

Note: This document is hosted here for archival purposes only. It does not necessarily represent the values of the Iron Warrior or Waterloo Engineering Society in the present day.



Frost Week Review

Page 8



Lesser Known Music Venue:
Trepid House

Page 9



Point vs. Counterpoint:
Should UW Keep Expanding?

Page 13

Co-op: Getting Ready for a Rough Ride

SUNNY NG
4B COMPUTER

With the recent economic downturn as witnessed with the financial sector meltdown and the automotive industry bailout, Waterloo Engineering students are left wondering what effect this would have on finding the next co-op placement or perhaps finding the first full-time position.

According to recent Co-operative Education & Career Services (CECS) statistics, the current employment rate for all co-op students for the Winter 2009 is 91.7% as compared to 93.9% for the Winter 2008 term. In Engineering, the employment rate is at 90.4% compared to 94.4%. It should be noted that CECS continues to assist students in securing a job well into the term until a co-op credit cannot be counted, so the employment rate can still go up.

I had the opportunity to speak with CECS Director, Peggy Jarvie on this issue and she explained that in addition to economic downturn, they face other challenges as well. Jarvie mentioned that there are more students at the University of Waterloo as compared to previous years. Although the employment rate for Engineering students seemed to have dropped from last year, the number of students being employed actually increased by over 200.

As expected by many, junior engineering positions are taking the biggest hits. Jarvie

Status	Action	Count	Date
Not Posted	Add to Short List	95	30 OCT 2008
Not Posted	Add to Short List	124	24 NOV 2008
Not Posted	Add to Short List	1	
Not Posted	Add to Short List	142	12 NOV 2008
Not Posted	Add to Short List	69	23 SEP 2008
Not Posted	Add to Short List	134	06 NOV 2008
Not Posted	Add to Short List	47	02 NOV 2008
Not Posted	Add to Short List	53	
Not Posted	Add to Short List	46	23 SEP 2008
Not Posted	Add to Short List	79	23 SEP 2008

Angelo Alaimo

Over 70 offers of employment were rescinded from students for the current winter 2009 workterm.

explains, "One of the findings based on the incoming students survey in conjunction with the Student Life Office, fewer and fewer students are coming in with any kind

of work experience when they come to university, so their marketability is challenging in that regard.

"I also expect that we are going to feel

more of the heat for the Spring term [than the Winter term]." Peggy Jarvie elaborates, "[Although the financial crisis started in the Fall term], many companies and other employers didn't do a lot of adjusting to their employment plans, but we're seeing more of that. We see fewer jobs coming in and we saw way more job offers rescinded than in the past, not as many as previous economic downturns." Jarvie also pointed out that historically Spring terms had the lowest employment rates due to competition with other schools. In the Winter 2009 term, CECS has seen around 70 job offers being rescinded, but 40 of those students involved have since been re-employed.

CECS is actively trying to assist students to succeed in finding jobs. This past October, they have made employment for students their #1 priority. Their focus is mainly on job retention, job development and support for students' efforts. CECS is hoping to use the economic situation to better market co-op students as co-op students can supply the talent but do not require the same long-term commitments as full-time employees. Jarvie drew comparisons to the recession in the early 90's. They have created a working group that is currently involved in that strategy, as well as working on developing a kit for students to find their own jobs using their own network.

See LOST JOBS on Page 3

CFES Congress in the Capital

STUART PEARSON
2N CIVIL

Once a year, Engineering students from across Canada and around the world gather to discuss issues relevant to undergraduate Engineers. The Canadian Federation of Engineering Students (CFES) is devoted to connecting students on a national level and providing them with a voice. This year's CFES Congress, "Lifestyles of an Engineer", was hosted by Carleton University and held in downtown Ottawa during the first week of January.

Five delegates from each Engineering Society at UW were in attendance, as well as several others serving on the national executive. Mike McCauley, Sarah Scharf, Nadine Ferguson, Sasha Smith, and Stuart Pearson were in attendance from A-Soc, while Cara Kennedy, Cat Hay, Michael Seliske, Kevin Liu, and Leslie Merrithew represented B-Soc. Adam Schubert served as Ontario Ambassador, Samantha Pinto as Charities Commissioner, and Erica Waugh as Vice President Services and Development. Spencer McEwan was also on hand as VP-Communication for the Engineering Student Societies of Ontario (ESSCO).

The week mostly consisted of a series of presentations and discussions about issues pertaining to engineering students. Topics included boosting involvement in engineering societies, the current financial crisis,

frish week around the country, international relations, and even engineering songs. Representatives from Engineers Canada and the Canadian Engineering Accreditation Board (CEAB) also made presentations on professional licensing and program accreditation, and a career fair gave students the opportunities to make industry contacts.

The second half of the week was dedicated to choosing a new executive and com-

missioners for CFES, as well as Plenary, a day-and-a-half-long voting session where decisions regarding the Federation are made.

One of the most contentious issues this year was a statement called "The Ottawa Declaration" made by the CFES Executive.

See OTTAWA DECLARATION on Page 4



The Waterloo A and B delegations at CFES Congress, held this year at the Westin hosted by Carleton in Ottawa.

POETS v2.5

TREVOR JENKINS
1B MANAGEMENT

POETS, the much beloved lounge and pub of engineering students for decades, finally reopened after getting a much deserved face-lift. The long awaited renovations have received rave reviews from frequenters, who use it for anything from a place to have a cold beverage between classes to being the home base of EDCOM during frosh week.

POETS reopened its doors on January 8 during the lunch hour, which was followed the next evening by the Official Grand Reopening BOT Party. Celebrating 30 years of POETS history and the beginning of a new term, and for some their last, was an appropriate fit for the occasion. Despite a technical glitch that caused parts of the Frosh Week '08 video to lag, the entire affair was a resounding success. POETS reached capacity quickly after opening the doors, despite the reaction of many that thought POETS looked more spacious than previous OTs. Bar Services attributed this to the crowds congregating at the back around the bar.

The changes are obvious the minute you walk in. The most apparent is the relocation of the bar from the front corner to the back, where the foosball machine used to be located.

See BIG CHANGES on Page 5

Letter from the Editor



KEVIN LING
EDITOR-IN-CHIEF

First and foremost I would like to wish you all the best in this new year and term. I trust that everyone enjoyed the holiday season. The one or two weeks off between work terms and academic terms are one of the few times a year that I get to just sit back and relax, and not worry about anything (of course with the exception of work term reports and technical presentation milestones).

In the first week of January almost every year, I get asked several times what my new year's resolutions are. And the question usually leads to a very uninteresting conversation since I hardly ever have new year's resolutions. Just because the ball has dropped and the year has changed doesn't really mean all that much to me. This year I plan to live like I always do. I mean, I enter the year with a sense of optimism that this is going to be another great year, but I don't need a new calendar to think that.

Unfortunately, Canada really hasn't entered 2009 with as great an outlook this year. Economic and political turmoil have been flooding the news nonstop for the past few months. Some of these issues have even penetrated into the content of *The Iron Warrior* (yes, we report on real news once in a while).

At least on the Engineering side of campus it seems like the economy is on everyone's mind. CECS has already warned us about the increased difficulty in finding a co-op placement, and many of the soon to graduate 4th years are concerned about what the job market is like. It's a grim thought that you can spend 5 years working hard in school and end up with the same results as someone with a B.A. in English.

On the political front, the trouble on Parliament Hill is more a nuisance than anything. Both sides are arguing in the name of democracy, the Conservatives saying that Canada elected them democratically so they deserve to be the governing party and the Coalition saying that they represent the majority of Canadians who do not agree with Conservative policies. To be honest, I'm quite glad the Governor General agreed with Stephen Harper's request to suspend Parliament until the end of January, but not because I want the Conservatives to hold onto power (and not that I don't want them to). I'm glad because it means that I have had the last month mostly politics free. It gave the news a chance to cover other events that are going on in the world rather than the problems created by the Canadian parliamentary system. The entire debacle might end up hurting the Canadian identity more than it will benefit Canadians. No matter which way the issue resolves, someone is bound to lose faith in the political system, be it the disappointed Conservatives or the rest of Canada. The only thing that we have left to do is to wait and see how the Conservative budget unfolds and the reaction of the Coalition.

(Sometimes it feels like I am spending my whole life waiting. I don't mean

waiting in some spiritual or philosophical sense, that's way too deep for me. I mean waiting in the absolute most literal sense: just sitting around doing nothing. Thinking back about last week, I spent a big majority of my free time waiting. On average, I probably spend about 10 or 15 minutes a day waiting for a bus. I stand by a microwave and wait for food to cook. As you will read in Sylvia's Wu's article on the Broadcast Radio concert, I wait for a show to start then wait through an awful opening act to see the band I actually went to see. Actually, that sounds like almost every concert I've ever been to. There really needs to be a way that I can turn all these 10, 20, or 210 minutes (in the case of the concert) waits into something productive. What I need is for a company to make something that I can do my calc assignments on. Like a tablet, but smaller. More like a Blackberry or iPhone. But better. And cheaper. I'm not made of money. Seriously though, if there were a way that all that downtime could be converted into productive minutes then I would probably do better in school, or at the least sleep more. I'm good with either.)

But even with all these troubles in the news, there is still plenty to look forward to this year. One of the big things of 2009 will be Stephen Hawkins coming to Waterloo. This is great news for all of those interested in theoretical physics. With the presence of such a great physicist here, Waterloo is bound to attract more international attention. Hopefully this will bring more bright minds and funding to the area.

Another one of the big things of 2009 will be President Barack Obama. From what I hear, there's going to be a lot of change. Although I'm really not a good barometer for American politics, I definitely had the impression that people have been much more passionate about Obama than any other political figure in my lifetime. This year will be a huge test to see if Obama will actually be able to bring about the change that he has called for. A lot of the campaign promises that he made sounded like they were headed in the right direction for a more ideal society, but Obama is still just a politician. Either all these promises are just flashy nice sounding words or Obama is truly as passionate as he claims to be. However living north of the 49th parallel we have to be concerned about how the new president's policies will affect Canada. Already there is a worry that the new president's energy policies will be detrimental to Canada's oil exports to the States. It should be really interesting to see how things play out; hopefully Obama will live up to the image that he has created for himself.

Controversy at The Iron Warrior

With all these exciting times ahead of us, it's still good to look back once in a while. And by that, I mean having a large chunk of *The Iron Warrior* archives here in the office is awesome and a huge distraction. While doing the layout for this issue, my editors and I went back through old issues to read up on the controversies that have struck Iron Warriors of years past. So far we have found two occasions

where our beloved student newspaper has been pulled from the stands.

The first of the two pulled issues was back in the winter of 1994 term. It seems that back then the relationship between EngSoc and the *IW* was nowhere near the way it is today. There was a sense of mutual dislike between the two entities and the *IW* was not publishing announcements requested by the EngSoc executives. As well, the content of the *IW* at the time was on a decline as it published fewer and fewer stories on engineering news and headed in the direction of becoming a joke paper. As a result, EngSoc decided that it would no longer allow our paper to run free and had it shut down for the rest of the term.

The most recent controversial issue of *The Iron Warrior* happened quite recently in the spring of 2006. If you look online at our website you can find the controversial issues in the electronic archives. There were two editorials published in the pulled issue that were quite critical of EngSoc and how it is run. The issues were consequently pulled, abruptly, before *The Iron Warrior* staff were even notified of the problem. A special 6th issue of the *IW* came out that term to tie up loose ends and explain the mysterious disappearances of the newspaper from all the stands on campus.

Although there were some rocky points in the past between the *IW* and EngSoc, these problems have all been resolved and I am proud to say that *The Iron Warrior* is "The Newspaper of the University of Waterloo Engineering Society".

As you may have guessed by now, this editorial was far from structured when I began writing it. The result? Everything here is just a mesh of ideas and things that have come up over the layout weekend. And I would like to take this opportunity to share a message with you all: Plan ahead! The same thing goes for assignments, work term reports, and technical presentations. Not planning ahead just results in a mess of things and editorials that might not make too much sense. Screw Flanders Screw Flanders Screw Flanders. It also results in a lot of nonsense being thrown in here and there just to meet the word quota.

Now I guess I should get on to talking about this issue that you have before you. This issue is my first as Editor-In-Chief, and I wouldn't have been able to do it without all of our great staff writers and editors. A special thanks goes out to all of my staff that came out to help me prepare the paper this last weekend. In this issue we have tried to continue to bring to the engineering student body the content that interests and amuses them.

If you ever have any suggestions, comments, or complaints about *The Iron Warrior*, please send us an email at iwarrior@engmail.uwaterloo.ca and let us know. If you think you can do our job better than us, then come out to the next meeting and join us. We are always looking for new staff members and no experience is required.

That is all, and enjoy the issue.

THE IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

Editor-in-Chief
Kevin Ling

Assistant Editors
Trevor Jenkins
Sunny Ng

Layout Editors
Marc Doan
Trevor Jenkins

Copy Editor
[vacant]

Photo Editors
Angelo Alaimo
Michael Seliske

Advertising Manager
Sylvia Wu

Circulation Manager
[vacant]

Web Editor
Sunny Ng

Staff Writers
Angelo Alaimo
Rory Arnold
Michelle Croal
Dangerman
Marc Doan
Rob Graham
Cherry Ho
Trevor Jenkins
Kevin Ling
Jon Martin
Sunny Ng
Sean O'Neil
Stuart Pearson
Bryan Sachdeva
Michael Seliske
Jaclyn Sharpe
Erica Waugh
Sylvia Wu

Contributors
Sasha Avrelina
Matthew Bester
Stephen Carpenter
Owen Cherry
Cat Hay
Arthika Kalathor
Cara Kennedy
Anna Lafoyiannis
Spencer McEwan
Scott Rankin
Peter Roe
Laura Sisson

Off-Stream Editor-in-Chief
Michelle Croal

The Iron Warrior is a forum for thought-provoking and informative articles published by the Engineering Society. Views expressed in The Iron Warrior are those of the authors and do not necessarily reflect the opinions of the Engineering Society.

The Iron Warrior encourages submissions from students, faculty and members of the university community. Submissions should reflect the concerns and intellectual standards of the university in general. The author's name and phone number should be included.

All submissions, unless otherwise stated, become the property of The Iron Warrior, which reserves the right to refuse publication of material which it deems unsuitable. The Iron Warrior also reserves the right to edit grammar, spelling and text that do not meet university standards. Authors will be notified of any major changes that may be required.

Mail should be addressed to The Iron Warrior, Engineering Society, CPH 1327, University of Waterloo, Waterloo, Ontario, N2L 3G1. Our phone number is (519) 888-4567 x32693. Our fax number is (519) 725-4872. E-mail can be sent to iwarrior@engmail.uwaterloo.ca

Next Submission Deadline

Jan 30, 6:00pm for publication on Feb 4, 2009

Send your submissions to iwarrior@engmail.uwaterloo.ca

Meetings every Tuesday, 5:00pm in E2 2349A

COMMUNITY EDITORIAL

Thumbs Up/Thumbs Down



To the increased number of smokers on campus. Don't you know it's bad for you? And for me too!



To Lady GaGa for scheduling a concert in Kitchener.



To locking the engineering building doors on the weekends. No longer can I have warmth and shortcuts in my afterhour cross-campus adventures.



To the global recession. Time to pull out bonds and stock up on canned foods!



To not having female showers in E3!



To the douchebag who pulled the fire alarm at Bomber last Wednesday night. You can go to hell.



To the UW Optometry Clinic for fixing my sunglasses... for free!



To those who don't bother holding doors for people immediately behind them.



To the PDEng independent review for taking much longer than they initially said it would.



To Frost Week. It's about time we had another purpling.



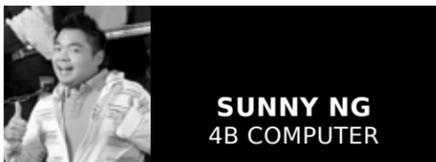
To people who still don't know that the IW office is NOT the WEEF office. We have a nice plaque for a reason. And that huge banner that was over our door was also a bit of a give away.



To iTunes for removing DRM from it's library of downloadable songs.

Send in your Thumbs Up/Thumbs Down to iwarrior@engmail.uwaterloo.ca

Future Uncertain for Week-long Frosh Week at Waterloo



SUNNY NG
4B COMPUTER

Orientation Week, which happens on the week before every Fall term has been a tradition at the University of Waterloo to welcome new students and to help them jumpstart their university career. Since classes begin the Monday after Labour Day, what happens when a Labour Day lands on the second week of September? This will be the case for this coming Orientation Week and a couple of proposals have been made in regards to this issue.

There have been two possible solutions that were proposed for this situation. The first option involves keeping Orientation Week running the entire week, but this may result in adding lecture days on Saturdays as well as exam days on Sundays. The second option suggests truncating Orientation Week programming to allow classes on Thursday and Friday during that week and continue programming after for the weekend.

Engineering Federation Orientation Committee member Mark Cremasco says, "They wouldn't allow us to do Frosh Week a week earlier this year because that's putting too much pressure on the faculty. They don't have enough time to prepare their lectures for the term." He sarcastically said, "Because all these professors clearly haven't taught these courses like ten times over."

Since situations like this happen every few years, when asked about how the university coped with the situation previously, Cremasco explains, "The last time this happened, they just cut the term short. We didn't have as many lecture dates because [the Canadian Engineering Accreditation Board's criteria] were not as strict at that point, so we didn't have the [60] mandatory teaching days. [But now] they are being strict and saying 'You have to hit those 60 days or you don't get accreditation.'" However, it looks as though this change

may become permanent beyond 2009 to prevent issues like this from arising in the future, as well as for other reasons.

Student Life Director Heather Fitzgerald also brings up the point that the number of students at UW has dramatically increased, which impacts the scheduling of the calendar. She says, "[The] number of increased students equals more classes. More classes equal more exams. More exams equal more exam slots, which equals more exam days." It was realized that the number of days needed for exams has pushed the schedule from the other end. "The academic side of the house is given the opportunity to revisit how the academic calendar is set."

Fitzgerald mentioned about an Orientation Week Review that is currently being conducted as they do every 5-10 years, "The last major overhaul of Orientation happened in '97-'98. When you look at the ever-evolving needs of the first-year students combined with the changing demographics of the first-year students, we realize that Orientation Week needs to change." During 1997, UW had around 3200 first-year students, while close to 6000 students are expected to arrive at the university in 2009.

One of the current findings in this study shows that a significant portion of first-year students goes home for the first weekend. An indicator of that were the sales of Greyhound tickets at the Turnkey Desk. Fitzgerald says, "We're finding that a lot of students are exhausted come the end of the week. Try asking yourselves why." She hopes to find more innovative and more efficient ways to orient students by not having as many days dedicated to Orientation Week programming.

Heather Fitzgerald discussed some issues that could come up if Orientation Week was to be shortened. She suggested that it is possible the move-in days could be moved to Saturday to Sunday instead of Sunday to Monday depending on UW Housing's take on this. She also pointed out that by shortening the week, upper-year students would be on campus during

the weekend, which raises the question, should the programming be catered to upper-year students as well? She hopes to use resources from National Orientation Directors Association (NODA) to gain advice from schools that do not have a full Frosh Week.

The issue has been presented to Senate this past Monday, but as of the publication of this article, it is unknown what was the outcome of the meeting. Currently, the Student Life Office and Federation Orientation Committee are still planning Orientation

Week 2009 as if it is a full week. Fitzgerald has mentioned that at this point it would be rather difficult to make changes to the Orientation Week schedule for 2009, however she says, "There's a strong likelihood that [a shortened Orientation Week] will be a reality for 2010." She added that this would have to be decided before Orientation Week 2009 occurs.

On that note, EngFOC Mark Cremasco reminds Engineering students who would still like to be a Frosh Week leader should sign up at www.eng.uwaterloo.ca/~foc.

Co-op Crunch

LOST JOBS

Continued from Page 1

They are using experiences from the last recession as the basis for this working group.

Some of the actions CECS have taken include encouraging students to return to their employers by contacting them via e-mail. They believe this is beneficial to the employers as they can get more out of students by having a returning student without having to spend as much resources to conduct training. CECS has also sent out an e-mail over the holidays requesting Winter 2009 co-op students that were still unemployed for permission to send their resumes to potential employers. Additionally, they requested students to update their skills inventories on Jobmine to assist in job matching. As well, CECS has posted an article on the UW Daily Bulletin on January 12th to encourage faculty and staff members to hire UW co-op students as well as generating leads.

Peggy Jarvie mentioned that the Co-op Ed Council, which has representations from all faculties, will meet this week and one of the items of the agenda is working on the protocol of what should happen if a student cannot find a job. While every co-op program allows at least one optional co-op term, it is unknown if this economic downturn would have a longer effect and cause students not be able to satisfy cur-

rent degree requirements.

When asked about what current students should do in this situation, Peggy Jarvie answers, "One of the main messages to students is to have more realistic expectations, particular in location, salary and job duties." Jarvie explains that while in the past, it seemed like a seller's market. With the economic downturn, students should think more like a buyer's market and should focus on what they can bring to the company instead. It is also important to contact previous co-op employers as they can give advice and may be able to highlight aspects in your own experiences that you may not have thought of before. As the competition for jobs get tougher, it is crucial to have a good resume and cover letters, pay attention to soft skills and to update the skills inventory on Jobmine. Lastly, Jarvie stressed on the importance of networking. "While the end goal may be to get a job, but the purpose of networking is to get to know more people and learn more about the field," says Jarvie. She encourages students to check out networks like Communitech as well as the Networking Workshop offered by Careers Services. For more information, go to <http://www.careerservices.uwaterloo.ca/>.

Those who are seeking full-time positions are encouraged to check out the Job Fair on February 4th at RIM Park.

Get Into the Green

The Top Ten Ways Of Getting into the Green Building Industry

STEPHEN CARPENTER
UW ALUMNUS

Sustainable design is certainly the hot topic in the building industry. In fact, while many areas of the real estate market are slumping, the green building business has never been better or busier. And there is a great need for engineers with a background in environmentally-responsible building design or operation.

While many young engineering graduates have the interest in green buildings, many do not yet have the experience to break into the industry. Taking a page from David Letterman, here are the top ten ways for a future sustainable design leader to break into this field:

10. *Become a LEED AP:* As the most widely recognized green building certification, LEED (Leadership in Energy and Environmental Design) is a must-know rating system for any green building specialist. To become a LEED AP (Accredited Professional), take the LEED one-day training course, study the LEED Reference Guide, and register to take the LEED exam all available through the Canada Green Building Council (www.cagbc.org).

9. *Make connections:* This tip could be given to any upcoming university graduate, but it is especially true in the small green building community. Go to a green building conference or LEED training course and talk with the speakers, instructor, or other participants and get your name and resume out there.

8. *Choose your co-op positions wisely:* HR managers in the industry will obviously look for candidates with at least one co-op term in the building sector (and of course time spent certifying a LEED building is always a huge bonus). Any work in the building sector is useful. Engineering design firms, building contractors (commercial more than residential buildings); mechanical equipment manufacturers are also excellent places to hone your understanding of how buildings work.

7. *Tailor your coursework:* When choosing classes, take a few that involve building systems, particularly HVAC, building science, and especially heat transfer. When given a design or research project where you can choose your topic, pick a green building- it makes for a great discussion point in a job interview.

6. *Be technically sound:* Many recent graduates apply to green building positions with a genuine interest in the environment, but without the technical background in building systems and operations, they won't get far. In addition to taking technical courses, do research with a professor in an area like heat transfer or building science.

5. *Develop your interpersonal skills:* Unlike some building projects, LEED projects use the integrated design approach where all mem-

bers of the design team, from the architect to contractor to LEED consultant, meet regularly to discuss how the building will achieve its green goals. Often other members of the team need to be sold on sustainable features, which means the LEED consultant needs to be confident enough to make their case in the face of opposition. Persuasion isn't just a bluff- you need to back up your confidence with a sensitivity to the situation. When applying for a job at a green building firm, making sure you display those characteristics and interpersonal skills in your interview.

4. *Don't settle for green-lite:* More engineering firms are getting into the green building game, because they know that's where the future of the building industry lies. Often these firms don't want to fully commit to going green and only have a small green building group as an after thought to their mainstream focus. There are firms, though, where green building is the main business, and if you want to get the respect you deserve from your employer, don't settle for anything less.

3. *Live green:* By living green, you learn first hand whether green technologies really work and it shows a commitment to the field. You need to walk the walk and talk the talk to convince an employer that this is the field you want to work in.

2. *Join green associations/Read green magazines:* There is a wealth of information on green buildings that can be used to upgrade your knowledge. The CaGBC website (www.cagbc.org) has case studies of green buildings. Environmental Building News is the best magazine in the green field. Attending meetings of green organizations like the CaGBC chapters (there is one in Toronto) can also expand your knowledge.

1. *Graduate:* With high academic standards and an excellent co-op program, U of W Engineering graduates are the best in the business. Just make sure you become one of them!

Stephen Carpenter, MSc, PEng., LEED AP, is the president and founder of Enermodal Engineering. He has over 25 years of experience in the building industry, including mechanical design, energy simulation, and sustainable development. He is active in the Canada Green Building Council serving as LEED Faculty Member and Chair of the Technical Advisory Group. He is the recipient of numerous professional and community awards including the University of Waterloo Engineering Alumni Achievement Award.

Enermodal Engineering is a consulting firm committed to buildings and communities that are energy and resource efficient. They are working on over 180 LEED building and has certified more buildings than any other firm in Canada.

UW Engineers at CFES

OTTAWA DECLARATION
Continued from Page 1

With the current economic downturn taking place, one of the first places that the government has been looking at to cut funding is post-secondary education. As a student-run organization heavily dependent on sponsorship and fund-raising, CFES would be left quite vulnerable by such a decision. The declaration was a statement of position to the federal government, reminding the government of the benefits to a rebounding economy offered by young engineers. Engineers have the power to help lead our country out of this challenging time, so to cut funding would only hurt Canada in the long run. The government's view on the situation remains to be seen, but it is hoped that they will continue to support engineering students.

The week was also a terrific opportunity to meet and network with other students

from across Canada. The evenings provided delegates with plenty of chances to explore Ottawa and socialize. Curling and skating on the frozen Rideau Canal were highlights for many. Representatives from BEST and Bonding, the European and German engineering student organizations, respectively were also in attendance. Meeting so many different people from all around Canada and the world was definitely one of the best aspects of Congress.

Next year, Congress will be hosted much closer to Waterloo, at McMaster in Hamilton. Memorial University in St. John's, Newfoundland won the bid to host Congress in 2011, so future delegates can look forward to lots of East Coast fun. Anyone interested in getting further involved in CFES should visit www.cfes.ca or speak to their VP-External (Mike McCauley for A-Soc and Cara Kennedy for B-Soc).

Going Global

International Exchange Opportunities in Engineering

PETER ROE
DIRECTOR OF
EXCHANGE PROGRAMS

At UW Engineering, we try to help your career, long term, to be the best possible for you. And promoting international exchange is an integral part of this. If you have lived most of your life in Canada, with just a few trips overseas for holidays or tourism, you can really win by going on exchange to a foreign country and being totally immersed in their environment. The experience is often life-changing; it can open your eyes to the outlook, traditions and culture of your host country and to many peoples around the world. You will meet other exchange students from all the continents when you are at one of our partner universities for your 3A or 3B term (or both!). You will make life-long friends and contacts from around the world.

In many universities in Europe and the Far East exchange to, or at least experience in, a foreign country is a mandatory part of the degree program. In Canada and especially in the United States, this has not been so heavily emphasized. Nonetheless, UW doesn't follow the herd of other places. The opportunity for International Exchange is a privilege which we offer to Engineering students in all our programs. We do whatever we can to help you because we want UW Engineers to be as ready as possible to meet all the challenges they will encounter and to be better prepared than students from other schools.

Exchange is available for all Engineering students who have completed 2B and who satisfy a number of other criteria. So why think about it in 1B or 2A? It's a great opportunity that deserves to be high on your list of things to plan for. It needs preparation, organization and forethought. If you plan ahead you can be among the 15% of your class who can go on this major adventure and learning experience.

We have exchange programs with some 60 top-tier universities in about 30 countries around the world. You need to evaluate which best suits your needs; some of our exchanges are restricted in numbers and some are open only to certain disciplines of engineering. In some of our exchanges it's easiest to go for a one-term exchange; in others two terms,

or even a full year including a work term is best. All this is a part of planning for your future career, which could take you anywhere in the world. To get started, visit our website, www.eng.uwaterloo.ca/~exchange for a wealth of detailed information and all the contacts you need to help you in the process.

For some Exchange programs you need to learn the language, (Chinese, French, German, Italian, Japanese, Korean, Polish, Spanish or Ukrainian), spoken in the country and used for instruction. But if you're in first or second year, you have time to do this, and in itself, learning a language will broaden and deepen your overall education. Canada is a bilingual country, and most students have learned at least a little French. So an exchange in French can enhance your ability to make a career at the top of such organizations as Bombardier, the Canadian Space Agency, SNC Lavalin, or the diplomatic service. Germany, Japan and Korea are among the most technologically advanced countries in the world, being able to converse with their engineers in their mother tongues gives you a real advantage.

You don't need to worry about the money; more and more scholarships and bursaries are becoming available. Normally exchange students lose no time on exchange and graduate with their class.

Finally, exchange is great for fun, travel and tourism. You will visit parts of the world that stay-at-home students may never experience. Don't take my word for it; talk to students who've gone, or read what they have to say. For example; Matthew Lee (SyDe 2005) wrote:

I wouldn't have traded my experiences for the world. My time on exchange was great: I got to go traveling and backpacking, got to meet some fantastic people from all over the world, and I graduated on time with my class and my friends! ... If you are even just considering an exchange, I recommend without the slightest reservation that you go. Waking up and looking forward to every day in a new country, that's just not a feeling that you get [if you stay at home]!

We shall be offering information sessions from time to time during the term, so come to one and start planning now for a great experience.

IW RECOMMENDS

Lip Balm

Burt's Bees Replenishing Lip Balm



SYLVIA WU
2A MECHATRONICS

I bought this lip balm purely out of impulse from the UWShop. However, this is one of the few times that I appreciate my shopaholic urges. It is the most moisturizing lip balm I have used to date. It goes on smoothly, does not feel sticky, and smells kind of nice. The lip balm is thankfully in a twist up tube, as I find jars quite unsanitary. The balm itself is red in colour, but it goes on completely clear so guys shouldn't shy away from it! Go grab a tube and rescue your chapped lips.



POETS Reopens Doors With New Looks

BIG CHANGES

Continued from Page 1

The old bar was removed and replaced with additional seating. The new, larger bar has more bar top space for bar-bound patrons and a new serving window cut out of the support wall makes it easier to get one's beverage of choice between classes, as opposed to having to squirm around the people sitting at the bar. The relocation has already received positive reviews from POETS regulars. Megan Pollock (2A Systems) commented on how much easier it is to get in POETS now that the bottleneck around the bar has been relocated away from the doors.

A new serving window that connects directly to the patio, will make getting a beverage during the summer months easier than ever.

The couches have also been rearranged to help create more of a pub feeling that's more conducive for conversation and remove the theatre feeling. While movies play an important part in the daily operations, the aim of the renovations was to create a more inviting space to students who might not otherwise

partake in the POETS experience.

Many who returned to campus this term were surprised to find POETS closed for the on-going renovations for the first three days of term, despite being told that the renovations would happen at the end of the spring 2008 term. Many wondered whether the delay plague that seems to face every construction project at UW took POETS victim. However, as Iron Warrior reporter Michael Seliske noted last September, the plans for the renovation were on schedule for last spring until the contractor became ill and was unsure if he'd be able to meet the strict frosh week deadline. Due to POETS being a necessity for frosh week, it was decided to delay the renovations until the Christmas Break. The wait was well worth it, because the results paid off!

As mentioned at the first EngSoc meeting of the term, plans are currently underway to purchase a new A/V system for POETS.

The credit for this long awaited endeavour is due to the hard work of the EngSoc exec, but more specifically Mary Bland, the Engineering Society Corporate Director. Her



Angelo Alaimo

The freshly unveiled bar uses the back "dead" space in a constructive manner.

hard work and dedication to the project saw it through from beginning to end, and without her, this project wouldn't likely have come to fruition.

POETS has always played an integral part in the lives of many engineering students here, and will continue to for generations to come.

Engineers Rule the World: Neil Armstrong



In this edition of *Engineers Rule the World*, we will look at one of the most recognizable individuals of the past century. His famous quote, 'One small step for man, one giant leap for mankind', heard around the world in July 1969 has been used in almost every context in popular culture, including movies, television, music, and satire. Neil Armstrong was the first man to walk on the surface of the moon. Throughout his life, he also served as a naval aviator, a test pilot, and a university professor. For all of his accomplishments, it is interesting to note that Neil actually began his calling as

an engineering student.

When Neil was 17, he was accepted to Purdue University in Indiana to study aerospace engineering. The United States Navy funded his schooling in exchange for three years of service. He was a prominent member on campus, belonging to two fraternities. Although his marks fluctuated throughout his undergraduate years, he graduated with a Bachelor of Science degree in aerospace engineering. He went on to achieve a Master of Science degree in aerospace engineering from the University of Southern California.

During his three years of service, Neil was a pilot for the United States Navy. The first jet he piloted was a F9F-2B Panther. He fought in the Korean War, and he flew 78 missions for a total of 121 hours in the air. He was awarded numerous distinctions, including the Air Med-

al and the Gold Star.

After graduation, he signed up to be an experimental test pilot at the Lewis Flight Propulsion Laboratory in Cleveland, Ohio. He piloted many different experimental aircraft, some of over 63 kilometres in altitude. In comparison, commercial aircraft typically fly at 14 kilometres above the ground! Neil's superiors were extremely impressed with his engineering ability. He was one of the most technically capable of all of the pilots in the program, and Neil 'had a mind that absorbed things like a sponge.' In 1962, his application to become an astronaut was accepted, and he began training for space missions.

Armstrong's first flight with NASA was the Gemini 8 mission. This particular mission was the first ever docking between two spacecraft. This flight took almost 6.5 hours to complete.

He was also a backup commander for Gemini 11. Once the Apollo program was started, he was the backup commander for Apollo 8, and was eventually awarded the command of the historic Apollo 11 space flight to the surface of the Moon. The parents of today's youth will most likely recall what they were doing when Armstrong landed on the moon. July 20th, 1969 was one of the defining moments of the human race.

It would be hard to find anybody that doesn't know who Armstrong is. Phrases like "the Eagle has landed" and "that's one small step for man, one giant leap for mankind" are from the Apollo 11 mission that Armstrong commanded. For embodying the spirit of human exploration and capturing the imagination of the world, Neil Armstrong deserves the title of an engineer that rules the world.

Want to make \$2000/hr?

Technical Speaker Competition

15-Minute Speech

\$500 First Place Prize

\$250 Runner Up Prize • Winners get to go to the Ontario Engineering Competition • Looks great on resumés

Check out www.eng.uwaterloo.ca/~sff/Competitions/TechnicalSpeaking/ for competition rules and information.

Please contact Douglas Harder at dwharder@uwaterloo.ca if you are interested in participating.

Thursday, February 5, 2009 at
11:30 am to 1:30 pm EIT 3142

**E2-3336, ext 84008, sff@engmail.uwaterloo.ca
www.eng.uwaterloo.ca/~sff**

Sandford Fleming Foundation

Professionalism.
Leadership.
Communication.

There's more to an engineering
education than engineering.



OPINION

The Future of Gaming

Consumer Electronics Show Wrap-Up



JON MARTIN
1B CIVIL

The Consumer Electronics Show (CES) has traditionally been meant for announcing and showcasing brand new technology to the world. As a result it may seem odd to have the three major consoles; Sony's Playstation 3; Microsoft's Xbox 360; and the Nintendo Wii; on display among state of the art technology which won't be available to the public for months to years. The current generation of gaming consoles has been around since 2006 (2005 in the case of the Xbox 360), so in the context of CES, they might as well be from the 18th century.

Despite their comparable age, CES is still a viable display opportunity for new games and peripherals. Not nearly as much gaming tech and programs as during the Electronics & Entertainment Exposition (E3) but a respectable showing nonetheless. While Sony and Microsoft have additional markets in which to advertise brand new technologies, such as televisions and computers, Nintendo had only the Wii to count on. Nintendo's reliance on the Wii may explain their relatively quiet rep-

resentation at CES compared with Sony and Microsoft.

At the Sony booth, the PS3 was shining in all its 3D glory. Sony representatives have announced their intention to incorporate 3D imaging into their games to complement their new line of 3D capable televisions. Sony has yet to settle on a specific means of generating the 3D images, as an international standard for 3D data processing and encoding (on Blu-Ray for example) has yet to be established. Sony was also displaying the Playstation Portable (PSP) and its possible integration as a multimedia remote for the PS3 and networked music. Sony also showcased Resistance 2, Little Big Planet, and Fallout 3.

Microsoft was also showing off 3D technology from Next3D, which will allow Xbox 360 and PC users to get 3D movies and trailers, IMAX films, and other content in 3D streaming directly to their systems. The service will be free, and is set to launch in the spring. MS also announced the release of "Kudo", a new game-building game coming out on the Xbox Live Community Games Channel. Kudo has been compared to Sony's "Little Big Planet" though the changes from when it was code-named Boku have challenged that comparison a lot. While the game lacks Little Big Planet's distinctive style, its block style game

construction appears to offer a wider range of creation possibilities. In addition, Microsoft has confirmed the release of the Xbox Live Primetime content, which was delayed from releasing alongside the New Xbox Experience in November. Primetime will allow 360 users to play with other users online in real-time game shows such as 1 vs. 100. Microsoft also showed off their current top selling games, including Fable 2 and Gears of War 2, as well as showing off upcoming games like Lips, Halo Wars, and Warhammer 40,000.

Both Sony and Microsoft were showing off their new console interfaces, PlayStation Home and the New Xbox Experience respectively. PS Home allows users to create a character to represent themselves as well as a house to live in and display trophies. The NXE allows users to create an avatar (with components designed by MS game studio Rare) to use in games and on the dashboard. The NXE also represents a complete overhaul of the 360's "blade" (the current graphical user interface) system and Xbox Live store, though the original layout is still available via the guide button.

At this point it has probably become apparent that Nintendo had very little in terms of new technology or innovations for the Wii (I guess they need to work harder on keep-

ing systems in stock before they improve the technology). Nintendo's main contribution to gaming at CES was their announcements of new games for 2009. Some of the new titles Nintendo announced were; Conduit, a first person shooter (FPS); Deadly Creatures, a game where you play as either a scorpion or a tarantula to survive in the desert; The House of the Dead: Overkill, a zombie FPS; Monster Hunter 3, the first release of the series on a non-Sony system; Punch Out, a boxing game. Of course there are also the required new Sonic and Wii Sports games; Sonic and the Black Knight, and Wii Sports Resort.

Over the course of CES there was also some publicity attacks from Sony against their competitors. Sony released a public statement, backed up by a table, to show the PS3's superiority over the Xbox 360 and the Wii. The release compares the included components in the PS3 versus the optional components available with the 360 and the Wii, followed by the graph and ending with the following statement:

"The Xbox 360 requires additional money, multiple upgrades and additional external devices, putting a burden on the wallet and adds clutter to the entertainment center. And the Wii's lack of enhanced features comes at the expense of a comprehensive entertainment solution. So as PS3 continues to evolve without the need for additional parts or expenses, expect the competition to continue peddling additions in an effort to keep up with the Jones'."

Now, my bias as a 360 owner will come out, the problem that I have with Sony's comparison is the removal of choice. They automatically assume that everyone wants wi-fi, a built in Blu-ray player, that their tv uses HDMI rather than component (which will also give you 1080p HD), and that they play multiplayer. If they do, that is great, if not then you shouldn't force it on to them.

An individual person's choice of console should be based on the type of games they play, and which console has more of that style of game. Many big blockbuster games come out on just about every system known to humanity, it is the console exclusives that determine the right console for you. That is the end of my philosophical rant.

With the CES now finished gamers have a few new games and future technologies to look forward to, but the real announcements will come in the future at E3 and the Game Developers Conference. Until then we can look forward to the newest games, and hope we have time to play any of them.

Functionality	PS3 80GB	Xbox 360 Arcade	Wii
Out of the box console	\$399	\$199	\$249
Wi-Fi	YES	\$100 add-on	YES
Hard Drive	YES (80 GB)	\$100-\$150 add-on (60GB-120GB)	Not Available
Online Gaming Service	FREE	\$50 per person/per year	Limited
Blu-ray gaming/movies	YES	Not Available	Not Available
HDMI Output	YES	Not available in earlier models	Not Available
Total	\$399	\$449 - \$499	\$249

Minister Gary Goodyear At UW



SYLVIA WU
2A MECHATRONICS

Disclaimer: Sylvia Wu is currently a registered member of the New Democratic Party. Any bias you find within this article is perfectly reasonable.

Recently, the Young Conservatives of The University of Waterloo and Wilfrid Laurier University jointly hosted an evening of question and answer with Gary Goodyear, MP of the Conservative Party and Minister of State for Science and Technology within Prime Minister Stephen Harper's Cabinet. The affair took place in an RCH lecture room. Though not a full house, I never expected to see so many 20ish young conservatives in one place at Waterloo. I think Minister Goodyear himself was surprised too. Paraphrasing him, university campuses are usually filled with liberal and socialist

types who can't see "common sense".

Minister Goodyear is not a typical political science grad who dreamed of sitting in parliament since youth. He did two years of science back in the day at UW and went on to chiropractor college. Upon graduating, he had made a successful career as a specialist in sports medicine. He only got involved in politics less than a decade ago, first running in 2004 and has been re-elected every time since. He frowned upon the long reigning Liberal party's taxing and wasting ways, and the desire to "make a change" was his motivation for running.

The agenda of the talk was not really about science or technology. It had a very political agenda. It is understandable that Mr. Goodyear plugs for Mr. Harper now and then out of party loyalty, but reminding us of Mr. Harper's brilliance and decisiveness in every response to a question is a just a little redundant. For example, in response to a question about the MacDonald Dettwiler Space and Advanced Robotics Ltd.'s poten-

tial sale to a U.S. buyer, and the subsequent governmental action to block such a sale, Mr. Goodyear commented that it was good decision, and "by the way", that Mr. Harper supports the Space Industry wholeheartedly, unlike those foolish Liberals who made the Canadian Space Industry into a forgotten frontier. Cuing all engineering students who love the space industry, put your hands up and cheer for Mr. Harper!

In response to the Iron Warrior's question on how the Harper government plans to involve more Professional Engineers in his government, since P.Engs are so disproportionately represented at both the provincial and federal levels, that the PEO and Canadian Council of Professional Engineers, are getting concerned. Mr. Goodyear responded that if we want something heard by the government, we should rent a hall on Parliament Hill and invite the MPs to support our causes, or use the good old "phone your MP" trick.

On the topic of the coalition "scandal",

Mr. Goodyear commented that it's just the Liberal and NDP's little conspiracy, because in his lifetime this is the only way Stephen Dion is going to be the prime minister, and the only way that Jack Layton will sit in Cabinet. By the way, Mr. Harper was ill that week and he still did so well. Good for him. (Cue for you to put your hands up in the air and cheer for Mr. Harper again.)

On a side note, the new conservative MP for Kitchener-Waterloo, Peter Braid, made an appearance as well. I recommend that Mr. Braid gets a new campaign photographer, since he looks much more handsome in person than on the brochure that was delivered to every household in his riding. That photographer shouldn't have been paid for the way he/she portrayed Mr. Braid. The Iron Warrior, on the other hand, has contacts of a large directory of skilled photographers available if Mr. Braid decides to accept its recommendation. Political leanings can be set aside temporarily for paid work.

My First Concert Review

Broadcast Radio and Some Other Band



SYLVIA WU
2A MECHATRONICS

You know your newspaper is getting read when the publicist of an indie band from Montreal sends you a press release and a concert invitation. I don't know about our new EIC Kevin's reaction, but I was pretty flattered. The rock band in question, Broadcast Radio, has gotten solid reviews by The Hour, Nightlife Magazine, Pop Montreal, The Ottawa Citizen, The Ottawa Sun, and Lonely Vagabond, according to the press release. I have no idea what any of these publications are other than The Ottawa Citizen, but I'm sure they are all serious journalistic publications, which also implies that the publicist of Broadcast Radio thinks we are just as serious as all of the aforementioned. What an honour! I giddily accepted the invitation and looked forward to the concert date--Friday January 10, 2009.

Kevin the EIC, a more avid music fan than I will ever be, accompanied me to Maxwell Music House on Friday. It's a teeny little venue on the corner of King St. and University Ave. If you don't look hard enough, you just might miss it and go to Phil's instead. However, Kevin and I are determined journalists, so we did not go to Phil's but kept our eyes wide open and finally found the place toward the back of a little strip plaza. The place is cozy (just a better word for small, like your UWP dorm room), nothing special in terms of decor, about half of the size of the Bomber and doesn't offer food other than packaged chips. It is worth noting that the Raintree Cafe is in the same plaza and has great food, so if you ever hit up Maxwell's, you might as well eat at Raintree before hand.

As we entered Maxwell's at 8pm (per the instruction from the publicist), the place was quite empty except a few people sipping beers at the bar. There was no publicist in sight or even a ticket checker. After we sat down on one of the couches, a gentlemen kindly reminded us that there is not only a cover for the show but the show doesn't start until 9:30pm. Dear reader, please use your imagination to picture our reaction, as we just walked from Hazel and Columbia to King and University in a snow storm, and now we are about to walk back.

Some old fool says that the second time's a charm. Not so in this case. When we came back a bit after 9:30pm, there was no indication that a show was about to start. Kevin jokingly suggested that there might be a bar quota that has to be met before the show starts, and I actually checked with the bouncer. Unfortunately it was his second day of work and he doesn't know anything! More waiting ensues. Only this time it was indefinite.

At about 10:45pm, the first band, which shall remain nameless, finally showed. I really can't say much about this band as I'm no music critic. I also wasn't very impressed so I'll keep it short and simple to not hurt their feelings or anger any of their 50 "friends and family" fans. They hail from London, which shows a reasonable effort and seriousness about their music. The bassist wore sunglasses indoors. The singer has an accent I can't put my hands on. They played Oasis covers. I suggest they keep their day jobs. Aside: the band's manager/sound engineer was a real friendly fella. He handed Kevin his number and email on a napkin. Kevin also got a demo CD that I doubt he'll ever listen after his ear drums have been so brutally harmed at the show (only to be healed by Broadcast Radio later).

After 13 unbearable songs and an encore,



Sylvia Wu

Broadcast Radio took the stage at Maxwell Music House in Waterloo.

we finally got to see Broadcast Radio in action. The music has a slight flavour of an Arcade Fire, Mobile and Broken Social Scene leftover platter--don't get me wrong, that's definitely a compliment. Despite being from Montreal and all of the band members having Quebecois accents, their lyrics are more easily distinguishable than those Londoners! The singer Nick's vocals are strong. However, his bandmates' backup vocals cannot be overlooked either. The guitar, drum, and bass were all quite lively and full of energy. I found most of the songs a little darkly tinted with the exception of one or two. However, I'm no fan of sunshine-and-unicorns type of music, so this band fit my bill. They also get bonus points for being cute guys with cute accents.

I certify this band worthy of live headbanging and hair flipping: they are much better live than on the CD. It is sad that the Lon-

don band's local friends and family crowd couldn't find it in their hearts to appreciate these Montrealers. If the first band got cheers for an encore, these guys deserve at least a decent applaud and some whistling.

Sadly, I can't comment on any of the songs in specific since the CD I purchased after the show is currently outdoors in my car's CD player and it's -29 degrees Celsius--I don't love the IW as much as my warm room right now. The CD is their sophomore album, titled Hallways of the Twenty-First Floor. It is my current favourite driving album.

If you ever get a chance to see Broadcast Radio, I highly recommend that you do. They mainly play in Montreal. As for the other band... pass unless you really like dirty looking guys with untamed long hair.

*Disclaimer: I don't really know how to write a concert review as I never took MUSIC 140. Critiques and *pointers are welcome.*

Thoughts on Being Canadian



STUART PEARSON
2N CIVIL

The word 'patriotism' seems to scare a lot of people these days, conjuring images of armies and airplanes bombing the crap out of some faraway country in the name of freedom. However it also has a very positive connotation when you strip away the CNN headlines and take a look at your own life. I recently had a week filled with dozens of particularly Canadian experiences that made me reconsider my definition of patriotism.

Most people bust out the Maple Leaf every year on July 1st, November 11th, or maybe during the Olympics. The rest of the year it just sits there, not forgotten, but left on the sidelines. I recently had the good fortune to attend the bronze medal game of the world juniors hockey series in Ottawa. Even though Canada was not playing until the game after, the energy in the room from thousands of people ready to watch Canada compete for the title of "World's Greatest" was truly awesome (in the original sense of the word, too!). We tried to stick around after and sneak into the Gold medal game but to no avail. At the bar later on that night, no fewer than eight O Canadas spontaneously erupted from the crowd.

That same week, I was at Ottawa in attendance for the Canadian Federation of Engineering Students (CFES) Congress 2009. As the name implies, it was the annual gathering of hundreds of engi-

neering students from universities across the country. Among the many Canadian delegates were also some international visitors from BEST and Bonding, the European and German engineering student organizations, respectively. It was a delight to share a truly Canadian (albeit somewhat touristy) experience with them: skating along the frozen Rideau Canal and eating Beavertails. Even just being in Ottawa makes the Red and White come out. The parliament buildings really are quite impressive, and standing at the War Memorial is a humbling experience.

But in a trip of many distinctly Canadian experiences, it was on the way home from Ottawa that I felt the most powerful sense of pride in my country. Driving back to Waterloo along the 401, we saw a row of emergency vehicles lined up along an overpass outside of Trenton. We assumed that there had been an accident of some sort. Then on the next bridge we saw more fire trucks. On the underpass after that, at least a dozen people were leaning against the railing with Canadian flags. We were initially confused by their appearance, our curiosity growing with every bridge we passed beneath. Slowly the truth dawned on us: on the 'Highway of Heroes', thousands of Canadians line up along overpasses to pay tribute to fallen soldiers as they return from combat in Afghanistan. The military procession passes from the air force base in Trenton to Toronto. That afternoon, Trooper Brian Richard Good returned to the country he had died serving, fighting for peace overseas.

I cannot describe how moving it was

to see all of the people lined up. Of the dozens of bridges between Trenton and Toronto, all but three were packed with citizens paying their respects to Good, the 107th Canadian to die in Afghanistan.

We are unbelievably lucky to be Canadians, and though it may not al-

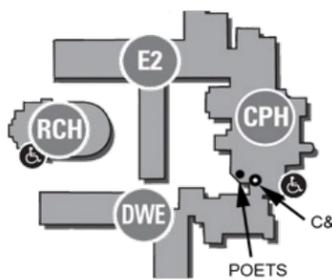
ways be at the forefront of our minds, it is important that we stay proud of our country. Whether it's pride at being the best hockey players in the world, pride for the brave men and women who died for us, or something else completely, find your own reasons to be glad to call yourself a Canadian.

MORE THAN JUST COFFEE & DONUTS

.....

The EngSoc C&D has more than just Coffee and Donuts. Stop by for a variety of freshly prepared sandwiches, baked goods, soups, and more! It is run by students for students, so the prices can't be beat!

There are a variety of specialty coffees available - including fair trade. Bring your own mug to help the environment too!



ENGINEERING SOCIETY



C&D

HOURS OF OPERATION
MONDAY-THURSDAY 7:30AM - 7:00 PM
FRIDAY 7:30 AM - 5:00 PM

Frost Week Jammed Packed With Activities



**ANNA
LAFYOIANNIS**
FROST WEEK DIRECTOR

This past week, we celebrated Frost Week. UW Engineering Frost Week is a tradition that began just two years ago as a way to introduce 8-stream first years to the Engineering Society that they will belong to for the rest of their university careers. This year, Frost Week included a plethora of activities, starting on Monday with snow fort making and a snowball fight at the Grad House Green. In the evening, Frosh Mentoring hosted an uptown tour for first years to learn about some of the fun activities available to them outside of campus (*cough* Spur *cough*).

On Tuesday, over a dozen of engineers embraced a national Engineering tradition – Purpling. Purpling is done, not only as part of keeping pride in our profession, but also to honour engineers in history. The colour purple has been associated with engineers since 1863 when the Royal Navy assigned engineers a purple arm band. It is said that the engineers on the Titanic wore purple coveralls and that they continued to fuel the fires on the ship, even while it was sinking, to keep the lights on and be visible to any ships in the area. As a result, engineering students across Canada dye themselves purple to recognize these brave engineers. Our purpling event was a huge success! Many people stripped down to boxers to purple their entire selves. A special mention must go to Hannah Lindsay and Megan Pollock for coming prepared with an extra pair of clothes to get purpled in and for being there first!



Students take the chance to get their picture taken with The Tool.

Michael Seliske

We were also very excited to have Acting Dean Rothenburg purple his hand with us!

First years were introduced to the Orifice on Wednesday, when the Exec provided them with a tour and free ice cream during lunch time. The first Engsoc meeting of the term was held that evening.

A courageous group of engineers braved the cold on Thursday to kick

each other's butts at Laser Quest. Code names were picked by each player, including my favourite code name; Funkinblow. By coincidence, an equal number of Frosh and Upper Year's came out. After playing a solo mission, the frosh and upper years were divided into two teams to battle each other. Although the upper year's beat the frosh, the night provided great bonding between the two groups.

Friday afternoon and night featured a pub-crawl put on by Gradcomm. The crawl included a different route from the typical, including a very fun stop at Dooley's for \$10 unlimited pool. It turned out to be a blast

Finally, Frost Week culminated in a tubing trip at Chicopee on Saturday. It was great fun. Overall, the week was a great start to the term!



Michael Seliske

Dean Rothenburg poses along side some purpled Frost Week Participants. Rothenburg partook in the festivities by purpling his hand.

ARTS AND ENTERTAINMENT

King Street's Lesser-Known Music Venue



ANGELO ALAIMO
2A ELECTRICAL

From the outside, it looks just like another typical old house along King Street, but some nights, one may walk by, perhaps on the way to a pub-crawl, and see lights, a band, and a crowd of people inside through the large front windows. That's how recent UW masters graduate Owen Cherry, current resident and house photographer, discovered the Trepid House, also referred to as '130 King'.

"I was biking down the street one day and I saw Chris Yang and Richard Laviolette sitting on the front yard eating dinner. They said, 'Hey, we're playing a show tonight, you should come, you should come sit with us and eat some dinner.'"

Three and half years ago, Jeff Woods, an employee at RIM, spent his own money and took a very run-down, century-old house, and transformed it into what could be considered the most interesting alternative venue space in town. Nothing about it is like a typical gig setup, except perhaps the entanglement of patch cords and microphone stands. The parlour, which is the room where not only local bands, but bands from all across Canada (and some from the United States) have come to play, isn't much bigger than half of the new Iron Warrior office. However, if the parlour is full or if some are worried about losing their hearing because it does get loud, people can join a conversation in the kitchen, spill out to the pirate room in the back of the house, or from the pirate room climb the ladder to the arborium. Of course, people can still hear the music thanks to the excellent wiring job through the house that connects speakers in each room to the soundboard. If there still isn't enough room, the audience can ascend to the attic which Woods has recently transformed into an art gallery featuring local artists. You can even join him



Richard Laviolette and his Hollow Hooves of Guelph play the Trepid House

Owen Cherry

in his room where he manages the soundboard while watching the concert through a fish tank in the wall that connects to the parlour.

When questioned about the kind of music played at the house, Cherry turns to Woods, "Is there anything we haven't had?" From hip hop to ska to ambient soundscapes, the variety of music won't please everybody all the time, but the majority who attend love it, especially Woods. He records every show and has the hard drives to prove it. Some of the recordings do end up on the Trepid House website along with photographs that Cherry takes of the shows.

It's no surprise with the hard work that Woods puts into this house coupled with the originality of the various rooms, it has

become well known within the local music community. Bands and audience members love to be at this alternative venue space, and according to Cherry, who also drums for local band Knock Knock Ginger, "it's getting to know your audience, and, well, they're not even your audience anymore they are just your friends, and you are just playing for friends. You leave a show knowing people that you didn't know before you played."

Steph Yates just moved into the house, which she describes as the quirkiest she has ever lived in. She explains the audience experience, "It's very fun and exciting, you are rubbing elbows with the people you admire; you get to mingle." From the host point of view, Woods added, "They have a real interaction with

the audience; they tear down that whole artificial plateau or platform or whatever. That's all gone you are interacting directly with them. You are sharing meals with them and that's where you build loyal fans and people that are legitimately interested in your career and come out to the rest of your shows because you built an actual interaction between them and you." Unfortunately, not all musical acts get to share in this experience, which Woods describes as "important for a vital music scene."

Many bands and artists come to Woods seeking a venue to play at; however, Woods has to turn down about five bands for each show at the house which Cherry interprets as a lack of venue space in town. There are other dwellings in town like the Trepid House, but most are under the radar, not opening the doors to the public unless you know where to look. Because the Trepid House advertises all of their shows on Facebook and on their website, attendance is much higher than most other house shows. Bands benefit from this higher audience, because \$5 or PWYC (pay what you can) is collected at the door from each person. The entire amount collected is then split between the bands playing, with no money going to the house or Woods.

Apart from the regular house shows, Woods also organizes an annual music festival called *Carl!* (*Carl!!!* this year since it's the 3rd year running) which spans over 3 nights at the Trepid House. Also, he helps organize other shows in larger venues such as the Grist Mill in Waterloo Park. One of those larger shows—a festival called *No Festival!*—will, like *Carl!*, span over several nights, but this time will be hosted at three different venues in February.

If you are lucky enough to spare some time from that busy engineering schedule of yours, be sure to check out the Trepid House at 130 King St. N. If you happen to have a band and are interested in booking a show locally, be sure to get in contact with Jeff Woods. All information regarding booking and upcoming shows, including *No Festival!*, can be found at the Trepid House website - www.trepid.org.



Vincat of Victoria, B.C. play the Trepid House

Owen Cherry

ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report



CAT HAY
PRESIDENT

Welcome back to campus (and welcome to B-Soc for some of you first and fourth years)! We hope you've enjoyed our start of term "frost week" events - we've got tons more coming your way the rest of the term!

I'd like to start off with a quick refresher of what happened over the last four months. After Betty's retirement as our secretary, we made the switch to part-time Orifice staff who keep the office open during our regular 8:30-4:30 hours. They are super-friendly and ready to answer any questions you have about Engineering-related events and services! We also modified our constitution to allow "persons who have made outstanding contributions to the benefit of the society and its membership" to be named honorary members. In November we had a referendum to

consider raising the EngSoc fee - this did not pass, so our term membership fee will continue to stay at \$14.25. Last (but not least) a new set of executive were elected on A-Soc: Sarah Scharf (President), David Liu (VP-Ed), Mike McCauley (VP-Ex), Tim Bandura (VP-I), Eric Cousineau (VP-F), and Jay Shaw (WEEF).

We also made a significant investment for redesigning our society website. We hired two contractors to redesign the site layout, navigation, as well as adding a content management system and a much-awaited online version of our Novelties store. The final cost of this project will be \$10-11,000 (split evenly between A-Soc and B-Soc), with an estimated completion date of May 2009.

You probably also noticed some big changes to POETS - we recently completed renovations which moved the bar to the back of the room along with a sliding-window for patio service in the summer, and a re-organized seating area at the front of the room. Over the next few months we will be

purchasing a new AV system, complete with mixing board, speakers, and a new amplifier.

Also coming up is the review of our new policy manual, which summarizes our finances (budget, donations, payment, and capital expenditures), communications (mailing list and posters), services/facilities/internal affairs (academics, POETS, Orifice, C&D, Novelties, Tool, Iron Warrior), external relationships (EWB, WEEF, WASA, FEDS, external engineering organizations, student teams), and operations (elections, referendums, conferences, directorships). A copy of the policy manual as passed by A-Soc is posted on our website and will be reviewed in council meetings 2, 3, and 4 this term.

At our first council meeting this term, we approved the renewal of a \$6 term donation to the Sandford Flemming Foundation, which aims to create an enriched academic environment for co-op engineering students. Some of their programs include: work report and coop proficiency awards, scholarships and academic excellence awards, exchange

fellowships and travel grants, sponsoring debates, technical speaking, and design team competitions, as well as faculty and TA awards. This fee was already passed on A-Soc last term and is renewed every five years on both societies.

Finally, we are looking for an Engineering representative for the Student Life Endowment Fund (SLEF). The fund takes applications from all over campus to improve student life and the SLEF committee decides who gets the money! This is a volunteer position that will require ~10 hours of meetings this term spread over about 3 days. There will also be some additional reading required (the application forms before meetings). For more information about the fund and it's purpose, visit: http://funding.feds.ca/sle_fund. If you're interested in this position, please contact me as soon as possible (bsoc_prez@engmail).

And in the words of Porky the Pig - Th-th-th-that's all folks!

VPED Report



SASHA AVRELINE
VP EDUCATION

Hello fellow engineers! I hope that all of you had a good work term and are having a great start to this new term. I would like to also welcome all the fourth and first years that have just switched into Society B!

First of all I would like to apologize to all the students that came out to resume critiques last week for the long line ups and wait times. To be quite honest, my resume critique directors and I were not expecting such volumes of students, hence we were a little bit unprepared. On that note I would like to congratulate everyone that came out for taking the initiative in getting their resume critiqued! I would also like to thank everyone for your patience. I will promise you that there will be appropriate changes made to resume critique sessions in the future. Finally, big thanks to the directors and volunteers who put in the countless hours critiquing resumes!

At this point I would just like to throw in a couple of updates from the last term. There has been some progress made in the PDENG Independent Review: the

self-study was completed in the beginning of the fall term and sent off for Deans' review. At the current moment the self-study has been reviewed by the Deans and after minor corrections and additions is being prepared to be sent off to the independent review committee for their review. I will be closely watching the progress of the review and will let you know of any updates right away.

Also during the fall term CECS has approved the idea of a complementary work term. Pretty much what a complementary work term is a work term during which a student can work for a humanitarian organization, such as Engineers Without Borders.

Throughout this term my top three goals include: working closely with the PDENG staff and the PDENG steering committee in order to improve the program and ensure completion of the independent review, to significantly better the academic services offered by engineering society and finally to maintain close contact with academic reps and the engineering student body. If you have any questions or concerns, please e-mail me at bsoc_vpedu@engmail.uwaterloo.ca or feel free to stop by CPH1327 (the Orifice) during my office hours of: Monday and Friday 11:30-12:30, Thursday 10:30-11:30.

VPF Report



SCOTT RANKIN
VP FINANCE

EMERGENCY! EMERGENCY!
ALL FUNDS DEPLETED.

No not really, we're doing just fine.

I'd like to say thank you to all Engsoc directors who submitted their budgets on time, we are currently looking into finalizing the budget, and are trying to give as much as we can to all, but since most of the directors have so many amazing things planned, it is going to be quite difficult. The budget will be completed and finalized a week from now (Wednesday January 28th) and I look forward to hearing your opinion on what we have decided.

Novelties sales have been going quite well, we have two brand new items, UW Engineering lanyards with and without USB sticks (1GB each), as well as the first winning shirt of the T-Shirt design contest, Sean Holt's ERTW shirt. Last Monday (January 19th) the newest T-Shirt design contest started, you can submit or vote on the Facebook group, to find it just search Novelties T-Shirt Design Contest. I apologise if you don't have Facebook, but if you don't, you can email me your submission at bsoc.vpfin@gmail.com, and I will submit it for you. Remember the winner of the contest gets their own shirt for free!

A vote was held at the last Engsoc meeting to purchase a new camera for the TSN video. The vote passed unanimously and a new video camera will be purchased for Engsoc at a cost of about \$650.

Thanks everyone.



LAURA SISSON
VP INTERNAL

Welcome back to campus everyone! It's hard to believe that we're already two weeks into the term! I was just looking over my calendar and midterms are only 3 weeks away for me. I should probably start doing some work!

However, it's no wonder that time has been going fast with all the events that have been going on. This past week, EngSoc hosted Frost Week as a chance for everyone to reunite after work term and also for those 1B Students that joined B-soc to get a chance to get to know some of the upper-years. We went on a couple outings such as tubing and laserquest and everyone who attended had a great time! We were also purpling people on Tuesday which had a great turnout (we ran out of dye). We even got Dean Rothenburg to join in and dye his hand with purple kool-aid. Although the purple is just about worn off everyone by now, I'm still finding stains on bathroom doors, computer lab mouses etc.

For those of you that missed the Frost week festivities never fear! There are plenty of events to come! Coming up this week, we're looking forward to a rocking semi-formal on Thursday at South Campus Hall. Dance tickets can be purchased at the Engineering Society Office (the Orifice) or at the door for 15\$ and the event starts at 8pm. There will also be a game of snow football happening on Thursday from 12-1 on the Gradhouse Green as well as an epic 4-team capture the

VPI Report

flag game on Friday the 23rd at 7pm.

For next week, some of the events we've got lined up are D.U.S.T.E.D. on Thursday Jan 29th, the legendary 24-hr Engineering Scavenger Hunt on the 30/31st and the Curling Bonspiel on Saturday the 31st. Tickets for all of these events are onsale NOW in the Orifice.

For those of you interested in learning more about some of the events that are going on, there are three ways you can get plugged in.

1. Join the EngSoc mailing list by following this link: (http://groups.google.com/group/engsoc_b_general/subscribe?hl=en)

2. Check the event calendar on the EngSoc website http://engsoc.uwaterloo.ca/www/evn_calendar.php

3. Subscribe to the google calendar of events (if you'd like to do this just email me at bsoc_vpint@engmail.uwaterloo.ca and I'll hook you up)

Until my next exec report, I hope everyone's terms started with a bang and I'll hopefully run into you all at some of these events!



TIME WARP
Let's do it again...

... at this term's **SCUNT**

The Engineering Scavenger Hunt

January 30 - 31, noon to noon

Register in the Orifice NOW!

Individual:	\$5
Eng Team:	\$30
Non-Eng Team:	\$50

Questions/Comments/Concerns?
Email eng.scavengerhunt@gmail.com

VPX Report



CARA KENNEDY
VP EXTERNAL

Welcome back (and welcome 1B/4Bs) to the winter term with BSoc! I hope everyone had a great work term and is enjoying the cold as much as I am.

First of all, here are some updates on what is happening with external relations in the next two weeks. First years should check their EngSoc e-mail addresses for the application form for the First-Year Integration Conference (FYIC), which is a free conference they can apply to attend. It takes place from January 29th to February 1st and is being hosted by University of Ottawa in Ottawa, Ontario. This conference is a great way to learn about ESSCO (Engineering Student Societies Council of Ontario) and meet other first-years from across Ontario.

I would love it if some upper-year students gave me some feedback on getting a shuttle to Guelph on the weekend of February 6th to the career and grad studies fair. Please check your EngSoc e-mail address.

For those of you who don't know, I represent our faculty outside of the school and across campus. Over the fall term I attended a few conferences with various organizations.

In September I went to ESSCO PM (Engineering Student Societies Council of Ontario President's Meeting) hosted by UOIT in Oshtawa and discussed the need for an Ontario Ambassador for CFES (Canadian Federation of Engineering Students). A few weeks later Adam Schubert (Electrical '09) was appointed as the Ontario Ambassador and fulfilled his

position until January 9th, 2009 when Sarah Patterson from the University of Western Ontario took over.

In October I attended CFES PM (Canadian Federation of Engineering Students President's Meeting) hosted by Universite de Sherbrooke in Quebec where we discussed our international relations with student engineering organizations in Europe, Germany, New Zealand and the United States. Also discussed were charity fundraisers and complementary education courses.

In November I went to the University of Windsor for PEO SC (Professional Engineers Ontario Student Conference) and we spent a large portion of our time discussing the political involvement of engineers. It was evident that engineers are not commonly involved in public policies and if we want to have an impact we should get more involved. We also discussed volunteerism and the benefits to getting involved (people/communication skills, gain confidence, network, etc.).

December was full of preparations for CFES Congress, which was from January 4-9, 2009, hosted by the Carleton University, in Ottawa. This conference was on the 'Lifestyles of Engineers' and showcased career options for engineers while including discussion about our international involvement at the student level. NCWIE (National Conference for Women in Engineering) was also a hot topic at this conference and during plenary CFES motioned and passed that NCWIE be associated with CFES.

I hope you found this update beneficial and if you want more information or have any questions please feel free to e-mail me at bsoc.vpext@gmail.com and I will get back to you at my earliest convenience. Stay classy, Cara.

WEEF Director Report



MATTHEW BESTER
WEEF DIRECTOR

Hello all and welcome back to campus. I have a fair amount of info to share with everyone, so lets get started.

It has been a busy week at the WEEF office with WEEF returns. As always WEEF Returns are available during the first three weeks of the term. Every engineering undergraduate student donates \$75 at the start of term. Each person has the option to have this donation returned to them. To do this all you have to do is stop by the WEEF office, Room 1323B in Carl Pollock Hall, between the times of 11:45 to 1:15. Remember to bring your WATCard or proof that you're in engineering.

To help with the returns and running WEEF I have an excellent team of Assistant WEEF Directors. The team members are Natalia Skomorowski, Michael Yip, Peter

Kelly, Cailin Hillier, Alex James, Tyler Szabo, Minoli Pathirane, and Sylvia Wu.

Submission of WEEF Proposals is just around the corner. If you are thinking of submitting a proposal this term, email me at weef@engmail.uwaterloo.ca and I will add you to the mailing list. If you have never made a proposal before, keep an eye out for an article in a future issue of the IW. It will be a guide on how easy it is to make a proposal.

Another thing that we have been working on is visiting the first year classes. Many of them now have WEEF Reps but many upper years are still missing some. If your class is missing one sign up! The list of class reps can be found online at weef.uwaterloo.ca/council.html.

If you have any questions, comments or suggestions you can email me at weef@engmail.uwaterloo.ca, get in touch with one of my assistants, or check out the website: weef.uwaterloo.ca.

That's all for now, you stay classy, San Diego.

EngPlay Wants You!

ARTHIKA KALATHOR
ENGLAY PRODUCER

Attention to all engineering students who know and also those who don't happen to know about EngPlay. We are inviting everyone to this term's spectacular EngPlay auditions.

Every term Engplay is rehearsed and performed by a group of amazing Waterloo Students. It is an excellent opportunity to meet new people with similar interests and to add that extra-curricular that you always wanted on your resume. It is also a great way to relax and have fun between hectic schedule of lectures, tutorials and labs.

The play for this term will be "And The Winner Is" by Mitch Albom, a comedy about a self-obsessed movie star. Anyone interested in auditioning for Engplay can sign up on Orifice door or Walk in for audition. The auditions will be held on January 20nd (11:30 - 12:30 pm), January 22th (5 - 7 pm), and January 25st (5 - 7 pm) at CPH 3607 No previous acting experience required. We have both small and large parts available.

This opportunity is open to Waterloo students from all faculties. If you have friends who would be interested give them a shout.

See you at the auditions!

Expose Yourself To Art



SEAN O'NEIL
ARTS DIRECTOR

Engineers love art. There, I said it.

There is a common misconception among non-engineers that all we folk like to do is read textbooks, do problem sets, and spurn the arts at every turn. Not SO! Although a beautiful and simple formula, freehand drawing, or micrograph is art in itself, we also love art of all other kinds. The visual, the auditory, and the performing arts. So this term why not show how much you love the arts by coming out to one of our fantastic art-like events? Like to draw, paint, build, write or take pictures? Just check out all of the sweet things we have on offer this term:

Art Central: Check the Arts Board across the Multimedia Lab for the newest drawings, pictures, and stories created by our very own Arts-Loving Engineers. Contests and events will also be advertised here. You can submit anything you want at any time, as long as it will get by admin. Your class will get P**5 Points for submissions that make the board.

Photo Contest: Every week, we'll be having a photo contest which closes at 5:00 pm on Friday. Check the Arts Board across the Multimedia Lab in CPH for the theme/subject and instructions/rules. The winners will be published in the Iron Warrior and each weekly winner will receive a prize!

Art Attack: Come to the CPH foyer on Wednesday at lunch between 12:30 and 1:30 on January 28th, February 25th, March 11th or March 25th to do finger painting, macaroni art, popsicle

stick construction, and colouring book mayhem for P**5 points. The most outrageous will go up on the Arts Board.

Mural Contest: It's about time these halls got another sweet mural painted on them, and we've got space for one large mural allotted this term. If you are interested in creating a lasting piece of artwork that will be around for generations to come, this is for you. Submit your design along with a short description of why you want to paint this mural, how it relates to UW Engineering, and the supplies required, to the arts mailbox or email account no later than January 29th, 2009. The mural should express some aspect of engineering life at UW, and the winner(s) will get a prize, along with a chance to paint the mural themselves (we'll cover the paint).

POETS POETRY SLAM: Haiku Master? Sonnet Sensation? Limerick Legend? Friday February 6th come to POETS between 12 and 4 to read poetry of your own writing. The best entry gets a sweet victory prize! To sign up, send an email to the address below.

Short Story Contest: Got a flair for fiction? Do you like to write short stories? Submit one of your best to the arts director and if you win, you'll get, surprise-surprise, a fabulous prize! The submission deadline is Friday, February 27th (MOT). If it's short enough, we'll try to run it in the Iron Warrior as well.

Any submission (whether random or for a contest, art event, or drawing competition), question, or sign-up can be submitted to Artsineer@gmail.com, or dropped into the Arts mailbox in the EngSoc Office.

Get ready to put some heart into your art because it's back with a vengeance.



ONTARIO CENTRE FOR ENGINEERING AND PUBLIC POLICY

Student Essay Competition

Undergraduate and graduate students in any engineering discipline at any Ontario university who are enrolled in Professional Engineers Ontario's Student Membership or Engineering Intern programs are invited to participate in the 2009 Essay Competition sponsored by the Ontario Centre for Engineering and Public Policy (OCEPP). Essays may deal with any subject matter broadly related to engineering and public policy, including but not limited to discussions of technologically-intensive policy areas such as energy, the environment or infrastructure, engineering impacts on particular policy issues, or the interaction of technology and policy. Papers need not be limited to Ontario policy issues, may not be longer than 5000 words, and must be received by the OCEPP by March 31, 2009. The author of the best essay will receive a \$1,000 prize and will be invited to present their paper at the 2009 OCEPP conference.

For further information, visit www.peo.on.ca.

HUMOUR AND SATIRE

The Adventures of Dangerman

The Pirate King and other New Year's Resolutions



Dearest Reader,

It is nearly time to say sayanara. By the time you read this, I will only have 65 days or less till IRS, after which I will effectively cease to be the dangerous man you know and love. Needless to say, I have to make these next few months count!

So cry out belligerence and let loose the brave reckless gods within!¹ The New Year is upon us; the winter of our discontent is over² and this dangerous son of Waterloo fully plans to rear back his head and proclaim his bridges burned, his sensibilities forgotten, and whatever nobilities or endearments he

once possessed cast aside. Beware, for this is the term of iron rings, of full-time jobs, of no good intentions, and fitness plans forgotten. This term, THIS YEAR, will be dangerous.

Dangerman's New Year's Resolutions:

1. Find more daily occasions to wear war-paint, and generally make mischief.

2. Resolve more and more of my daily problems with vandalism and/or outright violence.

3. Rather than getting a 'real job', come graduation I will instead choose to immigrate to Somalia to take up a career as a pirate. Career goal: become crowned the pirate king and scourge of the Arabian Sea.

4. Throw out the name Dangerman and start writing the Adventures of Scrapper,

but only phonetically in an Irish accent.

5. Begin collecting yachts and schooners, but only because I like saying 'yachts and 'schooners'.

6. Get uncircumcised, but only for the aesthetic appeal.

7. Begin 'practicing' abstinence, because so far I'm really not very good at it.

8. Become the subject of one of Ryan North's Dinocomics; preferably have T-rex write a screenplay about me.

9. Shoot the sheriff, the deputy, and at least 30 people on the way out of town.

10. Devote at least part of each day in some way to booby traps, explosions, small-time heists, kung-fu fighting, battles of wits with poisoned goblets, and homemade rootbeer.

Don't panic! I most certainly won't go quietly into that cold dark night. If you can make it through the next 65 days

without getting I 'heart' Dangerman tattooed somewhere on your body, I will be very surprised. I'm not talking about making a dent, I'm talking about making a crater. I'm talking about crashing through the wall and into the street, kickin' and gougin' in the mud and the blood and the beer³. The time has come to seize several days at once and hold on to them like a crocodile.

Get ready to have some fun this term. Sincerely,

Dangerman
4B Chemical

eric.dangerman@gmail.com

¹ "Studies in Classic American Literature", DH Lawrence

² "Richard III", Shakespeare

³ "Boy Named Sue", Johnny Cash

Good Old-Fashioned Fun

This Country Was Founded on Beards and Snow



Welcome back my fine-lookin' readership, I hope you're ready for a sexy new term! I trust that you all had a safe and jolly break before starting the long haul towards summer and all it's excitement.

The holidays can be quite stressful for some people, what with picking out the perfect sexy gifts, visiting the loved ones who share your good looks (or don't), and travelling to exotic (or boring) locales to get your party on with your hardy on while you've got the time.

For many people, the long break of two whole weeks is a chance to take a trip to a warmer-than-Canada country and wear your sexy summer outfits while you party it up out on the town. For others, it's a return to the cold extremes of the north where you spend your nights in a dingy low-ceilinged pub

pounding back tankards like the redneck you are. But amidst all this Christmas and new years revelry, you might have found yourself, like me, stuck in for a day with nothing to do.

So what is there to do on a day or night when you're broke or nobody is out, not just during the holidays but during crunch time, exams, or a snowstorm? You find yourself feeling at a loss when no adventures present themselves. It seems that many of us have lost touch with how to have good old fashioned home-brewed fun times.

Perhaps it's the transition to adulthood and the sudden freedoms attached, or the proximity to so many others our own age, or that there is almost always something going on around these parts, but wholesome activities seem fewer and farther between nowadays. And while the adult lifestyle is great, what happens when we get back into the mix? Why have we stopped doing so many of the things we used to love so much as kids? Are these activities really no fun anymore, or do we just ignore them to

do more grown-up things because we're afraid of seeming childish? At any rate, there is no better time than now to reconnect with these awesome activities. Here are a few that you can do in your very own home:

Blanket Forts. A blanket fort constructed using your engineering know-how and greater range of supplies in your own house can be the ultimate hideaway. As an added bonus, you can throw a sexy party for everyone to come and see your new lair.

Puzzles or Crafts. Drawing a picture for your wall, putting together an especially hard puzzle with more than 10 pieces, or building a popsicle stick rocking chair can add a bit of creativity to your bare walls at home. This one is great to do if you don't like the outdoors much, and nobody says you have to make it G-rated.

Snow Forts. The epitome of sexiness. What better way to show off your sexy snow skills and brilliant fort-building mind than constructing the most legendary snow castle/cave (for two) ever

conceived? It's a great workout and you can hang out inside it when you get sick of your roomies! Build more for a snowball fight and make a few snow angels while you're at it. If you're in a hot climate, try a sand-fort instead.

Cook/Bake. Nothing says lovin' like a pie in the oven, or some homemade manliness sauce. Try out a new recipe so that next time you can invite him or her over for a sexy dinner party. Why not let yourself know how much you care and make yourself something nice while you're at it. No adult supervision or even pants required!

Watch Some Classics. Crack open the oldies and dust off your VHS player to watch some of your all-time favourites. Invite your favourite lady-friend or man-hunk over for a little quality time and finally understand why your parents laughed along with you at the movies.

There you have it lovely readers, enough 'wholesome' activities to keep yourself in or out of trouble for at least a few hours. Until next time,
Stay Sexy.

Waterloo Cases in Design Engineering (WCDE)

WCDE is a group in the Faculty of Engineering that converts **work reports** into

Engineering Case Studies

for use in Engineering courses.

Work reports submitted electronically are worth **seventy-five P**5 points!**

cases.uwaterloo.ca

Sample Case Studies

All first-year concept courses are using these cases:

Hydro Quebec

- Alternative Energy Sources

Engineers Without Borders

- Alternative Drinking Water

Other cases currently in use include:

- Foot Brace Design

POINT VS. COUNTERPOINT

POINT

MARC DOAN
2A MECHATRONICS

After years of discussion and debate, the University of Waterloo is finally ready to open a campus in the United Arab Emirates this fall. David Johnston, the university's president, signed the agreement at a ceremony last Thursday. The UW-UAE campus, located in Dubai, will serve 100 to 150 students in civil and chemical engineering. Programs for mathematics, information technology, and financial management will be added to the mix in 2010. The international outreach is part of a strategic plan to make the university widely recognized as Canada's premier engineering school and counted among leading engineering schools in North America.

The idea of going global comes with inevitable political, financial, and ethical concerns, but there's a reason why approximately 75% of the university senate voted in favour of this movement. The net effects of establishing a Waterloo presence overseas are beneficial to both international and domestic students.

While culturally enriching, international education is expensive. There are more than 2 000 foreign students studying at the university, and they pay on average 79% more than domestic students do—excluding travel fare, visas, permits, insurance, and other costs involved in foreign study. Opening campuses in other parts of the globe reduces these costs, allowing UW to target and market to a completely new student demographic.

Cost, however, is only half the story. The failure rate for international students is much higher than domestic students. Independence, culture shocks, and absence of family are factors that often have devastating impacts on a foreign student's education.

Opening an international campus in Dubai will evidently benefit international students, but this by no means implies that domestic students get nothing out of this. The UW-UAE campus offers at least three advantages to domestic students.

1. *Increasing revenue increases the quality in education at the home front.* Let's be honest here. Life at Waterloo is relatively decent. Sure there are things that need fixing, but nothing in life is perfect and the little problems that do need attention aren't necessarily fix-or-we'll-die issues.

First rule of economics: you need to spend money to make money. In this case, the university needs to be adaptable to a changing economy, and the next step is to give ourselves an international identity by establishing a physical presence in influential communities such as the UAE.

The fact of the matter is that opening a new campus in Dubai will generate more cash. Not might—will. In a letter to the university president, the Senate wrote, "Our financial plan is sound, brings important revenue to the university, and mitigates financial risk by avoiding capital construction."

The success of the campus is inevitable. Statistics Canada reports a positive relationship between university participation and distance. Amit Chakra, vice-president academic and provost, adds that the campus will be in high demand as local UAE universities are exclusively for citizens and reject attendances from the country's many foreign residents.

The additional revenue brought in by the new campus is significant to the quality of our education here, especially during a time when the global economy is faltering and education budgets are under severe pressure. June Lowe, a WEEF instructor, says that budget cuts are expected to be as high as 5% this year. The extra cash will mean more resources, updated equipment, newer facilities, and an overall improved education.

2. *New opportunities for co-op will become*

Should UW Keep Expanding?

available as the university's relationship with eastern firms improve. Improved relationships with European corporations widen breadth of knowledge and resources. As an example, the University of Waterloo is currently the only Canadian partner in the international research network for developing alternative technology for advanced energy and environmental solutions in the UAE.

Johnston commented, "While some major American universities such as Cornell and Carnegie-Mellon are already operating in the Middle East, the University of Waterloo brings the unique opportunity of co-op."

Waterloo's presence in the UAE opens doors to international experience for domestic students. Currently, there are only a few jobs in the east on JobMine. With the UAE-Campus up and running, however, the Cooperative Education and Career Services (CECS) Centre won't be the only one recruiting potential employers anymore.

3. *The value and recognition of a Waterloo degree rises.* Twenty years ago, if you attended university, you had a job. Nowadays, the statement is not so true anymore. The last five years alone saw an 18% increase in the number of university enrolments in Canada. In today's highly competitive society, the value of a university undergraduate degree has decreased substantially. It's academic inflation in its purest form.

On top of that, the current global economic crisis will have future graduates scrambling to become the distinct few that will make it in a world of educated clones.

Expanding internationally is the first step in upping the value of a Waterloo degree. As an internationally recognized university, job prospects will improve and future Waterloo graduates won't be as confined to the country as they might have been in the past.

Ok, so is this project all fun and candy? Of course not. An endeavour this big has its share of challenges, and these issues have been hammered numerously before the project got green lights.

One outstanding issue that gained a lot of attention were human rights in the UAE. The university will, by no means, abandon its ethical beliefs and policies on human rights, but a strategic economic movement as significant as this requires respect and understanding for the laws, values, and culture of the school's international partners. In response to the Senate's concerns on human rights and labour laws, the university wrote, "UW will inevitably encounter cultural and legal differences. Such differences pose new challenges, but they also create opportunities for mutual learning and respectful cross-cultural dialogue."

The university also wrote, "As in any foreign country, the laws of the land prevail and the environment in which UW operates in Canada cannot be replicated...With respect to UW policies, it is important to distinguish between internal policy over which UW has

CHERRY HO
1T ELECTRICAL

Next fall, the University of Waterloo will open its first international campus in Dubai, United Arab Emirates. The University has taken a very brave move and decided to expand globally and build a new campus outside the country. This unique concept has brought a lot of discussion in the recent months. However, the question is, should UW keep expanding? Many people may suggest that it is a clever idea to create more campuses in other countries or continents. However, it can clearly be seen that it may not be such a good idea. Our current campus is relatively young, compared to the many other universities in the world. It can be considered not fully developed and it still requires many improvements.

There are many new buildings still being built around campus, such as the Quantum Nano Centre, and Engineering 5. Those both are costly projects and can use more funding and support. If you look around at the existing buildings, such as Village 1, DWE, RCH, or E2, you will see that things are not in the best shape. There are asbestos filled walls and ceilings that need fixing, defective chairs and desks, stained and damaged ceiling panels, or the many computers around campus that could use some upgrading. All these fundamental items around the campus could definitely use more funding to be improved. Serious consequences can come from leaving the items unfixed, and can possibly threaten the safety of the people in and around campus, as well as the reputation. Even if there are multiple UW campuses in various places, a ruined reputation would definitely deter prospective students from considering the university.

The university may gain more income from the added tuition earned from multiple cam-

pus. However, having multiple campuses offering the same programs, such as the new campus in Dubai offering certain Engineering programs would mean that more spending is required. The reason for this is that more staff members would be needed and more funding will be required to coordinate the programs between campuses. Another key point to note is that it may be difficult to coordinate multiple programs between campuses, and it may result in lower standards and thus lower credibility of the program.

More campuses on the international scale may provide more opportunities for exchange programs, but it may hinder the progress of the improvement and development of the University as a whole. It may be a great experience to go on an exchange program and a good opportunity to interact with other students in the same institution, but having international campuses may mean that international tuition fees would need to be paid, and as most of us know, international tuition rates are much more expensive. This may discourage students from participating in the exchange programs, and students may choose to go to closer destinations. Also, the set up and implementation of new programs, such as this exchange opportunity requires lots of time and effort, and if few students decide to participate, it would be a waste of effort and resources to create.

More campuses in other cities, countries or continents can make the university more recognized, however this may lower the value or interest that potential employers have for the students. Having more campuses would mean that the university is accepting more students, and thus more graduates, however, this may also mean that the quality of students being accepted is lower. Thus the quality of graduates would be lower and may ruin the reputation of the university. Also, the more graduates coming from the university, would mean that there is a higher supply of potential employees to the employers out in the workforce, and comparison, a lower demand for the graduates, making them seem less valuable.

It could also possibly be a good idea to make use of more campuses to bring more students in to raise the competition to improve student performance. More students can also be used to replace those who are dropping out. However, it may not be such a clever idea after all. More pressure usually leads to more stress, and thus worse performance. Also, using other people to fill in the spots of those who drop out would make the university seem like a bad place to be, as it creates an image to the general public that the university does not care about its students and only wants more money. A higher dropout rate or lower quality of work would also damage the university's reputation in the long run.

In conclusion, although many may think that having multiple campuses would help to increase reputation and income, along with adding many other perks and benefits. However, if one thinks carefully, it may actually permanently damage the good reputation and quality of our university.



Angelo Alaimo
Parts of the Waterloo UW campus are in desperate need of repairs.

COUNTERPOINT

Editor's Note:
Point Vs. Counterpoint is a feature meant to stimulate discussion on thought-provoking topics. The views and opinions expressed here do not necessarily reflect those of the authors, *The Iron Warrior*, or the Engineering Society.

Better Know a Beer: 60 Minute India Pale Ale



RORY ARNOLD
4B MECHANICAL

I hear a lot of bashing on American beers and the dirty stereotypes that surround them, and while yes they have produced some pretty dreadful brews, there a number of popular breweries who produce some of the best beers in the world. Two of these are Dogfish Head Craft Brewed Ales and Rogue. I always jump at the chance to buy one of their fine selections while in the LCBO. Sometimes however, life isn't always that easy.

Upon walking into the local liquor distributor to purchase a product for this article I was faced with a pretty tough decision, Rogue Dead Guy Ale or Dogfish Head 60 Minute India Pale Ale (IPA). From reading the title you know what my selection was. Although it was hard to turn the Rogue brew down I knew it would be easy to obtain at a later date.

This wasn't my first experience with the 60 Minute IPA. It was the (almost) unanimous decision at my last beer tasting as everyone's favourite. And you know the people I drink with must know a thing or two about great brews. It had been one of my happiest days finding that last six-pack on the bottom shelf at the LCBO of a beer I had read so much about but had yet to experience its hoppy goodness. I unveiled it at my beer tasting like it was a present descended straight to us from heaven and hoped to

God it wouldn't disappoint.

Returning to the LCBO this term I noticed they were fully stocked with this delicious brew (I have somewhat of an influence) and this is one beer that I found was definitely worth a repeat buy.

From the mysterious state of Delaware, Dogfish Head Craft Brewed Ales was started by Sam Calagione, an amateur brewer who used a loan to fund the business endeavor in 1995. Calagione is also the author of *Extreme Brewing*, a popular book on homebrewing extreme beers, such as the one currently brewed by his brewery. It was started as a brewpub and named after Dogfish Head in Maine where lobster fishermen often reported large numbers of dogfish shark in their traps. It was the first brewpub in Delaware and in tiny 12 gallon batches. The brewery was eventually moved and replaced by a distillery to occupy the room above the brewpub. They now produce 51,000 barrels a year of their wide selection of 'off-centered' brews. They produce eight beers year round with the 60 Minute IPA being the most common. They also brew Lawn Mower, which is slightly lighter in taste, Indian Brown Ale, Raison D'etre brewed with raisins, Palo Santo Marron, a malt liquor, Shelter Pale Ale, Midas Touch Golden Elixer, which is a cross between an ale, wine and mead, and finally their 90 Minute IPA. They also brew a large number of seasonal and monthly beers including a 120 Minute IPA.

The India Pale Ale or IPA was created while the English still had military presence in India. They need a beer that

would survive the long sea journey to India to satisfy the thirsty British soldiers. (As someone who has actually been to India, I can attest to why they did not drink the local stuff). Hops, a natural preservative, was radically added which drastically increased the bitterness and the alcohol percentage, but also increased the shelf life. In recent years, American craft brewers have taken this style and tried to make it even more bitter.

The 60, 90, and 120 Minute designations refers to the ingenious invention of the brewery with a machine that continuously adds hops to the brew. Normally the hops are added at two or three intervals during the wort's boil. For their IPAs however Dogfish Head's machine continuously adds hops making for some of the most extremely hopped beers in the world. The hops are added and boiled for 60 minutes for the 60 Minute IPA, 90 minutes for the 90 IPA and as you can imagine 120 Minutes for the 120 Minute IPA. 60 Minute IPA comes in at 60 IBUs (International Bitterness Units) and 6.0% ABV while the 90 Minute IPA is 90 IBUs and 9.0% ABV, while the 120 Minute IPA comes in at an astounding 120 IBUs and 20% ABV. For reference most macro brews are in the 10-20 IBU range. Most beer connoisseurs, myself included, will list the IPA as their favourite as it is one of the hardest styles to get correct. When done properly however it can be one of the most rewarding drinking experiences you will have.

Before you even drink the 60 Minute



IPA admire its thick, gritty label. Pour it robustly, tipping your imperial pint glass at 45° to produce a nice one inch thick head to seal in all the delicious flavours. A nice deep golden amber colour this beer can truly be admired in your glass. The head will quickly dissipate and give off a nice aroma of citrus and cedar. The head should stay nice and lacey going to just a thin film as you consume the beverage. Each mouthful will give off an initial bitter earthy taste, which is smooth on the tongue and is perfectly balanced with the malty finish. Even though this beer comes from Delaware it should leave a nice Brussels lattice on the glass telling you it is still fresh. Never drink an IPA that doesn't leave foam around the glass leaving a line where each sip was taken.

I give this beer a near perfect score of 97/100 leaving space only in hopes that I will someday get to try the 90 or 120 Minute versions. I have found this beer in Waterloo twice now which I can only hope means you will be able to find it as well.

Winter Fashion: Staying Stylish and Warm



BRYAN SACHDEVA
4B COMPUTER
ERICA WAUGH
4B CIVIL

Well I can finally say to my mom in Northern Manitoba: "It's cold in Waterloo" and she doesn't laugh, (it's been -20 at home for weeks). I was contemplating this article on my walk to school this morning. What should I write about? What haven't we covered yet? I can't believe it's not butter? As my cozy warm boots crunched over the snow and I turned my hooded head 90 degrees to see the traffic, it came to me. Let's dress people properly for winter. It doesn't have to be a lost hope of warmth over fashion. You can achieve style success even at 20 below. There are entire companies devoted to making you look good and keep warm. Let's have a look,

Ladies:

Starting from the bottom: boots. Boots have experienced quite a boom in the past few years making it easier for us to look good and stay warm. The trouble I have seen is that girls are buying the right boots but just don't look after them. I see salt and dirt stains coming out of the woodwork. Prime example: Ugg Boots. Everyone and their mother has a pair (in my case, my dad also has them.) Personally, I love my Uggs. They are so freakin' cozy and warm and I would wear them to bed if I had the time to wash my sheets everyday. They are, however, very susceptible to salt stains, which can be quite unattractive. I find that wearing your jeans over them reduces the stains (then they are just on your jeans, easily washed out) and their hideousness is minimized. You are still going to have to look after them. Please pur-

chase a good suede all-weather spray AND a salt cleaner. Both of these are available at Shoes 22 on Weber Street for ~\$30 for both. If you choose to sport something else try to keep it simple, you are going to have a lot going on up top (coat, hat, scarf, mitts) so keep your boots simple and clean. Plain, brown, leather boots have been spotted in every shoe store and don't stain as easily as their suede brothers. Try tucking your jeans in and looking for a pair with a flashy buckle.

Moving up! Your coat. The black wool button up coat is always a classic but it may not be warm enough in this 20 below weather. The North Face has put out some very cute and very warm coats. They are mostly neutral shapes but with classic shapes, always remember to choose a coat that fits you closely as this will be the warmest. The fur lined hood has been popular for a few seasons now and is still alright to sport but toques are coming out in droves to replace it. I know, I know, you don't want to wreck your hair. Now I'm not sure what to call them but they are kind of floppy, beret looking toques. They are both warm and won't wreck your hair as much as a regular toque. If a toque isn't your thing, ear-muffs can add a cute, timeless look. For your hands, if it's not freezing out a nice pair of leather gloves can accent your wool coat very nicely. It provides a delicate and feminine accent to an otherwise bundled up, masculine look. Change it up, these accessories are not expensive. Try not to be too sporty, try a new pattern. After all, with a neutral coat it doesn't matter what you're wearing underneath so spice it up.

When putting the entire outfit together, an easy and affordable way to add some pizzaz is with a cute scarf. To purchase a neutral coat, mitts, and hat is pretty reasonable as you will be wearing them frequently. However, if you'd like to change it up try purchasing a

few different scarves. You can pick up many different patterns and colours at a variety of stores, commonly for less than \$20.

Gentlemen:

As Erica points out, with -20 degrees out, there is no competition between fashion and warmth (go for the warmth). But, if you plan it out well, you can make staying warm attractive. Before we begin, let's go over some reasons why winter-wear generally looks un-attractive. The first reason in my mind is probably that guys tend to mismatch their winter wear. It's sheer laziness to believe that warmth is best achieved by thinking about items individually (i.e. buy a jacket, buy gloves, buy a hat), rather than holistically (i.e. buy a warm winter outfit). A little bit of effort goes a long way here. The second is that guys tend to buy clothes that are bulky (I'm not sure why that is, it's definitely not more manly). This second reason hides any human quality or natural form, which generally makes it hard to be attractive. Now that we know the reasons, we can overcome them.

The first thing that guys generally ask about is the jacket, so I'll start there. If you can afford it, I recommend two: a dark one, and a light one. For the dark one, there are a few options here. Yes, there is the typical UW Leather Jacket. I have one, but I also have another. Recently, I spotted Alexandre James sporting a rather flattering full-length wool/tweed trench. Though these are typically not very warm, they are quite appealing. Pick this one up for when it's not very cold out. Avoid the big, black, puffy jackets please. These really bring out the second reason why winter wear is unattractive, as mentioned above. As with the lighter jacket, a simple ski jacket is always attractive. For the lighter jacket, try not to get an in-your-face

colour on it. This is common with ski jackets, where beige is paired with red or neon yellow. We don't want to be able to spot you out of a crowd in CPH, so don't wear them. What is in fashion, and also quite warm, are graphic prints on white jackets. Popularly available in snowboarding jackets, you can find a nice selection at The Bay and other stores in Conestoga.

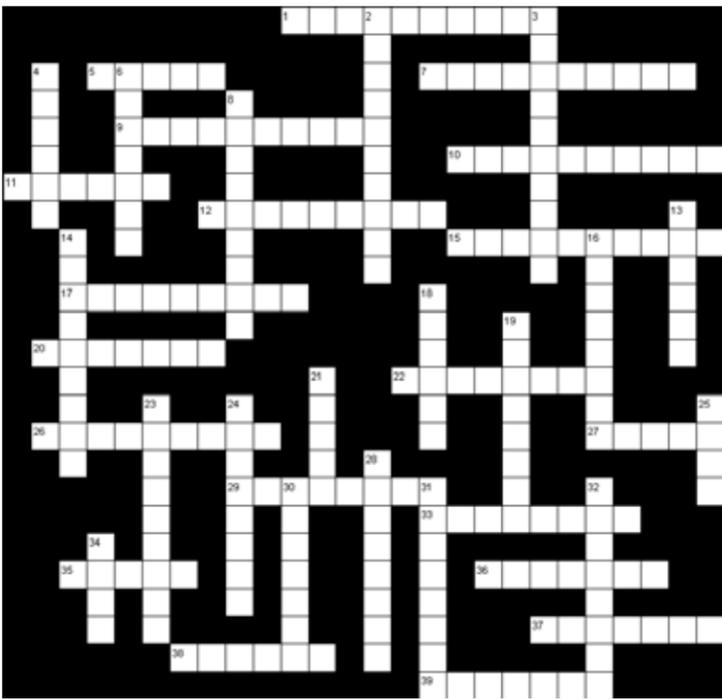
As for boots, try and match these to the jacket. Brown works with almost any color, but unless you have a brown coat, you'll have to get all of your other accessories to be brown too. Grey is also a fashionable choice. Of course, with a white jacket, white boots would really pop. Just be sure to devote plenty of time to keeping them clean (see Erica's tips above). What makes boots extra tricky is that they stay on indoors, after you take your jacket off. That means, that your actual outfit will have to match your boots (rather than the other way around!)

And now we talk about my biggest pet peeve when it comes to winter wear: uncoordinated accessories. Your gloves, scarf, and headgear should all match! Match does not mean being the same color, it means going together with reference to your jacket. So if you are wearing a black jacket, your accessories & boots should be either black (boring), grey (classy), or brown (trendy). You could also opt for a beige coloured earmuff (I'm a HUGE fan of the behind the ear muffs), a beige scarf, and brown gloves (but only if your jacket is between dark brown and beige or dark grey). Surprisingly, you can get a whole matching set (and they are decently warm) from the Dollarama at Albert & Baringer! Don't look down on it, it's the best of all worlds: warm, cheap, and trendy. Though, the dollar-store stuff is far from water-proof.

Good luck boys!

The Iron Crossword

CHERRY HO
1T ELECTRICAL



Crossword Clues

Across

1. Homework _____.
5. _____ optics
7. Contains a lot of metal boxes.
9. To copy.
10. A fancy word for a car.
11. 10^{100}
12. If you got this on PDENG you had a good weekend.
15. $10^{(10^{100})}$
17. Dish that points to the sky.
20. True or false
22. Gets slow when you use up your bandwidth.
26. Micro_____.
27. Television.
29. Abc123 is a bad one.
33. Flying machine.
35. _____ gates
36. .exe
37. 101010
38. Not Flimsy.
39. Tpyrcne

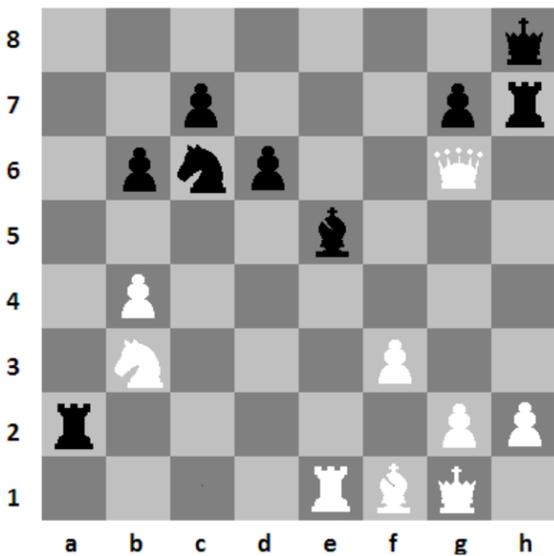
Down

2. Missing parts.
3. The new textbook and _____ grant.
4. Computer that sits on your knees.
6. To be better
8. Very small fried potato slices.
13. This large metal box brings you food.
14. _____ Channel/To find out.
16. "of or relating to logistics."
18. There is none of this in the basement of RCH.
19. "small workplace where hand-crafts or manufacturing are done"
21. Logic _____
23. Chemical symbol Ge.
24. Monitor, keyboard, mouse...
25. Flimsy.
28. _____ assignment.
30. 28% of the earth's crust, or the chemical symbol Si.
31. Spreadsheets and spreadsheets of numbers.
32. Sort of rhymes with internet, but doesn't.
34. Programming _____.

Be the first to complete the Crossword or the Chess Puzzle and win 50 P**5 points for your class! Submit completed puzzles to the P**5 box located inside the Orifice after being time-stamped.

Chess

ROB GRAHAM
4B COMPUTER



Black's move. Black wins big material.

Difficulty: 1.8/5

Photo of the Every-Other-Week Contest



Angelo Alaimo

You can win P**5 points by winning the caption contest!

Submit your caption to iwarrior@engmail.uwaterloo.ca
Be sure to put "Photo Caption Contest" as the subject, and include your name, program and term.

THE IRON INQUISITION

What radical new addition to POETS would you like to see?

Michael Seliske, 2A Computer



Bryan Sachdeva and Liz Muir
4B Computer and 4B Civil
"Disco ball and karaoke machine."



Kim Broton
3N Chemical
"15 foot pole."



Anna Lafoyiannis
3B Environmental
"A small stage for open mics."



Megan Pollock
2A Systems Design
"A salt lick so Mike Seliske will stop licking my face."



Kevin Ling
2A Electrical
"Strippers... Don't quote me on that."



do you like building community?
role modelling? planning events?

DONNING COULD BE THE RIGHT FIT FOR YOU

Applications will be available online Jan 5-30th
www.housing.uwaterloo.ca



Department of
Housing and Residences