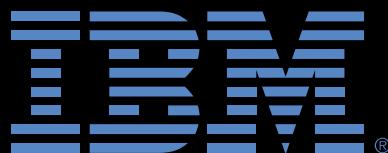




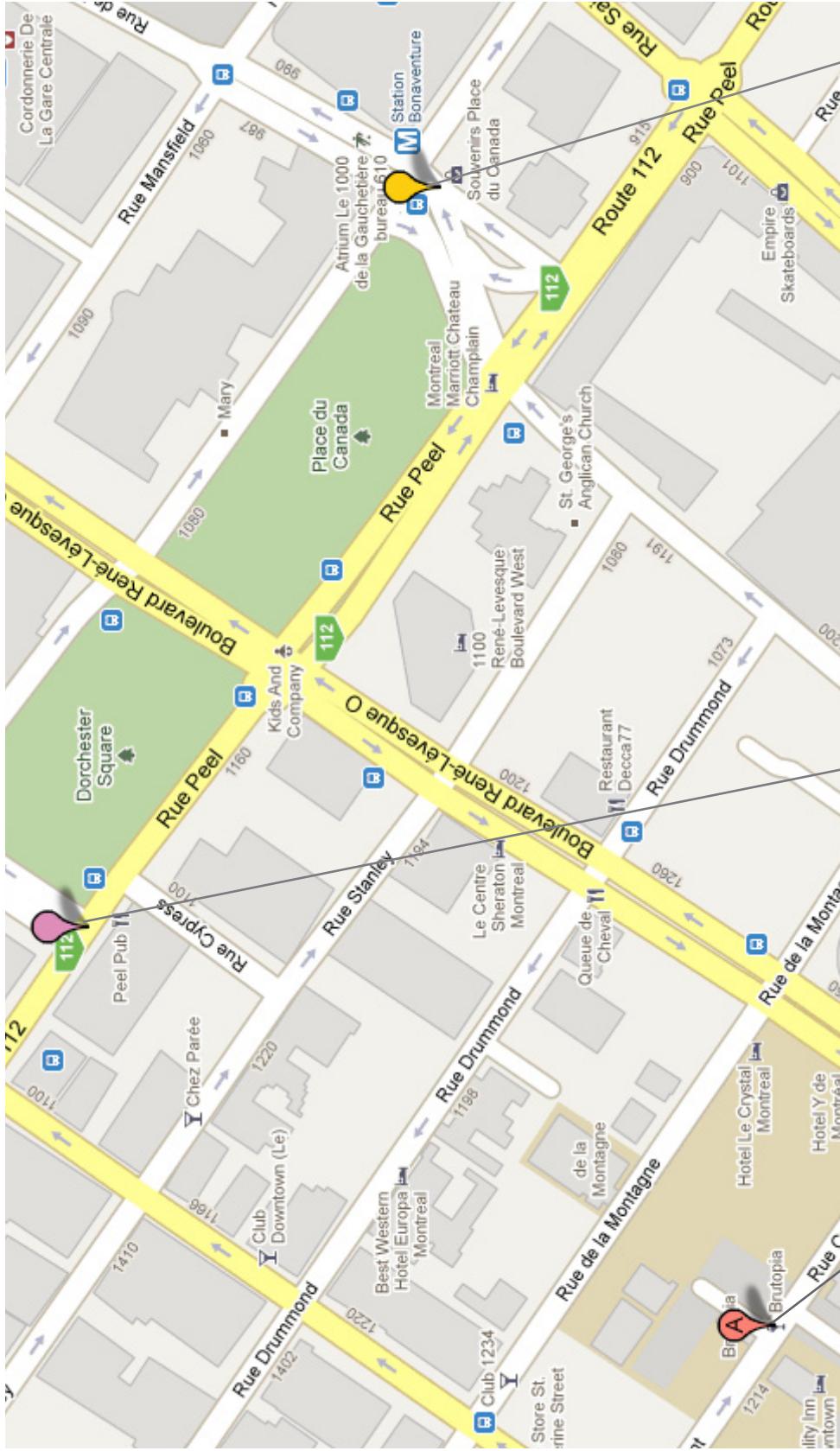
Canadian University Software Engineering Conference

Montreal, Quebec
January 13 - 15, 2011

In Partnership with



Relevant Locations



Marriott Chateau Champlain

1 Pl. du Canada
(514) 941-9610
Hotel and Conference Centre

McLean's Pub
1210 Peel
(514) 392-7770
Startup Drinks

Brutopia
1209 Crescent
(514) 393-9277
Shopify Party

Schedule

Thursday, January 13		Friday, January 14		Saturday, January 15	
08:30	Registration				
08:45		Academic			
09:00		Derek Ruths (IBM Room)			
09:15					
09:30	Intro to CUSEC 2011				
09:45					
10:00	Keynote: Michael Lopp (IBM Room)				
10:15		Tutorial			
10:30		Guy Barette (IBM Room)	Edward Ocampo-Gooding with Daniel Beauchamp (Viger)	Eric Diep (IBM Room)	James Duncan (Viger)
10:45					
11:00					
11:15	Paul Kry (IBM Room)	Academic	Keynote: Ben Fry (IBM Room)	Keynote: Julie Steele (IBM Room)	
11:30					
11:45					
12:00			Lunch	Lunch	
12:15					
12:30					
12:45					
01:00					
01:15					
01:30					
01:45					
02:00					
02:15			Career Fair		
02:30					
02:45					
03:00					
03:15	Moataz Adbellateef - Direct Energy	Corporate	Marc-Antoine Ruel - Google (IBM Room)	Corporate	Keynote: Yehuda Katz (IBM Room)
03:30	(IBM Room)		Martin Drapeau - Planbox (Viger)	Mark Jorgensen - Morgan Stanley (Viger)	
03:45					
04:00					
04:15					
04:30	Keynote: Drew Conway (IBM Room)		Keynote: Mike Shaver (IBM Room)		Closing Remarks and Prize Giveaway
04:45					
05:00					
05:15					
05:30					
06:00					
06:30					
06:45					
07:00					
07:30					
08:00					
08:30					
08:45					
09:00					
09:15					
09:30					
09:45					
10:00					
10:30					
					Shopify CUSEC 2011 Party (Brutopia)



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CUSEC 2011 Organization Team

<i>Chairs</i>	Sven James Thomas Hibbert
<i>Director of Logistics</i>	Vijeta Patel
<i>Director of Speakers</i>	Phill Mendonça-Vieira
<i>Speakers Team</i>	Alex Daskalov Matthew Gallant
<i>Director of Web</i>	Jonathon Marcogliese
<i>Sponsorship Team</i>	Mathieu Dumais-Savard Yagnik Khanna
<i>Director of Promotions</i>	Stephen Krujelskis
<i>Promotions Team</i>	Alexandra Phillips
<i>Advisors</i>	Abdullah Salim Eitan “Skrud” Levi Andrew Louis Juan Musleh

Head Delegates

<i>Concordia University</i>	Eric Chan Corey Clayton
<i>University of Ottawa</i>	Dan Godfrey
<i>Trent University</i>	Dan Mathers
<i>University of Toronto</i>	George Ju
<i>Université de Sherbrooke</i>	Jules Delisle
<i>McMaster University</i>	Marc Lafratta
École de Technologie Supérieure	Marc-Etienne M. Léveillé
<i>Université de Moncton</i>	Maryleen Mompoint
<i>Queen's</i>	Mike Zalewski
<i>Carleton University</i>	Nicole Waldrum
<i>Waterloo</i>	Roshane Silva Saumaya Sharma



Message from Co-Chairs



Ask the question 'What is CUSEC?' and you'll never get the same answer twice. CUSEC means many things to many people. In the beginning, CUSEC meant moving beyond academic theory and into the realm of practical knowledge. It was an opportunity to learn first hand from software idols and find out they were just like you. Over the last ten years however, CUSEC has become so much more. As the conference has grown in size and reach, it has become a way to bring like-minded young people across the country

together, a springboard into a future career, a place to release, nurture and celebrate one's inner geek, and a legal drinking age circumventing road trip to Montreal. For me, CUSEC has provided a way to grow my personal network, learn valuable lessons, and has opened my mind to more things than I ever thought existed (some, I wish I'd never seen). So over the next three days, take advantage of everything CUSEC 2011 has to offer, and add to the ever growing list of definitions of what CUSEC means to you.

Sven James, CUSEC 2011 Co-Chair



Being selected as Co-Chair of CUSEC 2011 was a huge thrill and humbling honour for me. A year later, we are now poised to begin the 10th anniversary of the future of software engineering.

As a team we set out to put on a conference that would provide you with learning opportunities that go beyond the classroom, sponsors that open doors to exciting careers, and events that will leave you with fond

memories and new friends. I am confident that we have succeeded in these things, and excited that you are here to enjoy it with us.

CUSEC helped me find direction in my studies, secure my first internship, and build lasting friendships. I hope that the conference brings you much of the same, and encourage you to make the most of your CUSEC experience!

Thank you for coming, and let's make this the best CUSEC yet!

Thomas Hibbert, CUSEC 2011 Co-Chair

CUSEC History

There are two versions of CUSEC's history. There is the version we like to tell people and then there is the truth. Let's start off with the version we like to tell people.

CUSEC's Glorious History

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 education in Canada.

Not much is known of the meeting. Everyone who attended was sworn to secrecy and all the notes that were taken were burned. What is known 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 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 that would happen at the conference like the grueling yet entertaining software engineering competitions, the very popular cookies & milk (popular only to me I am starting to think), and our very successful career fair. Neither were all the amazing new friends and relationships you would forge over the best three days of your school year ever mentioned. And I guarantee you nothing was ever mentioned about the amazing parties held in John's suite until the wee hours of the morning where the attendees got the opportunity to play poker and exchange horror stories with some of our most famous keynote presenters.

The Unfortunate (I Personally Think Fortunate) Truth About CUSEC's History

An undergraduate student in 2001, who will remain nameless, attended a university technology conference as a head delegate for Concordia University. He was extremely excited to attend but after the second day he found himself discouraged. It was really nice for him to get the opportunity to meet with some of the brightest CEOs in business today but what he really wanted to do was meet with people he aspired to become. He wanted to meet the Dave Thomas, David Heinemeier Hansson, Kent Beck, Kathy Sierra and Joel Spolskys of the world.

He foolishly thought it couldn't be that hard to organize a University conference that catered to people who were looking for the same things as him. He mentioned his idea to a couple people, they got excited about the idea of starting a conference, the founding team that brought to you CUSEC 2002 was formed and the rest is as they say history.



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

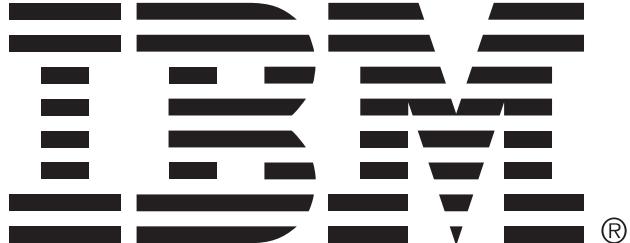
Both stories have a lot of truth to them, that is if the 7th floor of Concordia University's main building was both the top floor of the building and the tallest building in Montreal. If I remember correctly it was a dark night. But I digress...

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.

Welcome to CUSEC 2011 my friends!

Thank You to Our Sponsors!

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Platinum Sponsors



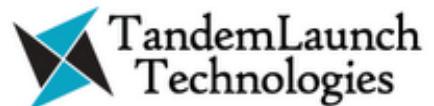
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Morgan Stanley



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- Work on top company initiatives
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If you love to code, enjoy working on complex business problems, and want to make an impact in the dynamic energy industry then Direct Energy's Leadership Development Program is for you.

If you've got the drive, we've got the path.

To direct your career down a new path visit our booth and email us your resume at graduates@directenergy.com



Join our page on facebook.com/DirectEnergyLDP to tell us about your CUSEC experience and you'll be entered into a draw for a \$50 ThinkGeek gift certificate.



Direct Message GradsAtDE to let us know that you attended CUSEC and we'll enter you into a draw for another \$50 ThinkGeek gift card!



A large, semi-transparent globe is centered in the background, surrounded by numerous glowing, radiating lines resembling fiber optic cables or light rays. The globe appears to be showing a map of North America.

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- **CIVIL ENGINEERING**
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- **ELECTRICAL ENGINEERING**
- **INDUSTRIAL ENGINEERING**
- **MECHANICAL ENGINEERING**
- **SOFTWARE ENGINEERING**
- **COMPUTER SCIENCE**

What's more, each program offers exciting co-op work-study options, which give students the chance to experience the profession first-hand. If you're curious about Concordia, visit our website and find out more about studying engineering and computer science in the heart of vibrant Montreal.

encs.concordia.ca



See it all.
All the time.

A photograph of a man in a dark suit and white shirt, seen from behind, looking out over a city skyline. A large, semi-transparent circular graphic overlaps the left side of the image, containing the text "See it all. All the time." in white.

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Imagine a world where one advanced platform, packed with powerful features, seamlessly manages all your security and safety systems. We did. Now thousands of customers are reaping the benefits of our unified security platform worldwide.

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Many of the most vital and critical roles at Morgan Stanley go beyond brokering deals. The backbone of one of the world's most influential financial institutions is in areas like information technology, finance and operations. In fact, we have one of the most advanced technology departments in the world. And we believe that in order for you to help us, we need to invest in you. That's why we provide you with world-class training, so you can help us bring new markets online and create our trading infrastructure. When you become a member of our team, you can look forward to long-term opportunities at a company that values your skills.

To learn more about Morgan Stanley and to hear from recent hires visit:
www.morganstanley.com/careers

Morgan Stanley



- 2005 Graduated from UC Berkeley**
- 2006 CIO at Silicon Valley start-up**
- 2007 Development architect at SAP, Palo Alto, CA**
- 2009 Helped develop a solution for adapting a new billing process in seconds with SAP® software**

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Please visit us at www.sap.com/careers.

* SAP defines business software as comprising enterprise resource planning and related applications such as supply chain management, customer relationship management, product lifecycle management, and supplier relationship management.

THE BEST-RUN BUSINESSES RUN SAP™ 

Remember that our sponsors will be hiring for internships and full-time positions during the CUSEC Career Fair.

Whether you are a recent grad looking for a job, or a student looking for an internship or Co-op placement, these firms are coming to CUSEC because they want people just like you.

Find out what their firms are all about and whether you would be a good match for them.

IBM Case Study Competition

This competition mimics the overall Extreme Blue summer internship experience. In teams of 3-4, develop an approach to the proposed Amusement Park Case. All teams must submit a page of point form notes on their approach. Up to seven teams will be selected to present in front of an open audience.

The Amusement Park Case

Apply IBM's Smarter Planet concepts (Instrumented + Interconnected + Intelligent) to a real or hypothetical amusement park (the client) of your choice to deliver increased customer satisfaction, safety and profitability, as well as competitive differentiation via the innovations made possible by your architecture.

Brainstorming - January 13

Work in teams of 3-4. You should discuss the following aspects in developing your solution. Assigning one person to each of these areas is recommended.

- *Client* – select and describe the client (real or hypothetical) and their challenges and objectives.
- *Instrumented* – types of sensor devices to be used, types of data to be gathered.
- *Interconnected* – how data will be integrated, stored and accessed, visualized and reported on.
- *Intelligent* – what new capabilities and actions are now possible, and how are they driven.

Given the brevity of both the written submission and the presentation, participants should focus on exploring opportunities for creativity and innovation, rather than on developing an in-depth technical solution.

Written Submission - January 14 @ 3:00pm

Submit one page of point form notes which summarize the impact your approach will make in each of four areas: competitive differentiation, customer satisfaction, safety, and profitability. Be sure to include your team name and a list of team members. Based on submissions received, up to seven teams will be selected as finalists to present their solutions the following afternoon. Please e-mail your submissions to ibm.cusec.case.study@gmail.com by 3:00pm. A list of finalist teams will be posted by 5:00pm on January 14.

Pitch Competition - January 15 @ 1:30pm

Everyone is invited! Finalist teams will present their approaches before an open audience and a panel of judges. The presentation format is a four minute pitch without slides that covers the opportunity, solution, value to the client and value to IBM. Each part should last for about a minute, and it is recommended that each of the four parts be covered by a different team member.

Real Extreme Blue pitches are only 4 minutes long. Your team will receive a warning



at four minutes and be cut off at five minutes. Plan for this! Be as concise as possible, and make every word count. Judges will deliberate after the session, and up to three winning teams will be announced at the Extreme Blue info session later in the afternoon.

Extreme Blue Information Session - Jan .15 @ 4:00pm

Everyone is invited for a brief presentation on the IBM Extreme Blue Program, as well as the announcement and distribution of awards to the Case Study Competition winners. Please take this opportunity to learn more about Extreme Blue. You'll be glad you did!

The IBM Extreme Blue Summer Internship

Extreme Blue is one of the most comprehensive and challenging leadership development internship programs in the world. The Case Study Competition offers you a small taste of what it's like. Are you up for the real thing?

- TAKE ownership of a real emerging business opportunity for IBM.
- PROVE it will work! Build the technology and the business case.
- COLLABORATE across IBM divisions, locations and product teams.

Your Team

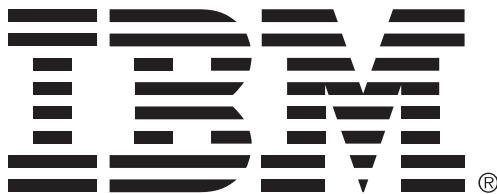
- Some of Canada's best students — three technical, one business — with skills perfectly matched to your project.
- Mentored by top IBM technical and business leaders.
- Engaging IBM experts worldwide.

Your Chance to Shine

- In the spotlight! Face-to-face with an IBM executive almost every week.
- Take it on the road! Pitch it to IBM senior executives at Extreme Blue Expo in Armonk, NY.
- Your mentors will empower you to promote your project, your team, and... yourself.

Are You Ready to Start Something Big?

This summer's Extreme Blue is open to business and technical students as well as new grads. We'll have teams in Toronto and Ottawa, May 9 – August 19, 2011. Visit ibm.com/extremeblue to apply.



Keynote Speaker



Drew Conway

<http://drewconway.com/>
[@drewconway](https://twitter.com/drewconway)

Thursday, January 13 at 4:15pm
IBM Room

Drew Conway is a PhD student in political science at New York University. Drew studies terrorism and armed conflict; using tools from mathematics and computer science to gain a deeper understanding of these phenomena. Before entering the PhD program, Drew worked for four years in Washington, DC as a research and analytical consultant for the intelligence and defense communities. During this time Drew developed a passion for understanding national security issues within the framework of social science. While working in the intelligence community Drew was also introduced to the power of and properties of social networks, which comprise a large portion of his research.



Keynote Speaker



Ben Fry

<http://benfry.com/>
@ben_fry

Friday, January 14 at 11:00am
IBM Room

Ben Fry spends most of his time thinking about, and making pictures of, patterns and structures found in complex and dynamic sources of data. Drawing on a background in graphic design and computer science, he pursues this fascination as principal of Fathom Information Design in Boston, Massachusetts, where he produces software, printed works, installations, and books that explain and depict topics from the human genome to baseball salaries to the evolution of text documents.

He's also a co-founder of the Processing project, which seeks to ruin the careers of talented designers by tempting them away from their usual tools and into the world of programming and computation. Similarly, the project is designed to turn engineers and computer scientists

Keynote Speaker



Yehuda Katz

<http://yehudakatz.com/>
@wycats

Saturday, January 15 at 3:00pm
IBM Room

Yehuda Katz is a member of the SproutCore, Ruby on Rails and jQuery Core Teams; during the daytime, he works as a framework architect at Strobe. Yehuda is the co-author of the best-selling “jQuery in Action”, the upcoming “Rails 3 in Action”, and is a contributor to “Ruby in Practice”. He spends most of his time hacking on open source — his main projects, along with others, like Rubinius, Thor, Handlebars and Moneta — or traveling the world doing evangelism work.

He blogs at <http://yehudakatz.com> and can be found on Twitter as @wycats.



Keynote Speaker



Michael Lopp (Rands)

<http://randsinrepose.com/>
@rands

Thursday, January 13 at 10:00am
IBM Room

Michael Lopp is a Silicon Valley-based engineering manager who builds both people and software. When he's not worrying about staying relevant, he writes about pens, bridges, people, and werewolves at the popular weblog, Rands in Repose. Michael just wrote a book called "Being Geek" which is a career handbook for geeks and nerds alike. He also wrote a book called "Managing Humans" that explains that while you might be rewarded for what you produce, you will only be successful because of your people.

Michael surfs and plays hockey in Northern California whenever he can because staying sane is more important than staying busy.

Keynote Speaker



Mike Shaver

<http://shaver.off.net/>
@shaver

Friday, January 14 at 4:15pm
IBM Room

Mike has been working professionally on Internet software since 1993, when he joined what became Ingenia Communications, an Ottawa-based internet consultancy known primarily for its pioneering work on Canada's SchoolNet. He was fortunate to be working on the web when it was called "gopher", and on network security when the firewall industry was a mailing list at greatcircle.com. His open source work began with trivial Linux kernel patches and led him to Netscape where in 1998 he was a founding member of the Mozilla project.

As a software developer, Mike has worked at virtually all levels of the web software stack, from Linux kernel networking and high-performance cluster filesystems through JavaScript implementations, component systems, and browser interfaces. His code runs on almost half a billion desktop computers, and has powered some of the largest supercomputers in the world. As VP Engineering of Mozilla, he leads the strategy and development of the Firefox browser, meddling in everything from performance tuning to standards strategy.

Mike was the recipient of an honorary degree from Seneca College in 2008, and he joined Seneca's Board of Governors in 2010. He also sits on the board of StopBadware, a non-profit working to eliminate malicious software on the internet. He lives in Toronto with his wife and daughter, and spends his spare time reading, cooking, playing video games, programming, and trying to keep up with a toddler.



Keynote Speaker



Julie Steele

@julie_steele

Saturday, January 15 at 11:00am
IBM Room

Julie Steele is an editor at O'Reilly Media interested in connecting people and ideas. She finds beauty in discovering new ways to understand complex systems, and so enjoys topics related to gathering, storing, analyzing, and visualizing data. She holds a Master's degree in Political Science (International Relations) from Rutgers University.

Julie also works with topics related to Python, PHP and SQL. She lives, eats, reads, codes, and practices yoga in New York City.

Tutorials



Guy Barrette

Guy Barrette is a freelance Solutions Architect based in Montreal for .NET Expertise. He is the Microsoft Regional Director for the Montreal region and a MVP for ASP.NET. He has been working and developing with Microsoft development tools since the launch of VB 3 in 1994. His focus is helping organizations build better software using Microsoft .NET technologies. He's been a speaker at developers' conferences like Microsoft TechDays and DevTeach. Guy leads the Montreal .NET Community and he is the Visual Studio Talk Show



Eric Diep

Eric Diep is a math dropout, technology entrepreneur, and cofounder of A Thinking Ape. Since 2007, Eric has been at the forefront of technology building consumer products for web and mobile that have reached over 100 million people worldwide. His startup, A Thinking Ape, has recently been highlighted in the New York Times as one of the top grossing developers on the iPhone platform. He has been invited to speak about his views on the consumer web at international events in San Francisco, London, and Amsterdam. Eric is a former student of the University of Waterloo.



Tutorials



Edward Ocampo-Gooding with Daniel Beauchamp

Edward Ocampo-Gooding looks forward to making your soul yawn open with effervescent self-realization. A subsequent dose of his experiences in bending cities to his will with open data will be served.

THIS IS A TWO PART talk on:

- 1) Getting the most out of CUSEC
- 2) How open data will be the milkshake that brings all the boys/girls to the yard.

Seriously, you want to come to this talk. Achievements will be unlocked.

Edward's awesome titles include Developer Advocate at Shopify (talk to me about APIs and apps) and lead Organizer at Open Data Ottawa (talk to me about APIs and apps). In 2008, he was CUSEC Director of Presentations.

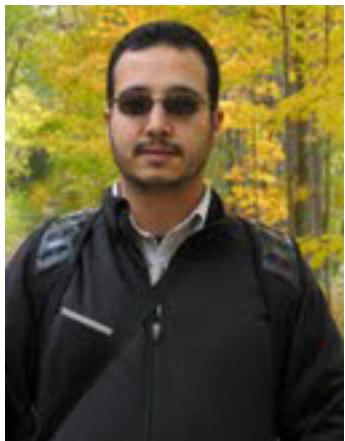


Daniel Beauchamp is a 4th year Software Engineering student at the University of Ottawa, and a co-founder of the Ottawa based startup, Avitu. He is also one of the core members of Open Data Ottawa: a movement to push governments to make public data freely accessible to the public, and to make awesome mashups based on the data. Along with Edward Ocampo-Gooding, he has given several talks on the subject, and has recently helped organize a hackfest spanning 76 cities worldwide.

He can be found on twitter as @pushmatrix.

Corporate Speakers

Moataz Abdellateef - Direct Energy



Director, Architecture and Shared Services Residential

Moataz has been with Direct Energy since July 2002 and has more than 13 years of IT experience. Now the Director of Architecture and Shared Services Residential, Moataz and his team works to create a three year technology roadmap for our pan-North American Business.

Prior to joining Direct Energy, he worked for CIT/Oasis Technology Ltd and CertaPay Inc.

Along with a wealth of expertise in Workflow Systems, Archiving Systems, Image Processing, Data Mining, among many others, Moataz also has a Bachelor of Science in Computer and Automatic Control Systems Engineering, from Ain Shams University in Cairo, and is a Sun Certified Enterprise Architect.

Mark Jorgensen - Morgan Stanley Technology Division



Mark is a graduate from the École Nationale Supérieure d'Informatique et de Mathématiques appliquées de Grenoble, in France, where he majored in distributed systems and real-time processing.

After working for the French National IT Research Institute (INRIA) where he researched formal verification methods, he went on to join the IT Systems and Architecture team of Arcelor Mittal, a global leader in steel industry, where he led the transition from Mainframe processing to java distributed systems.

He then crossed the pond, and spent some time in professional services, working for IBM and specializing in Application Architecture and Web Portals. After the successful launch of Bombardier's online customer portal, he joined Morgan Stanley where he leads the Customer Tax IT team in Montreal. His team has developed tax withholding and reporting systems processing over 12 Million transactions a day.

This presentation will explain how the Agile method was applied on a real-world project that was in trouble at Morgan Stanley, and how this method helped turn the project into a success.



Corporate Speaker

Marc-Antoine Ruel - Google



Software Engineer working on Google Chrome at Google Montréal since 2007, Marc-Antoine used to hack on file system filter drivers. He now works on what he used to call “the user mode stuff”. He implemented printing support in Google Chrome, contributed to the sandbox and is currently working on continuous testing infrastructure and even python web services.

Marc-Antoine is a buildbot contributor and you can find him easily on freenode. He holds a degree in Computer Engineering from Université de Sherbrooke.

Abstract

“Silent data corruption, examples, detection and correction”

Summary: As chips include an increasing amount of transistors, disk platter and memory are increasingly small and software increasingly large, the probability of observing silent faulty operation increases constantly. This talk raises issues computer engineers face and how to rectify errors caused by low quality probabilistic hardware and software.

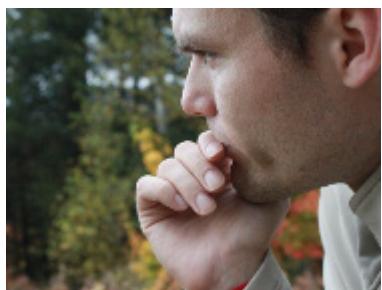
Academic Speakers



Paul Kry

Paul Kry is an assistant professor in the School of Computer Science at McGill University. He obtained his Ph.D. in 2005 from the University of British Columbia, and has also spent two years in Grenoble at INRIA as a postdoctoral researcher. His research interests include physically based simulation, character animation, interaction, motion capture, and a variety of related topics.

This talk will give an introduction to physically based animation and present some recent developments from the McGill Computer Graphics Lab. Specifically, I will show a method for animating legged locomotion using only modal vibrations computed from the physical properties of an articulated character. I will also present an approach for simulating elastic deformable models at a coarse level while taking into account fine details such as topology and varying material properties. Come to this talk if you would like to gain intuition about fundamental techniques for physics based animation and development of simulation software.



Derek Ruths

My work concerns predicting the behavior of complex, living systems: from cells to societies. Because limited (and often unreliable) data are available for such systems, I'm particularly interested in mathematical and computational techniques that use easy-to-obtain, structural attributes of the systems to predict how they will change over time. This interest has lead me to work in a variety of areas from cancer biology, to Roman history, to the growth of online social networks.



Academic Speaker



Sha Xin Wei

Experimental projects with music, dance, time-based visual art, electronic textiles, augmented reality games and theater provide fertile opportunities for applications of machine perception, real-time and parallel computation, digital signal processing, computer graphics, and computational physics. Questions of gesture and agency have profoundly shifted from earlier computational and cognitive models to alternative perspectives

of embodiment and materiality. How do our notions of gesture and agency change in the presence of real-time, dynamically varying computational media?

Over the past 10 years, the Topological Media Lab's has built responsive spaces as apparatuses to explore such questions about gesture and agency. I will show some of the lab's creations, and share some insights learned working with teams of students and researchers from computer science, performing arts, studio arts, and architecture.

DemoCampCUSEC4

Thursday, January 13 at 7:00pm

IBM Room

PDFtoAudioBook

Gina Cook

Concordia University

The Android application “PDFtoAudioBook,” allows users to generate an AudioBook from any PDF. It can read any text but it is specifically designed to read textbooks or technical documents so that students or busy people can revise materials on the go. Text to Speech readers are generally very bad at reading formulas, code blocks, mathematical symbols and reading new words like “GUI.” I will demo the use case of giving the application a course syllabus and a PDF of the textbook, having it generate AudioBook chapters to read as the syllabus progresses and having it ask the user to pronounce words that it doesn’t know.

While You Were Sleeping

Ashwin Panchapakesan

University of Toronto Mississauga

This project accepts an input document and attempts to output its ideas in a minimalistic topic map. Texts with syntax that can be represented in a “noun-verb-noun” model such as lecture notes and newspaper articles fall in the problem domain. This simple syntax allows for parsing with specific structural assumptions. By integrating Python’s NLTK, these assumptions permit part-of-speech tagging.

As a result, fewer words become necessary to parse ideas, since modifying words are found sententially close to their targets. The project presents the parsed document by using tools such as Graphviz, thereby generating an accurate topic map from a text document, an unprecedented achievement. Thus far, visually displaying the generated topic map and parsing more complex sentences (which have larger sentential separation between modifying words and their targets) are challenges for this project. I propose integrating WordNet to enable detection of related words, multi-document-comparisons, semantic noise-filters, and plagiarism detection.



Learn2Learn

Aaron Toth, Mythu Sivapalan
McMaster University

Learn2Learn is a web application which assists high school students with disabilities better transition to a university learning environment. Using techniques based on cognition theory, Learn2Learn teaches students how to better themselves in an engaging and interactive way. A lot of effort was put forth to ensure that this would be versatile to support every student at McMaster. Several accessibility features were also custom-built for the project, such as a toolbar which provides features like text-to-speech and text highlighting.

More Information: <http://learn2learn.ca>

ChronoLog

Jean-Francois Im
École de Technologie Supérieure

Hate timesheets? Can't remember what you did Tuesday afternoon between those two meetings? ChronoLog allows you to go back in time to look at what you did on the computer this week and remember what you have been working on, just as if you had a time machine — but without those pesky time continuum-breaking paradoxes.

FreeRDP

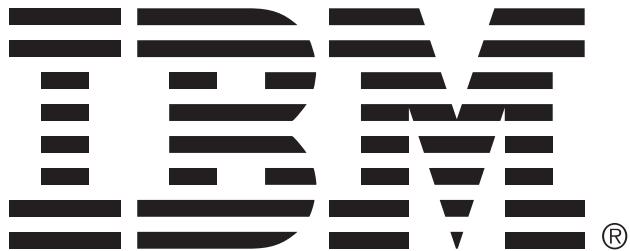
Marc-André Moreau

FreeRDP is a free remote desktop protocol client based on rdesktop. If the rdesktop implementation of RDP is based on works of reverse engineering, FreeRDP is a major rewrite that uses the official protocol documentation released as part of the Microsoft Open Specification Promise. Because of its modularity, cleaner code and newer features, FreeRDP quickly attracted developers, such that it is now in active development. Other projects are being developed in close relationship to FreeRDP, such as xrdp (an RDP server for X11) and Remmina (a graphical front-end to remote desktop clients).

As the founder of an active open source project, I will also share my experience and the story behind it. Even though FreeRDP was started for fun, it grew serious enough so that I could register my own business, Awake Coding Consulting, to offer my services as a software developer. I now have a revenue doing freelance work for my passion.

More Information: www.freerdp.com

Partner Sponsor



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This intelligence makes it possible to harness the vast amount of data created by the trillions of connected devices in today's world, and turn it into knowledge that can be used to anticipate, forecast and even predict changes in our systems. This is the vision behind IBM's Smarter Planet strategy.

Canada is home to the largest team of IBM software professionals outside of the United States. Our software development lab sites in Markham, London, Ottawa, Montreal, Edmonton, Vancouver and Victoria—collectively known as the IBM Canada Lab—are responsible for delivering IBM software solutions that are used worldwide. Our Bromont, Quebec manufacturing plant is IBM's largest semiconductor packaging and test facility and one of Canada's leading exporters. In addition to packaging and testing IBM products such as the new POWER7 chip (the most powerful chip ever produced by IBM), Bromont performs custom assembly and testing for Original Equipment Manufacturers (OEM), including packaging the chips used in today's most popular home gaming consoles.

Since opening our first Canadian office in 1917, IBM has been a model corporate citizen, supporting communities across the country through corporate grant programs, volunteerism, education initiatives such as IGNITE (Igniting Interest in Technology & Engineering) camps for Aboriginal youth, and our annual employees' charitable fund campaign.

We have also introduced programs that allow employees to have an impact on a global scale. In 2009, 24 Canadians participated in the IBM Corporate Service Corps, a program that allows employees to visit developing countries to work on short-term community projects. Another 20 Canadians are expected to take part in this unique global leadership development opportunity in 2010.

Our commitment to diversity and inclusion, which internally ensures an understanding, respectful and accommodating workplace, also extends to the community. And from an environment perspective, we strive to minimize the potential impact of our own operations, while applying our technology and services to help our clients and partners do the same.

As a company, IBM's actions are driven by three core values: Dedication to every client's success; Innovation that matters, for our company and for the world; and, Trust and personal responsibility in all relationships. These values, which were determined by IBM employees globally, shape everything we do as we strive to make Canada and the world work better.



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The Information Services Leadership Development Program (ISLDP) at Direct Energy gives recent grads a jump start in each of our lines of business through a customized career development plan that provides exposure to the breadth of Direct Energy's business while fostering development of core technical skills. The ISLDP has been ranked in the Top 20 Leadership Development Programs by Leadership Excellence Magazine. Energize your career with Direct Energy IS, one of Computerworld's Top 100 Places to work in IT!



Vigilant Futures – a Montreal-based research and development firm – is a leader in the design and implementation of high-performance systems and innovative software solutions applied to the world of finance. Its success is rooted in its strong emphasis on developing technically innovative software, hardware and infrastructure solutions that allows unprecedented insight into market dynamics and superior execution efficiency.

Through a custom-built platform deployed on the latest hardware, Vigilant Futures' R&D and Technology teams produce cleanly designed cutting-edge technology with an emphasis on robustness and performance. The teams push the boundaries of what is possible in electronic markets through superior technology and infrastructure on a daily basis.

Our collaborative approach to research and development ensures each member's diverse experiences, skills and ideas reach full potential in the small, team-based effort. Ideas are well-executed through the best test facilities, hardware, development software and productivity tools, as well as through advanced training courses, seminars and conferences for its employees.

The Company fosters active engagement with the community, believing community involvement enriches the experience of working and living in Montreal and offers a collaborative, contemporary and rewarding work environment.

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With a diverse and dedicated student body composed of undergraduates and graduates from around the world, Concordia University's Faculty of Engineering and Computer Science has established a strong international reputation in research and development. The Faculty is committed to preparing its students for a professional career through the delivery of quality academic programs designed to meet today's technological challenges.

The strengths of the Faculty are evidenced by its signature areas of research, which include: Energy and Environment; Aerospace & Transportation; Nanotechnology & Materials; Information Security & Telecommunications; Computer Imaging & Gaming.

All of Concordia's Engineering programs are fully accredited by the Canadian Engineering Accreditation Board. Computer Science programs are accredited by the Canadian Information



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Evertz offers the most complete HD, 3G, and 3D end to end solutions including: master control systems, large, medium and small routers, branding, RF, master sync generation, terminal gear, fiber optics, multi-display monitoring, production tools & interfaces, and closed captioning. Evertz also provides solutions for post-production, production, and mobile production, IPTV, transport and distribution equipment, and broadcast, satellite, and cable applications.

Through customer communication, technology research, active involvement in standards committees and in the standardization process, Evertz will continue to provide innovative, cost effective solutions that not only support and bridge both digital and analog worlds, but also advance our industry into new domains, to customers around the world.

Find out more about our distinctive hardware platforms.



It was in 1997 that Genetec was incorporated as a software research and development company. In those days, analog security systems were most commonly used to protect and monitor physical spaces. Users accepted the limitations inherent to analog security systems. Genetec's engineers had the intuition that the typical analog or digital point-to-point telecom architecture would be short lived. More so, Genetec believed that the direction of the future was the multipoint to multipoint networked architecture. The sophisticated intelligence of software created to manage a complex network offered a major opportunity and would usher in new possibilities to customers worldwide. Thus, Genetec pioneered the first fully IP-based security system. Despite industry scepticism of this new market technology, Genetec's team developed and perfected the solution.



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We were the first to offer you IP video surveillance, and have extended our expertise in IP security to access control and license plate recognition (LPR).

Genetec's security solutions are deployed throughout industries such as city-wide surveillance, education, gaming, government, law enforcement, parking enforcement, retail, transportation and many more. The open architecture of our solutions enables integration with one another, as well as with third-party solutions, letting customers leverage investments and lower total cost of ownership.

Microsoft®

As a company, and as individuals, we value integrity, honesty, openness, personal excellence, constructive self-criticism, continual self-improvement, and mutual respect. We are committed to our customers and partners and have a passion for technology. We take on big challenges, and pride ourselves on seeing them through. We hold ourselves accountable to our customers, shareholders, partners, and employees by honoring our commitments, providing results, and striving for the highest quality.

Morgan Stanley

Morgan Stanley is a global financial services firm providing a wide range of investment banking, securities, investment management and wealth management services. The Firm's employees serve clients worldwide including corporations, governments, institutions and individuals in more than 40 countries. Morgan Stanley's multi-billion dollar investment in technology enables the development and delivery of quantitative trading systems, modeling and simulation software, analytics and security systems. Developing state-

of-the-art technology behind the industry's first auction-based initial public offering (IPO), customizing client technology solutions for hedge funds and money managers, and leading the way on the use of virtualization technologies – these are just some of the achievements that have put Morgan Stanley at the forefront of technology innovation.

The Montreal office of Morgan Stanley was launched in 2008 with a team of information technology professionals, many of whom had worked as consultants to the firm since 2002. Since then, the group has almost doubled in size and expanded its coverage to work with both local and global teams on a wide range of innovative products and services.

Morgan Stanley has built a community of talent that delivers the finest financial thinking, products and execution in the world. The integrity, skills and passion of our people have earned us a reputation for excellence. Morgan Stanley attracts individuals from diverse backgrounds, but all are high achievers who share intellectual curiosity and the desire to work in a collegial and meritocratic environment. The firm provides a superior foundation for a challenging professional career, with abundant opportunities to learn, grow and excel.

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* SAP defines business software as comprising enterprise resource planning and related applications such as supply chain management, customer relationship management, product lifecycle management, and supplier relationship management

web strategy and consultation, site development and custom theming. For every new technical challenge our work brings us, we focus on building creative and robust open source solutions.

We believe in contributing back to the Drupal community, and have helped develop several modules, host regular local meetups, and sponsor several international Drupal conferences.

Our team is comprised of passionate and dynamic individuals. Talented web developers with a strong interest in open source stand to benefit from the intellectually stimulating nature of our work. Please visit our website for more information: www.evolvingweb.ca



TandemLaunch collaborates with universities and independent inventors across the world to identify commercially viable innovation in the areas of video, audio and online multi-media consumer technology. After an assessment of the economy potential and development requirements, TandemLaunch embeds each new invention in a dedicated project. The project is funded entirely by TandemLaunch and staffed with appropriate engineers and business development experts from our in-house staff.

This team works closely with the inventors to bring the project from the whiteboard to a commercial package suitable for sale to the larger consumer electronics industry. Usually this involves the reduction of key risks through proof of concept systems, the fabrication of impressive demonstrators, and the establishment of a solid intellectual property portfolio for the invention. Meanwhile our business development experts work closely with our industry network to gather feedback and ultimately place the technology with an interested party.

Startup Sponsors



Evolving Web is a Montreal-based web development company specializing in multilingual Drupal-powered websites. Our services include



Past Organizers

We would like to acknowledge and thank everyone who has helped make this conference happen over the past ten years.

2002

John Kopanas
Chae Dickie-Clark
Madeline Taing
Marc Abbyad
Chadi Freiha
Jason Essebag

2003: Adapting the Process

Chair John Kopanas
Director of Presentations Frédéric Rioux
Director of Finance Chae Dickie-Clark
Director of Operations Jacinthe Gagnon
Director of Industry Relations Thanh Vinh Tang
Director of Inter-University Promotions Yann McCready
Jia-Wei Zhang
Director of Activities and Kangaroos Mark Abbyad
Director of Exhibitions Francois-Michel Brière
Director of Software Engineering Competition Gaspard Petit
Marc-André Laverdière

2004: Ensuring Quality

Chair Joël Migneault
VP Presentations Gregory Sagget-Rudd
VP Communication & Finance Alexandre Lampron
VP Finance Madhumita Banerjee
VP Logistics Vincent Dionne
VP Technology & Presentations Ahmed Kamel
Logistic & Presentations & Executive Assistant Nadia Chaouch
Finance Leon McKernan-Milon
Communication Pier-Luc St-Onge
Dominic Lagarde
Maxime Clerk-Lamalice
Logistics Audrey Girouard
Sandrine Tiné
Fanny Waffo
Ndeye-Syra Ba
Competition Ka Lun Sze
Central Committee Frédéric Rioux

2005: Thinking Outside the Cubicle

<i>Director of Physical Things</i>	Chris Donaldson
<i>Director of Other Physical Things</i>	Karen Widish
<i>Director of Audible Things</i>	Michael Smith
<i>Director of Common Sense</i>	Matt Gawlik
<i>Director of Safety and Fun</i>	Andrew Dunbar
<i>Director of Seating</i>	Sherwin Sim
<i>Graphic Design</i>	Wataru Watanabe

2006: Engineering Useful Software

<i>Director of Physical Things</i>	Chris Donaldson
<i>Director of Other Physical Things</i>	Karen Widish
<i>Director of Audible Things</i>	Michael Smith
<i>Director of Common Sense</i>	Matt Gawlik
<i>Director of Safety and Fun</i>	Andrew Dunbar
<i>Director of Seating</i>	Sherwin Sim
<i>Graphic Design</i>	Wataru Watanabe

2007: Designing for the Future

<i>Chair</i>	Neeraj Mathrani
<i>Director of Finance</i>	John Sloboda
<i>Director of Presentations</i>	Hugo Levasseur
<i>Director of Keynotes</i>	Oralndo Marquez
<i>Director of Academic Presentations</i>	Walid Koleilat
<i>Director of Corporate Presentations</i>	Michelle Chua
<i>Co-Director of Sponsorship</i>	George Gao
<i>Co-Director of Sponsorship</i>	Linda Wang
<i>Co-Director of Sponsorship</i>	Rami Ayyad
<i>Co-Director of Logistics</i>	Linda Wang
<i>Director of Promotions</i>	Karen Widish
<i>Director of Interactive Events</i>	Kalu Kalu
<i>Art, Website and Registration Website Director</i>	Richard Shih
<i>Volunteer</i>	Mitra Nami



2008: Making it Fun

<i>Co-Chairs</i>	Abdullah Salim Hugo Levasseur
<i>Director of Finance</i>	Neeraj Mathrani
<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>Account Manager</i>	Louis-Philippe Huberdeau Rami Ayyad
<i>Co-Director of Logistics</i>	Linda Wang Michelle Chua
<i>Director of University Relations</i>	Juan Musleh
<i>Director of Promotions</i>	Eitan Levi
<i>Director of Events</i>	Julie Hache
<i>Website Director</i>	Richard Shih

2009: Software (R)evolutions

<i>Co-Chairs</i>	Linda Wang Eitan 'Skrud' Levi
<i>Director of Finance</i>	Abdullah Salim
<i>Director of Presentations</i>	Andrew Louis
<i>Director of Academic Presentations</i>	William Hua
<i>Director of Sponsorship</i>	Juan Musleh
<i>Director of Logistics</i>	Claudiu Scotnotis
<i>Director of Promotions</i>	Aran Donohue
<i>Director of Events</i>	Kyle Sama
<i>Webmaster</i>	Guillaume Theoret
<i>Website Designer</i>	Rebecca Cohen Palacios

2010: GOTO 10

<i>Co-Chairs</i>	Andrew Louis Juan Musleh
<i>Director of Finance</i>	Abdullah Salim
<i>Speaker Team</i>	Phill Mendonca-Vieira William Hua
<i>Sponsorship Team</i>	Sven James Ahmed Ben Messaoud
<i>Logistics Team</i>	Thomas Hibbert Clara Choi Todd Ritchie

Special Events

DemoCampCUSEC4

DemoCamp is an opportunity for students to show off the cool things that they have been working on in their free time. From the next great arcade game to a new programming language, some of the coolest software is built in your free time. We want you to show it to us! In DemoCamp, the focus is not on slides, it is all about working code. You'll have 8-10 minutes to show us what you have been working on live in action. We'll then give you 2-3 minutes to answer questions about your baby.

We're inviting entrepreneurs and investors to take part in this event. It will be a fun evening of learning, networking and sharing ideas.

DemoCamp is happening on Thursday, January 13th at 7:00pm in the IBM Room.

Startup Drinks

"Startup Drinks is a monthly freestyle networking event hosted in pubs and bars by startup community instigators from coast to coast. We keep it a presentation free and sponsor free because the point is to make connections over drinks and.....relax a little. You can talk shop, geek out, or just shoot the breeze." - StartupDrinks.ca

CUSEC has invited the Montreal Startup Drinks crew to come meet with students. We will be meeting at McLean's Pub on Thursday, January 13th at 8:30pm.

CUSEC 2011 Banquet

It's CUSEC's 10th birthday! Come celebrate by joining us at our CUSEC 10th Anniversary Banquet. There is good food and wine to be had!

It's happening on Friday, January 14 at 6:30 pm at the Marriott Hotel.

Shopify Party

Startup Sponsor Shopify is hosting a party at Brutopia.Come relax after the Banquet by coming down and mingling with students, speakers, and organizers.

It's happening at Brutopia at 10:00pm.

Can you solve a problem?
Can you make a difference?
Are you a student of the world?
Are you ready to build your career,
not just your résumé?
Do you think the world can work smarter?

Are you an IBMer?

Join us. IBM is looking for people to work alongside the best and brightest minds in the world to build a smarter planet. To cure diseases by digitizing hospital records. To reinvent power grids. From consulting to research, software to sales, there is bound to be an opportunity for you to build the career you want at one of the most successful companies in history. Start building a smarter planet, and have time to live in it, too.

Let's build a smarter planet. ibm.com/start



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