLINK. Vince started full-time with Evertz as a Design Engineer upon graduation in 2002.

Today, Vince fulfills his need for challenge daily, by doing things that haven't been done before. At any given time, he works on several diverse projects, each requiring a different set of skills and a whole host of new technologies with it.

Working with interns and new employees keeps him in tune with the new generation of software developers.

*"Teaching is one of the coolest things I get to do.
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Overview

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Autodesk Media & Entertainment, based in Montreal, Quebec, was established in 1999 after Autodesk acquired Discreet Logic Inc. and merged its operations with Kinetix. In January 2006, Autodesk acquired Alias, a developer of 3D graphics technology.

Markets Served

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- Interactive gaming
- Design visualization

Global Presence

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Keynote Speakers

Tim Bray

Hard Problems in Network Computing

Zed Shaw

The ACL Is Dead

Dr. Peter Grogono

Living with Concurrency

Dr. Jeffrey Ullman

When Theory Matters

Jon Udell

Hacking the Noosphere

Jeff Atwood

Is Writing More Important Than Programming?

Hard Problems in Network Computing



Tim Bray

Director of Web Technologies, Sun Microsystems

Jan. 17: 10AM – 11AM

@ MANSEF Keynote Room

Biography

Tim Bray managed the Oxford English Dictionary project at the University of Waterloo in Ontario, Canada in 1987–1989, co-founded Open Text Corporation in 1989, launched one of the first public web search engines in 1995, co-invented XML 1.0 and co-edited “Namespaces in XML” between 1996 and 1999, founded Antarctica Systems in 1999, and served as a Tim Berners-Lee appointee on the W3C Technical Architecture Group in 2002–2004. Currently, he serves as Director of Web Technologies at Sun Microsystems, publishes a popular weblog, and co-chairs the IETF AtomPub Working Group. [From Oram & Wilson’s “Beautiful Code”, 2007]

Abstract

The good news is that we make progress in hardware, and in software at both the infrastructure and application levels. The other good news is that there are still lots of hard problems that we don't know how to solve. This will be a tour through some of the gnarliest and ugliest things that keep the leaders of the software community awake at nights. My completely-un-hidden agenda is to get the student audience worried about some of them too, so you can spend some of your nights trying to solve them in ways nobody's thought of yet, instead of wasting your time sleeping.

The ACL Is Dead



Zed Shaw

Author, Mongrel Web Server

Jan. 17: 3:15PM – 4:00PM
@ MANSEF Keynote Room

Biography

Zed A. Shaw is the most famous Shark Jumper there is. Having jumped his shark a decade ago he still finds time to work for large and small companies implementing large and small software for large and small amounts of money. He is the author the Mongrel web server, creator of the Utu project, recent Factor convert, and absolutely hates Ruby even though he makes money on it.

Abstract

A tale of suspense, intrigue, corporate greed, and the stupidity of an authorization mechanism that isn't turing complete. With code.

Living with Concurrency



Dr. Peter Grogono

Professor, Concordia University

Jan. 18: 11:00AM – 12:00PM
@ MANSEF Keynote Room

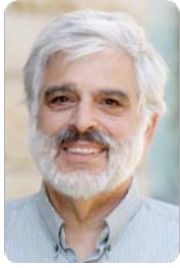
Biography

Peter Grogono is a professor in the Department of Computer Science and Software Engineering at Concordia University. Before entering the groves of academe, he developed software in a variety of application domains, including pattern recognition, operating systems, highway construction, electronic music, games, and accounting. His principal interest is in tools that help programmers to efficiently produce high-quality software, especially programming languages and development environments. He has given keynotes at four previous CUSECs.

Abstract

Many universities have introduced undergraduate software engineering degrees during the last decade. Are they doing a good job? Is industry getting what it needs? Most current degree programs are doing well for now, but the industry is changing fast, and universities must keep up with it. Herb Sutter says that the "next software revolution" will be about concurrency. Is industry ready for it? Are universities ready for it? Objects, aspects, and concurrency will make a very rich mixture - perhaps too rich. Effective use of new hardware will require drastic change: perhaps even a new programming paradigm. We will outline a modest proposal.

When Theory Matters



Dr. Jeffrey Ullman
Professor, Stanford University

Jan. 18: 3:15PM – 4:15PM
@ MANSEF Keynote Room

Biography

Jeff Ullman is the Stanford W. Ascherman Professor of Computer Science (Emeritus). His interests include database theory, database integration, data mining, and education using the information infrastructure.

Abstract

Some of the most profound ways in which the Web changes our lives would not have happened without a heavy dose of computer-science theory. PageRank, and how it makes Google work, is a well-known example, but there are many others. We shall explore briefly some of the interesting algorithms, such as PageRank variants, minhashing, and locality-sensitive hashing that have given us surprising capabilities.

Hacking the Noosphere



Jon Udell

Technical Evangelist, Microsoft

Jan. 19: 11:00AM – 12:00PM

Location: MANSEF Keynote Room

Biography

Jon Udell is an author, information architect, software developer, and new media innovator. His 1999 book, *Practical Internet Groupware*, helped lay the foundation for what we now call social software. Udell has been a software developer at Lotus, was *BYTE Magazine's* executive editor and Web maven, and has worked as an independent consultant.

A hands-on thinker, Udell's analysis of industry trends has always been informed by his own ongoing experiments with software, information architecture, and new media.

From 2002 to 2006 he was InfoWorld's lead analyst, author of the weekly Strategic Developer column, and blogger-in-chief. During his InfoWorld tenure he also produced a monthly series of screencasts about software, and a weekly series of audio interviews with innovators -- which now continues at ITConversations.

In January 2007 he joined Microsoft as a technical evangelist. In his new role he'll continue to explore and explain a broad portfolio of technologies, both inside and outside Microsoft. He aims to build bridges not only within the technical community but also, and crucially, across the chasm that divides elite technologists from everybody else.

Abstract

We learn, teach, and work in an increasingly connected world. Computer and information sciences supply the raw connectivity. But it's people, interacting on networks, in information-rich contexts, who weave the fabric of knowledge and action. To empower them, we need to add a social dimension to our engineering practice.

Is Writing More Important Than Programming



Jeff Atwood

Founder, www.codinghorror.com

Jan. 19: 2:00PM – 3:00PM
@ MANSEF Keynote Room

Biography

Jeff Atwood is the founder of www.codinghorror.com, an amazing blog that offers new perspectives about software engineering and development.

Abstract

Programming, like all writing, is just another form of communication. Writing code that the compiler understands is easy. Writing code that other people understand is far more difficult. And that's assuming you're persuasive enough to convince other people that your code, in a world positively overflowing with free code, is worth looking at in the first place. Good luck. You're gonna need it. History books are written by the winners and the winners in the software industry were those whose voices were heard over the din. Code speaks, but writing-- for machines and the people who love them-- speaks loudest of all.

Corporate Presentation

SAP: Michel Martin

The Evolution of Large Scale Business Software

TELUS: Chris Collition

Performance Analysis and Tuning Techniques within Enterprise Applications

Idée: Leila Boujnane and Paul Bloore

Building your software start up and having fun doing it!

Google: Jeff Bailey

Keeping it fun: Hacking on open source after graduation

The Evolution of Large Scale Business Software



Michel Martin
SAP Corporate Speaker

Jan 18: 10:00AM – 10:45AM
@ SAP ROOM

Biography

Michel Martin comes from Rimouski, a small town in the eastern part of Québec. In 2000, he moved to Sherbrooke to study computer science. Among several internships that were part of the COOP program at the Université de Sherbrooke, he started at SAP in 2003. Michel has been at SAP for five years since then and is now the development architect for the Trade Promotion Management team at SAP Labs Canada.

Over the last years, Michel participated in a couple of patents as well as the SAP Developer Challenge 2006, and has been a key person within the development of CRM 5.1, CRM 5.2, and CRM 2007. He has also supervised and guided several SAP interns from various universities.

Abstract

In the business software jungle, SAP has stood King for the past three decades. Although you not might be familiar with this business software industry giant, this giant is familiar with you. Its list of customers includes the likes of Nestlé, Hydro Québec, and the Canadian government. In other words, SAP technology has almost certainly been used to manage data pertaining to you. Regardless of its past successes, in this extremely fast-paced and constantly changing environment, the crown could have easily gone to one of SAP's many competitors had it not embraced change and evolution. With locations across the globe and a workforce of approximately 40,000 employees, SAP is a true software engineering powerhouse. With the support of their employer, SAP developers have been pushing the boundaries of software engineering for years. At the heart of these successes are SAP's core set of values: Customer Focus, Quality, Product Excellence, Passion, Integrity, and Commitment. The technical focus of this presentation will be the strategies and tactics used throughout the evolution of the CRM (Customer Relationship Management) software suite over the past few years. This evolution was driven by a rupture with the traditional mode of development at SAP, which had an impact on all aspects of the CRM software development practice: planning, development processes, UI development, application architecture, and development methodologies.

Performance Analysis and Tuning Techniques within Enterprise Applications



Chris Collition
TELUS Corporate Speaker

Jan 18: 10:00AM – 10:45AM
@ TELUS ROOM

Biography

Chris is a manager in the Enterprise Architecture group at TELUS in Vancouver. He draws upon over 11 years of consulting experience as a Senior Technology Manager at Accenture helping to deliver large-scale development efforts at companies such as Cisco Systems, EMC, Alcan, Sears, Cablevision, GTAA, and 407-ETR.

Chris graduated from the University of Waterloo's engineering program (Civil) in 1996. He is a recent Toronto transplant to Vancouver and is fully enjoying the surrounding mountains

Abstract

Developing and deploying software solutions in enterprise environments often involves integration of components across multiple systems, data stores, vendor COTS packages, and disparate patterns such as J2EE, .NET, or batch processing. An important aspect to successful project delivery and user acceptance is the ability to model and predict the performance characteristics of the overall solution. This understanding is pivotal in complex enterprise 'ecosystems' involving worldwide call centre operations, international consumer web presence, and multiple datacenters.

Mr. Collition presents an enterprise-grade performance readiness approach highlighting correct design patterns, testing approaches, and tuning techniques. Particular emphasis is on J2EE application stacks involving synchronous, asynchronous, and batch processing using Weblogic and Oracle Real Application Clusters.

Building your software start up and having fun doing it!



Leila Boujnane and Paul Bloore
Idée Corporate Speakers

Jan 18: 4:15PM – 5:00PM
@ SAP ROOM

Biography

Leila Boujnane is Chief Executive Officer of Idée Inc. She is responsible for all aspects of the company's strategy and operations. Before founding Idée, Leila held positions in international organizations in the commercial and public sectors, including Algorithmics, Infinity Financial Technology and Bank of Montreal. Leila is characterized by her peers and colleagues as a passionate and determined team player with exceptional leadership skills. Leila is also an outspoken participant in the imaging and technology industry. She regularly speaks at industry conferences and is an active mentor for young women in technology.

Paul Bloore has over 15 years of experience designing and implementing innovative commercial software. As Chief Technology Officer, he is responsible for all research and development of new visual search and image recognition technologies. With his solid experience and success in commercial software development and distributed computing systems, Paul has been the driving force behind Idée's research and development efforts in the visual search field.

Prior to co-founding Idée, Paul was co-founder and a principal of TrueRisk Inc. which developed firm-wide financial risk management software. TrueRisk grew to become one of the leading developers of quantitative financial software for trading and risk management. In 1999 SunGard Data Systems Inc. (NYSE: SDS) acquired TrueRisk.

Paul Bloore is characterized by his passion for software development and applied technologies. Inspired by his combination of vision and industry experience, Idée continues to produce award-winning technology.

Abstract

How to conquer technology challenges, build a team and change an entire industry. Leila Boujnane and Paul Bloore are the co-founders of Idée Inc. (<http://ideeinc.com>). They are both software industry veterans and in this presentation they will take you through their current start up adventures. A day in the life of Idée Inc, a technology retrospective (how far have we come), a lesson in building great technologies, large compute clusters and landing some of the largest clients in the world. All without ever stopping to have fun.

Keeping it fun: Hacking on open source after graduation



Jeff Bailey

Google Corporate Speakers

Jan 18: 4:15PM – 5:00PM
@ TELUS ROOM

Biography

Jeff Bailey works for Google in the Open Source Programs Office. Prior employers included places like Canonical, Sirius Sattelite Radio, and Hollinger Digital Canada. Jeff is also a member of several Free and Open Source projects, such as GNU, Debian, Ubuntu, and Gnome.

Jeff is originally from Vancouver, but considers Montréal to be "Home". He is currently studying for his Masters of Science in Computing and Information Systems with the University of Athabasca.

Abstract

Jeff will be talking about the growth and development of Open Source Software in corporations. This will include a bit on what Open Source is, an overview of some licenses, snippets about the growth of Open Source in corporate Canada over the past decade, and information on how Google (his currently employer) uses Open Source Software. He will also cover what it's like being an Open Source hacker working in these environments, and how to sell OSS to enterprises.

Academic Speakers

Dr. Marsha Chechik

Guarding Against Software Accidents

Kate Hollenbach

Developing Visualizations of Web Content with E15

Dr. Jeremy Cooperstock

Music and Games: How fun Applications Stimulate Core Technologies

Dr. Ettore Merlo

Automatic Detection of SQL Injection Vulnerabilities

Guarding Against Software Accidents

Dr. Marsha Chechik

Associate Professor, University of Toronto

Jan 17: 11:00AM – 11:45PM

@ SAP ROOM

Biography

Marsha Chechik received her Ph.D. from University of Maryland. She is now an Associate Professor of Computer Science at the University of Toronto. She does research in the use of formal methods to improve quality of software. She is also interested in computer security, requirements engineering, software specifications and model management. She has had a number of joint research projects with industry, including such companies as IBM, Lucent, and AT&T. She teaches programming languages, compiler construction, software testing and verification, logic, and a whole number of other courses at a graduate and undergraduate level. And... she is looking for excellent students to join her research group in the Fall of 2008!

Abstract

A talk about software accidents and techniques for checking whether software is prone to them.

Developing Visualizations of Web Content with E15

Kate Hollenbach

Research Assistant, Massachusetts Institute of Technology

Jan 17: 11:00AM – 11:45AM

@ TELUS ROOM

Biography

Kate Hollenbach has a B.Sc. in Computer Science and Engineering from the Massachusetts Institute of Technology, and is currently pursuing an M.S. in Media Arts and Sciences at the MIT Media Lab. She is a research assistant in the Physical Language Workshop, where she is developing software tools for information visualization and creative expression in digital media.

Abstract

E15 is a graphics platform designed for creating dynamic, 3D data visualizations. It consists of an OpenGL graphics engine with a scripting interface that can be used to generate objects and textures or fetch data from the web. The scripting interface, an embedded Python interpreter, enables the visualization designer/developer to change visual parameters without having to recompile code, making it easy to rapidly prototype different visual designs. This talk will cover the key features of E15 as a web visualization platform and showcase some of the visualizations created with it. More information about E15 can be found at <http://e15.media.mit.edu>.

Automatic Detection of SQL Injection Vulnerabilities

Dr. Ettore Merlo

Professor, École Polytechnique de Montréal

Jan 19: 10:00AM – 10:45AM

@ SAP ROOM

Biography

Ettore Merlo received his Ph. D. in computer science from McGill University (Montreal) in 1989 and his Laurea degree - summa cum laude - from University of Turin (Italy) in 1983. He was the lead researcher of the software engineering group at Computer Research Institute of Montreal (CRIM) until 1993 when he joined Ecole Polytechnique de Montreal where he is currently a full professor in the computer and software engineering department. His research interests are in software analysis, software reengineering, software security, user interfaces, software maintenance, artificial intelligence and bio-informatics. He has collaborated with several industries and research centers in particular on software reengineering, clone detection, software quality assessment, software evolution analysis, testing, architectural reverse engineering and genetic linkage analysis.

Abstract

An approach that combines static, dynamic analysis, and re-engineering to automatically detect and protect PHP Web applications from SQL-injection attacks is presented. Results from 31 versions of phpBB are shown. Software engineering perspectives include continuous security assurance, regression security validation, and software evolution. Research perspectives include security models and static analysis.

Une approche qui combine l'analyse statique, dynamique et la ré-ingénierie est présentée pour la détection et la protection d'applications Web écrites en PHP contre les attaques par injection SQL. Les résultats obtenus sur 31 versions de phpBB seront présentés. Les perspectives en génie logiciel incluent l'assurance qualité continue, la validation de régression de la sécurité, et l'évolution du logiciel. Les aspects de recherche comprennent les modèles de sécurité et l'analyse statique.

Music and Games: How fun Applications Stimulate Core Technologies

Dr. Jeremy Cooperstock

Associate Professor, McGill University

Jan 19: 10:00AM – 10:45AM

@ TELUS ROOM

Biography

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.

Abstract

Musical interaction and games have long been ignored by the mainstream of engineering, perhaps considered as unworthy of serious attention. On the contrary, these applications pose serious design challenges and present important opportunities to test core technologies, with implications to a broad range of other activities. Examples of such technologies, motivated by the needs of music and games, include video tracking systems for identifying body pose and position, low-cost accelerometers with efficient gesture recognition algorithms, low-latency network transport protocols, high-fidelity spatialized audio, and advanced video rendering. This talk illustrates the development of some of these core technologies along with their associated research challenges and implications to future applications.

Tutorial Speakers

Julian Spillane

Microsoft's XNA as a Tool for Rapid Game Prototyping

Sylvain Carle

We didn't start the fire

Adrian Thurston

Creating fast, maintainable and secure parsers with Ragel

Microsoft's XNA as a Tool for Rapid Game Prototyping

Julian Spillane

CEO, Frozen North Productions Inc.

Jan 18: 9:00AM – 9:45AM @ SAP ROOM

Biography

Julian Spillane is the co-founder and CEO of game development company Frozen North Productions, Inc. Julian attended the University of Waterloo for Software Engineering and has taken a great interest in applying principles of engineering design to software development in the games industry. Julian is also the founder and Chair of the Toronto Independent Games Conference.

Julian is also no stranger to CUSEC. He's managed to climb the ranks by going from the University of Waterloo Head Delegate in 2007 all the way to speaker in 2008!

Abstract

This talk will provide an introduction to game prototyping and how Microsoft's XNA 2.0 technologies make it easy for people familiar with .NET languages to rapidly realize ideas to test their viability.

We didn't start the fire

Sylvain Carle

Co-Founder & CEO, Praized Media

Jan 18: 9:00AM – 9:45AM @ TELUS ROOM

Biography

Sylvain Carle dwells in emerging technologies; he has been on the bleeding edge of new media and networked applications for more than 10 years. Communications tools, XML web services, digital media and Free Software, Open source and open standards are amongst his core expertise. Strong communicator and advocate for pragmatic IT, he's one of the cofounders and CTO of Praized Media, a newly funded startup in local search, and serves as an advisor for several startups in the Montreal area.

Abstract

How startups have everything to do with lighting a fire and keeping it alive.

Creating fast, maintainable and secure parsers with Ragel

Adrian Thurston

Ph.D. Candidate, Queen's University

Jan 19: 9:00AM – 9:45AM @ SAP ROOM

Biography

Adrian Thurston is a Ph.D. student at Queen's University, where he hacks on source transformation systems. His current work focuses on the analysis and manipulation of real-world languages. Many computer languages cause trouble for the grammar-based generalized parsers that are normally used in generic transformation systems. His current project, Colm, is a new transformation system that will solve this problem. Adrian is also the creator of Ragel, a software development tool that allows for the embedding of arbitrary code into statically compiled regular expressions. It can be described as a regular language parser generator; as such it can be used to make very fast parsers. Adrian did his Master's degree also at Queen's and his Undergraduate degree at the University of Waterloo.

Abstract

A talk on what Ragel can do for you and what it requires of you for effective use.

Events

Direct Energy Presents Bruce Miner

DemoCampCUSEC2

Birds of a Feather (BoF)

EA Montreal Studio Tour

76design Presents CUSEC 2008 Pub Night

Radialpoint Present CUSEC 2008 Banquet

Direct Energy Presents Bruce Miner



Jan. 17: 4:30PM – 5:30PM
@ MANSEF Keynote Room

Biography

Bruce Miner has over thirty years of IT experience, specializing in enterprise grade systems architecture, large scale development, database design, database internals, operating systems internals and management consulting.

Bruce's assignments include a mix of development, strategic planning, business analysis, enterprise architecture, project management and marketing. Industry verticals include an international mix of banking, insurance, telecommunication, Internet, government, education and energy. He has participated in various industry standards based initiatives including the eLearning shareable content object reference model (SCORM), the World Wide Web Consortium (W3C), the Internet Engineering Task Force (IETF), the Open Group Architecture Framework (TOGAF) and the Object Management Group (OMG).

In addition to his teaching assignments, Bruce has spoken at numerous industry events including the World Wide Web Symposium in Hong Kong and the Object-Oriented Programming Systems and Languages Association Conference in Austin.

Father of five children (all daughters), Bruce lives in downtown Toronto with his wife, children and cat. He is very busy in various community activities and volunteer board positions in both Toronto and Wainfleet Ontario where he owns a century cottage on Lake Erie. Additionally he is a regular sailor, SCUBA diver and skydiver. Bruce holds a BSc in Mathematics from the University of Toronto.

Abstract

The underlying themes of thinking strategically and taking risks are applied to a variety of real life experiences ranging from Internet giants to up and coming environment applications.

DemoCampCUSEC2

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 17th, 2008 @ 7:00 PM - 9:00 PM

Where: SAP Room

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, students and professionals are all welcome... demo or not.

Why: To support innovation amongst Software Engineers

Details

DemoCampCUSEC2 is being held at the same location as CUSEC (the Canadian University Software Engineering Conference) and open to all including students, entrepreneurs, 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 not? Well, you have working software...right?

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

Email hache.julie@gmail.com if you want to present. Don't be shy! If you'd like to find out more about DemoCamp, there is additional info at <http://barcamp.org/DemoCamp>.

Birds of a Feather

CUSEC is a great opportunity to learn but also to exchange with others. These lunchtime sessions will allow you and your fellow attendees to connect and share on any and every topic. Pick up a spot in the conference, write up your topic, and chat away!

EA Montreal Studio Tour

Twenty lucky CUSEC attendees will get a tour of EA's game development studio in Montreal. This tour will happen from 5:30pm to 6:15pm on Jan 18th, 2008. How can you get a tour? Be one of the first twenty people to sign up for it on Day 2 of CUSEC; sign-up begins at 8:30am. The sign-up sheet will be available at the Registration table. CUSEC thanks EA Montreal for providing us with this opportunity!

A bus will depart for the studio at 5:20pm from the Centre Mont-Royal. You will be picked up by the same bus at 6:15pm and dropped off at the Best Western hotel.

76design Presents CUSEC 2008 Pub Night

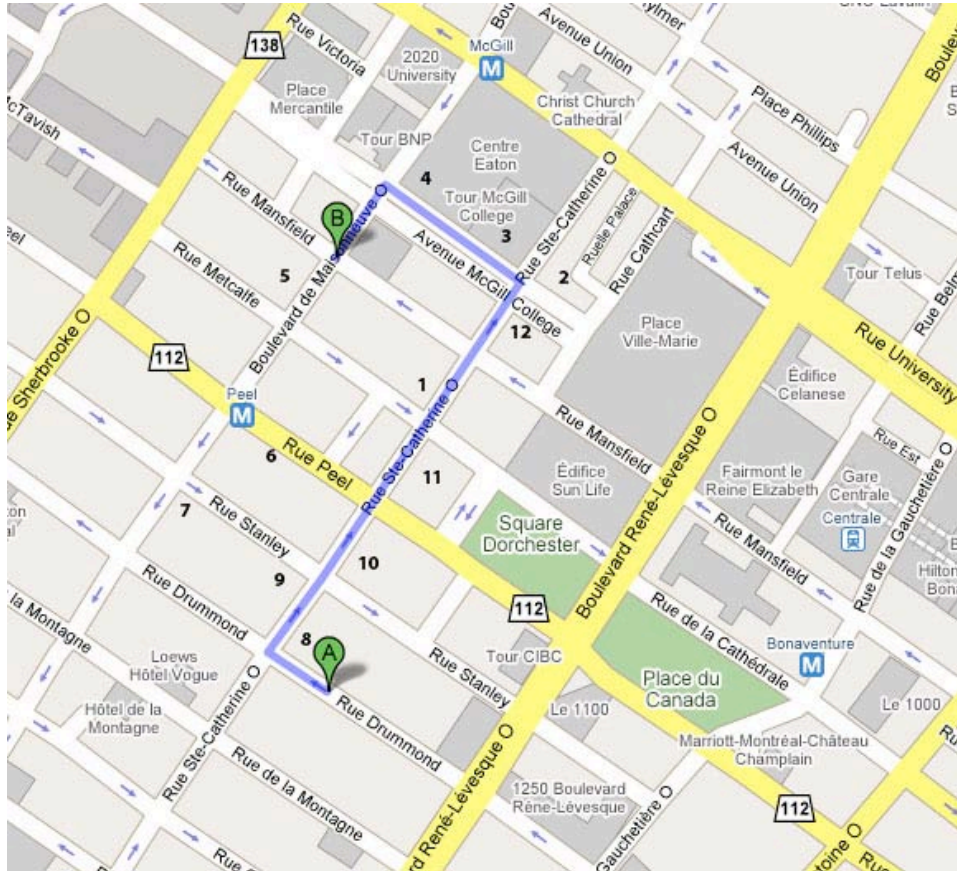
76design will be sponsoring the annual CUSEC Pub Night at Brutopia, the premiere brewpub in downtown Montreal. Join speakers, sponsors, organizers and delegates in an of drinks and discussions! Brutopia is located at 1219 Rue Crescent. The Pub Night will take place on Thursday, January 17, 2008 starting at 9:30pm, after DemoCampCUSEC2.

Radialpoint Present CUSEC 2008 Banquet

Radialpoint will be sponsoring the annual CUSEC Banquet at Weinstein and Gavino's. Speakers, sponsors, organizers and delegates will all be there to enjoy a wonderful an evening of fine dining and great conversations. Weinstein and Gavino's is located at 1434 Rue Crescent. The banquet will be on January 18, 2008 starting at 7pm. Formal dress code is required for the banquet.

Attractions in Montreal

Food around the conference center and hotel:



1. Fast Food Court (Downstairs) - "Carrefour Industrie Alliance"
Between Simons and Famous Players
Contains: Brulerie St. Denis (amazing coffee), Japanese, Chinese, Subway, Mexican, Burger King, and more.
2. Van Houtte Café
Boccacinos Restaurant/Bar (Pizza, Salad, Pasta, etc)
3. Centre Eaton (Mall)
Starbucks
Premium (Wraps, Salad, Soup, Desserts – Fast food)
4. Risolina Restaurant (Burgers, Pasta, etc)
5. Presse Café
6. Alexandré (Pub/Restaurant)
Illy (Restaurant - Sandwich, etc)
7. Le Fournil (Bakery, Egg dishes, Tortillas, etc)
Sushi Shop
8. Basha (Shawarma, Vegetarian, etc)

- 9. Starbucks
 - Subway
 - Indian Restaurant
- 10. Ruben's
 - Second Cup
- 11.3 Brasseurs (Large restaurant menu, microbrewery)
- 12. Commensal (Vegetarian buffet)
 - Ruben's
 - Ice Cream

Bars and Nightclubs:

Le Pistol - 3723 Boulevard St-Laurent
Bar co-owned by the brother of Sam Roberts with cheap eats and drink catering to the collegiate crowd

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

Club Opium - 2100 Rue Crescent

Jello Bar - 151 Rue Ontario

Some of the best martinis in town are served here

Hurley's Irish Pub - 1225 Rue Crescent

John Sleeman's Pub - 1454 Rue Peel

Tonnes of exotic and local beers on tap for low prices

Newtown - 1476 Rue Crescent



WEB 2.0 DEVELOPMENT

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Do you love programming, have a passion for technology and business, and want to travel North America?

Direct Energy is holding interviews while at CUSEC, so don't miss your chance to be part of our Leadership Development Program for Software Developers!

Drop by our booth to schedule your interview time today!

For more information about the program check out our IS Grad website at www.directenergy.com/isldp.

Leadership Development Program for Software Developers