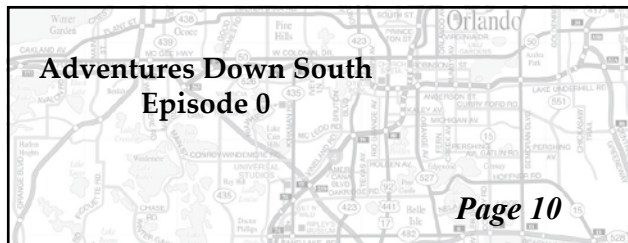


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THE IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

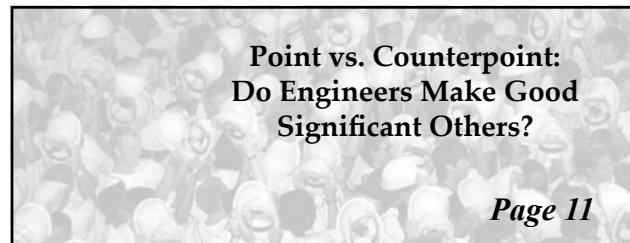
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<http://iwarrior.uwaterloo.ca>

The Race Is On: Feds Election Upcoming



Angelo Alaimo

SUNNY NG
4B COMPUTER

The campaigning for the various positions for the 2009 Federation of Students has started as of last week. Unlike the previous elections where two of the Feds executive positions were acclaimed and the remaining two races having two candidates each, from the election debate from this past Friday, this year's Feds elections proved to be a bit more exciting. Even on the Senate side, there is a 5-way battle for the Engineering Senator

position.

As the election date is quickly approaching (February 10th to 12th), students are encouraged to pay attention to issues that matter to them and decide which candidate they would like to administer the various businesses and services of the Federation of Students and ultimately decides what happens to the \$33-per-term fee paid by each undergraduate student of UW.

Last Friday – January 30th, the Feds Executive forum was held in the Student Life Centre Great Hall. Many of the running candidates were present to explain

and defend their platform as well as question their opponents' abilities. Drama was bound to be present. A fair amount of students attended this forum. Since Chris Neal is acclaiming the Vice-President Administration & Finance position, he did not participate in the forum.

The 4-hour long forum began with the Student Council debates. The Engineering councilor position is being acclaimed by Anthony Iseyemi (2T Computer). After sitting through the Student Council debates for the Arts, Math, Science and St. Jerome's University where zero to 2

candidates for each race bothered to show up, real excitement was about to begin.

In the race for Feds President, the candidates are Sam Andrey (Chemistry), Allan Babor (Independent Studies), Brandon Mulholland (Speech Communication), and Mubarak Sadoon (Economics). Mulholland was unable to attend the forum, and prepared a video to talk about his platform instead. However, due to technical difficulties and time constraints, it was not played.

See **FEDS ELECTION** on Page 4

Fourth-Year Design Symposium Top Five



Angelo Alaimo

MARC DOAN
2A MECHATRONICS

Fourth year engineering students showcased their projects at an on-campus symposium two weeks ago. The main floor of DC was packed with more than 48 booths demonstrating the creativity and ingenuity of their designs. From an optimal parking spot identifier to a cashless bar to an automated foosball machine, the diverse projects covered various industries including gaming, automotive, and robotics. Here's my personal run-down of the top five booths that certainly caught my attention.

#5: Personal Cardiac Monitoring System

If you know any hypochondriacs, then this might just be the perfect present to get them for a future Christmas. The personal cardiac monitoring system utilizes a simple device attached to a comfortable band that you wrap around your chest. It dynamically measures ECG waveforms and analyzes the results to diagnose any abnormalities. In cases of emergency, the device wirelessly connects to your cell phone via Bluetooth. The cell phone is then used to triangulate the location of the patient through GPS, and if necessary, send text mes-

sages to a medical doctor or emergency dispatcher. The cost of the system was an estimated \$120.

Design Team: Alan Wong, Charlton Wong, Calvin Ho, Savio Tsui

#4: Ice Skate Telemetry Device

If you think that some things are just too difficult to learn, imagine what it's like being the person who has to teach the impossible. Take figure skating as an example. There's so much more going on than the typical "just push and glide" routine. How do you effectively communicate complex foot motion to another person? If you're a dance enthusiast with two left feet, you know what I mean.

On the bright side, not all hope is lost! In the future, students may end up turning their heads to an ice skate telemetry device for guidance. This inexpensive device is equipped with pressure sensors, accelerometers, and gyroscopes that relay important information to the computer screen. The companion program can illustrate in detail exactly what the foot is doing when a complicated trick is performed. The applications of this device extend far beyond figure skating. Medical researchers may use the data to explore foot problems while shoe

See **TOP FIVE** on Page 6

Letter from the Editor



KEVIN LING
EDITOR-IN-CHIEF

A belated Chinese New Year to you all! I know, I'm about a week and a half late, but it's the best I can do with a biweekly publication. If you read my first editorial, then you probably know that I don't put much emphasis on new years, and it's true. I don't. I didn't even realize that Chinese New Year was so close until someone told me, probably on the Friday or Saturday before it. There is no way I can keep tabs on something that changes date each year, lunar calendars are just inconvenient. But today was probably the first time that I stopped to wonder what the history behind Chinese New Year actually is (other than the fact that it's when the lunar calendar changes over to a new year).

This yearning for knowledge, of course, led me to the same place I always turn to when I want to know something: Wikipedia. According to wiki, there is an ancient Chinese myth behind their new years. It was believed long ago that a beast called the Nian (which translates into "year") would come on the first day of each New Year to devour livestock, crops, and villagers. To protect themselves from the Nian, the villagers would put offerings of food in front of their doors before the New Year so that the Nian would feast on their offerings and leave them alone. Then one year the villagers witnessed the Nian being scared away from a child wearing red. They then determined that the Nian is afraid of the colour red and that is why each year the Chinese put up traditional red emblems, lanterns, and other decors for Chinese New Year.

(Surprisingly, while researching this article I actually had some restraint and didn't click too many Wikipedia links. Usually it's a trap, and I get stuck there for at least 20 minutes reading about random things that are connected by 6 degrees of difference. It's almost unbelievable how much knowledge has been accumulated by Wikipedia since its launch only 8 years ago. Wikipedia is just another one of those things that is such a great and simple idea that I just stop and wonder why I never thought of something like that. Although many of the articles on the site aren't entirely accurate, it is still the first place I look to for knowledge on any topic. Searching Wikipedia is like talking to a friend who knows exactly what you want to know. They can give you most of the details, but not everything is guaranteed to be 100% spot on.)

For those of you that have seen me before, the question of what ethnicity I am may have crossed your mind. I never realized that my race was so ambiguously defined by my features until I arrived here at university. It was probably since I began meeting so many new people in different settings, but people started asking me more and more often what race I am. I was one of the 5 Asian Americans (or "Asian Canadian", if you prefer) students in my high school so everyone already knew what race I am. However, here it seems that everyone has an idea of what the typical Chinese person should look like and I apparently don't fit that description. And it's not only people at UW. One of my landlords that I lived with for four months said he had no idea until he asked me, and many of my coworkers on my co-op terms were actually surprised to find out that I am fully Chinese. Then again, when I say fully Chinese, all I am confirming is that both my parents look

and are Chinese. It's entirely possible that somewhere along my ancestry other ethnicities entered my family's bloodline, not that it even matters to me.

I'm not sure if it's a good or bad thing, but I have little to no interest in my racial identity or heritage. Hopefully my parents won't disown me if they read this, but I really don't feel that I identify as being Chinese, or care that I'm Chinese. Once in a while I find myself in a conversation with a friend or acquaintance about some kind of Chinese tradition, history, practice, or holiday and when I confess that I know absolutely nothing about it they tell me that I should, you know, since I'm Chinese. Personally, I don't think that my heritage has any role in my life. My sister and my cousins often make fun of me for being so "white-washed", but I'm not sure if that's really the way that I should be described. For me, I just don't feel that I should have to celebrate something that was handed to me when I was born, something that I have absolutely no control over. My ethnicity seems like just another label that was dropped on me as a child and in this and age I feel that it is something that I can live without. I don't mind the label being there, but I'm just absolutely indifferent about it.

Right about now it might seem like I don't really have any values, since so far in my first editorial and up to now in this one I have just been talking about things that I don't care about. There are plenty of things that I care about and deem important, my race just doesn't happen to be one of them. I fully respect people who do care about their own family history, ancestry, race, etc, but being born in Canada and spending my entire life here, I feel more Canadian than anything else. In retrospect, I wholeheartedly agree with Stuart's article, in our previous issue, on his perspective on being Canadian.

Canada fits the melting pot analogy very well, and Canadian culture is a huge blend of all sorts of cultures culminating together to make the one super culture. I realize now that growing up in Kanata, a suburb of Ottawa, I had a very sheltered youth. It especially didn't help that I went to a Catholic high school in an area that is predominantly

Caucasian. I really wasn't exposed to much multiculturalism, but after living here in Waterloo (and in Toronto on work terms) I am really starting to appreciate all the different cultures that contribute to make Canada the country it is and will be.

It's been almost exactly a month since many of us just got back to school from our workterms, but already I'm feeling the fatigue of the academic term set in. I am in dire need of a break. Reading week feels like it's perfectly situated right in the middle of term, an excellent opportunity for me to finally catch up on all those lectures that I've missed from 'accidentally' sleeping in.

In anticipation of the key romantically festive event just prior to reading week, the staff here at *The Iron Warrior* has gathered some nice pseudo-Valentine's content for our readers. Not really, but there are a few things that are relationship-y. Hopefully you'll enjoy our point-counter-point on whether or not engineers make good significant others, the Valentines Iron Chef Recipe, and Bryan and Erica's dating behavior tips. Although this is about a week and half in advance, I know it will get you all excited about the coming overly-commercialized lovebird holiday.

Another thing that I'm really looking forward to that is approaching very quickly is the Ontario Engineering Competition. The event will be hosted next weekend by the University of Guelph. Engineering schools from all over Ontario will be present to represent their school in different fields of competition, including engineering design which yours truly will be participating in. We will be sure to bring you all the details in the next issue of the Iron Warrior. For our next issue we will be straying slightly from our biweekly production schedule since 2 weeks from now will be the middle of reading week. Those of you that are complete addicts and need your dose of the IW every week shouldn't worry though! If you can hold out for just a week longer, there will be a nice issue of *The Iron Warrior* waiting for you when you get back from reading week. Until then, good luck with all of your midterms and enjoy the break!

Letter to the Editor

MARK CREMASCO
ENGFOC 09

In an article featured in the first edition of *The Iron Warrior* this term, comments that I made were used in an article discussing the future of Orientation Week. In the context presented, those comments do not reflect my, or any other EngFOC's, opinion of our faculty, and most notably the professors that take us from childish high school students to knowledgeable and valuable members of society. Waterloo engineers are by far the best in Canada, and some of the best in the world (ERTW!) and thus are truly a reflection of the time and effort that the faculty puts into our programs. It is the hard work and dedication of our faculty that allows us the opportunities and avenues to achieve our goals.

While my comments about professors having taught our courses many times does hold some truth, it does not mean that they do not put time into improving the courses. My comments come from my frustrations related to Frosh Week, and the all-but-certain reduction in length Frosh Week will see starting in 2010. While all

student groups (including Feds) are pushing to keep frosh week a full week, many of the non-student groups are pushing towards (and winning) a shortened and spliced version of Frosh Week. This is something that many engineers, especially us who are FOC feel very strongly about, as it is a core event in our annual calendars (and currently our daily calendars). We feel that a shortened week would deprive new students of some of the opportunities that we have been afforded, and opportunities which have helped many engineers become the leading members of society that they are.

In closing, I would like to stress my apology for the way in which my comments were presented, and note that I have nothing but the utmost respect for the engineering faculty. I accredit them for helping me go from near failure (59.50 right on) to a comfortable position that allows me to be a member of EngFOC, and would not be here had they not provided me immeasurable support and assistance. My frustrations over frosh week skewed my comment, and I in no way meant any insult or disrespect to our staff.

THE IRON WARRIOR

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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.

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Next Submission Deadline

February 13, 6:00pm for publication on February 25, 2009

Send your submissions to iwarrior@engmail.uwaterloo.ca

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

COMMUNITY EDITORIAL

Thumbs Up/Thumbs Down



To GRT for blatantly ignoring their own schedule. Buses always seem to come 5 minutes early or 5 minutes late so either you miss the bus or stand out in the cold waiting.



To the Curling Bonspiel for taking place on production weekend.



To Feds Xpress's waffle maker for making SLC smell so delicious. Mmmm waffles.



To VeloCity's free visitor parking lot. Every residence should have one!



To the Asian convenience store in the UW Plaza for having red bean and green tea ice cream.



To EngSoc not having QOT (quarter-of-term) and 3QOT. Maybe TOT (third of term) and 2TOT too.



To all the doors entering RCH from outside being locked on the morning of February 2nd.



To The City of Waterloo having cheaper gas than the GTA on any day!



To Feds Xpress's waffle maker ...for making my weight approach unacceptable levels.



To ResNet for cutting ethernet cables on the basis of "pirating via torrent".



To the people who keep locking the E2, CPH and DWE doors. Biggest inconvenience ever.



To Williams Coffee & Pub for serving super delicious food super late at night.

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

Engineers Rule The World: Bill Nye



**SPENCER
MCEWAN**
3A ELECTRICAL

In this edition of Engineers Rule the World, we will look at one of the most recognizable nerds in Ontario high schools. This slender individual always wears his blue lab coat and bow tie, and regularly demonstrates crazy contraptions such as the "magnifying glass of science!" or the "paper airplane of science!" Bill Nye, also known as Bill Nye the Science Guy, is a staple in high school science classes throughout

the western hemisphere. He also is a well-established engineer in the aviation world.

Bill Nye was born on November 27th 1955 in Washington DC. Since the beginning of his life, he has been always fascinated by science. One of his earliest memories was throwing around a rubber-band airplane, and figuring out how to make the plane turn left. "It was fascinating" said Nye, "if I altered the wings enough it would fly in a circle and come back to me." This love of flight and airplanes would be a major part of his eventual career.

Bill attended Cornell University and received a degree in Mechanical Engi-

neering in 1977. His degree would be used as a platform for much greater things. Immediately after graduation, Bill was hired at Boeing, where he worked for three years. He worked on flight control systems, and actually designed a hydraulic pressure resonance suppressor that is still used in Boeing 747 aircrafts. He worked at a variety of other companies throughout the next ten years. Notably, he worked as a consulting engineer. One of his clients was actually the United States Department of Justice. He consulted on the configuration of top-secret fighter jets, among other classified projects.

Bill was also very active in the entertainment field. He was a sketch comic on a local television show, and went on to star in "Back to the Future: The Animated Series". His success in this role attracted interested from television executives, and he was asked to host an educational science program that was eventually named "Bill Nye the Science Guy." Each one of the 100 episodes aimed to teach a specific topic in science to a preteen audience, yet it garnered a wide adult audience as well. The show was somewhat popular as a public educational resource and is still used to this day.

After the television series ended, Bill returned to the aviation field. He is still an active consultant for a variety of clients, and has multiple design patents pending. To this day, he is still a licensed mechanical engineer. He also has been a university professor for a number of years, and performs public speaking at universities across Canada and the United States.

Bill still owns over six-dozen bow ties and wears a 38 tall lab coat. His all time favorite experiment on the show was shooting plastic film canisters up off the kitchen counter with baking powder and water. He urges young scientists to try things, but to clean up after yourself. Then try more things, and clean that up too.

His on-air persona captures the essence of his fascination with science. For looking wicked cool in a lab coat, and for showing students all over the world that science rules, Bill Nye deserves the title of an engineer that rules the world.

This author is a member of the Engineering Student Societies' Council of Ontario (ESSCO). More information on the association can be found at <http://www.essco.ca>.

York University Strike



CHERRY HO
1T ELECTRICAL

During the past twelve weeks, the many students from the University of Waterloo wrote many exams, midterm tests, work term reports, lab reports, and attended numerous hours of classes. Though many students may dread these activities, the students from York University weren't so lucky. From November 6th 2008, at least 45000 students were not allowed to attend classes, complete labs or write exams. A strike was started by the CUPE 3903, representing contract professors, and many research, teaching and graduate teaching assistants who were not content with their job security and pay. This Monday, after weeks of having nothing to do (or for Waterloo students, after weeks of hearing their friends from York complain that they have nothing to do while studying for midterms and finals), the York students finally get to return to school. Last Thursday, on January 29th, the Ontario Legislature voted on and

passed a legislation to order the striking workers back to work. The 3800 workers had spent more than 80 days picketing, trying to get an agreement with York University. Of the 69 votes possible, only 8 voted against, all of which were NDP members. After the legislation was passed, the workers must return to work, and anyone preventing them from returning can be fined \$2000 a day.

Many people are angry and are complaining that it took the government way too long to take action and to get something done. The long strike has caused the students to be behind in their studies and affecting the students' plans for the break after the school year, such as summer jobs and vacation plans. Some argued that their tuition should be refunded, while others banded together online, such as starting facebook groups and petitions to team up together to take some action, hoping to stop the strike earlier. Some facebook groups attracted more than 4000 students to join. However, some other students who may have been falling behind in school work, or those who were too stressed out, enjoyed the extra break.

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The Battle for Feds Exec and Senate Have Begun

From FEDS ELECTION on Page 1

The three remaining candidates were faced with hard-hitting questions and current Feds Vice-President Administration & Finance – Del Savio Pereira facilitated the forum to ensure the candidates were actually answering the questions directly and not dodging them, which just like any sort of politics happens more often than voters would like. When candidates were asked to name three day-to-day responsibilities of the president and two councils the president sit on, Sadoon was unable to provide an answer, while Andrey and Babor could name three responsibilities (it was questionable if the three provided by each candidate were really three distinctive responsibilities) but not two councils.

Andrey is running on the Team Green ticket along with Justine Williams for Vice-President Education, Chris Neal for Vice-President Administration & Finance and Sarah Cook for Vice-President Internal. They are running on a campaign to bring relevance of Feds back to the students with their 50 Point Plan. Things were starting to get exciting when Babor questioned the legitimacy of the team platform as he stated, “I’m running alone because I can only speak for myself.” Andrey responded by accusing Babor of hypocrisy as he claimed that Babor was trying to get some of his running-mates on his own ticket before the start of the campaign. Sadoon boldly stated, “Nobody will bother reading [Team Green’s] 50 Point Plan.”

Babor is running on the platform for engaging more students on the Federation of Students level. However, he was accused by Andrey of flip-flopping opinions for being the only student senator that voted in favour of the UAE satellite campus, despite signing the open letter regarding concerns of human rights earlier.

Sadoon’s campaign is on transparency. He pointed out the low voter turnout for Feds elections is an indication that students do not know much about the organization. Though throughout the time he was in attendance of the forum, he was unable to answer questions re-



Angelo Alaimo

Candidates for Feds President present their platforms at the Feds Exec Forum. From left, Mubarak Sadoon, Sam Andrey, and Allan Babor. (Not present, Brandon Mulholland)

garding the specific operations of Feds and he attempted to dodge questions by stating points that were unrelated to each question asked, and was asked by facilitator Pereira to respect the forum. Sadoon left the forum halfway through.

Amongst other topics discussed, Andrey promises to release 50% of society funds at the beginning of term so that student societies would have money earlier, and Babor hopes to implement campus-wide event and exam-bank submission forms. Both Andrey and Babor promised to provide make improvements on the Feds’ website for better communication.

The candidates for the Vice-President Internal race are Kia Buchanan (Sexuality, Marriage and Family Studies), Sarah Cook (Psychology) and Valerie Orr (Biology). Buchanan is hoping to engage students by unifying the three campuses and facilitate clubs to collaborate. Cook seeks to improve how clubs and servic-

es are run to suit the needs for students. Orr hopes to improve Feds’ financial system through her experience working for the Federation of Students.

The race for Vice-President Education consists of Alicia Mah (Liberal Studies) and current Feds President, Justin Williams (Environment and Resource Studies). Mah seeks to make education more affordable with additional government and alumni funding. Williams promises to work with the administration to provide fairness in tuition for international students and those in professional programs.

The candidates for the At-Large senate position are Muhammad Ali Akbar (Biology), Raynold Alorse (Arts & Business / Economic), Brittany Boilard (Political Science), Matthew Caswell (Arts), George Chiran (Biology), Matthew Colphan (Science), Mohamed Farid (Systems Design Engineering), Kevin Knapp (Environment), Sabastian

Kundra (History), and Sylvia Wu (Mechatronics Engineering).

Candidates running for the Engineering senate position are Devin Cass (3A Computer), Abhilash Jayakumar (2B Mechatronics), David Liu (2B Mechatronics), Jay Shah (2B Mechatronics) and Kyla Tan (3A Civil). For more information about each candidate, please read our coverage of the senate elections on **page 8**.

Students are reminded that the Federation of Students and Senate elections will be held online on February 10th to 12th. More information on the election as well as each candidate can be found on the official website at <http://vote.feds.ca>. Students are also encouraged to attend the Campus Media Forum on Friday, February 6th in the Student Life Centre Great Hall at 11am to 3pm, as *The Iron Warrior* will be in attendance to ask each candidate questions.

Think Globally: Go On Exchange!

PETER ROE

DIRECTOR OF EXCHANGE PROGRAMS

Each year, there are thousands of engineering students who go on exchange around the world, but few of them are Canadians. So – if you want to be a standout when you graduate, think seriously about UW’s exchange programs. You can go to more than two dozen countries; there are more than 50 universities on four continents that partner with us, with more being added all the time. No other Engineering School in Canada offers such a wide choice of opportunities. There is room for 15% of each class to participate, so why not you?

Is exchange expensive? Not really. Once you’ve bought the plane ticket, which is the main extra cost, you’ll find that in many places around the world student meals and residence are highly subsidized – it’s likely cheaper than here.

Will it take longer to complete your UW program? Very few people take extra time; almost all graduate with the rest of their class, and those who don’t say it’s worth the extra time.

Will you suffer academically? Not if you keep up with your work (like at

UW).

Will it fit with Co-op? Well, yes – if it didn’t you couldn’t go.

What about language - will I have to learn one?

It’s a good idea to understand lectures given in a foreign language, so you’ll need to know at least a little before you go. But remember, you’ll be living in the environment of that language so it’ll be much easier to become fluent. And think of the advantages of being able to communicate with millions more people.

Are there Scholarships or Bursaries?

There are several awards available, and they can make the trip even easier. You have to apply.

Is it tough to qualify for exchange? No! Go to www.eng.uwaterloo/~exchange to find the instructions, the criteria and the forms. It takes some time to complete them; you need appropriate approvals, but it’s not hard. JUST DO IT!

What about my future? If you go on exchange you give yourself a ‘leg up’ over the ones who stay home. Employers will treat you with more interest if you have real international experiences, not just holidays.

Make new friends! See the world!

Exchange is for meeting, learning and seeing – new people, new cultures, new places. They will be part of you for the rest of your life. Don’t let the opportunity go by. It only comes once, and

don’t believe me, believe students who have completed an exchange or who are here on exchange; it is an eye-opener for anyone and it can be life changing.

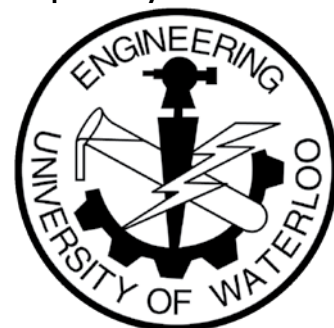
Want 150 P * * 5 Points for your class?

Bring your old midterms & exams to the Orifice!

Blank exam	50 Points
Exam with Partial Solution	100 Points
Exam with Prof Solutions or Excellent Grades	150 Points

CSE exams are welcome!

Chemical, Management, and Mechatronics exams are especially welcome!



ENGINEERS WITHOUT BORDERS

Fair Trade Facts

UMAIR MUHAMMAD
EWB CORRESPONDENT

The fair trade movement came into being out of criticism of the current setup of global trade, which has been extremely exploitive towards the third world. Breaking down trade barriers and regulations has resulted in low wages, harsh working conditions, and depreciating living standards for farmers and labourers in third world countries.

The unfairness of conventional trade is appalling. Commodity prices have been in steady decline since the 1970s and production costs have exceeded revenue for cash crops like coffee and cotton in many parts of the world. Small farmers are pitted against each other in competition, continuously held at the whim of volatile commodity prices and exploitive market forces.

Producers are reduced to poverty, barely scraping by. They have hardly enough food to eat and water to drink. They are unable to afford the most basic kinds of healthcare, and unable to send their children to school. They are stuck in a circle

of scarcity.

Fair trade seeks to mitigate these problems caused by the so called "free trade" by taking an active interest in not only making sure that producers and workers are justly compensated, but also that socially responsible methods of production are used; child labour is not utilized, pesticide use is minimal, etc.

A large and continually expanding range of goods are available in the fair trade variety. They include mostly farmed goods like bananas, coffee, cocoa, cotton, and tea, but also handicrafts like soccer balls.

Spearheading the movement, FLO International (Fairtrade Labelling Organizations) provides fair trade certification for goods that meet fair trade production guidelines. Buyers must voluntarily seek out certified producers and purchase their goods at higher than market value. This is the part where we come in. As consumers we have to be willing to pay a bit more (not always!) for the coffee we drink, or the bananas we eat, and create demand for fair trade products. Companies will respond to the demand, they will purchase them from certified producers and sell them to us. In

fact, this has been happening.

According to FLO, from 2001 to the end of 2007, fair trade certified sales worldwide have grown by 280%. They are estimated to have amounted to around \$5 billion in 2008. This is making a very real difference for millions of people.

The growth rate looks very encouraging, but there is still a long way to go. In the markets where fairly traded goods are available, they only make up a small percentage of the total volume of goods sold.

Communities in the third world that have embraced fair trade have generally witnessed a significant increase in living standards. With the increase in revenues, they have constructed schools, healthcare centres, and public transportation systems. Though they are still relatively poor, fair trade provides opportunities for community growth, as opposed to subsistence.

Forcing people into poverty and then throwing billions of dollars of misdirected aid and high interest loans at them hasn't really helped to make this a fairer world to live in. Allowing them economic stability and self-determination, it seems, might be a better way to go about it.

All it takes to be a part of the fair trade movement is the will to shop consciously. It's not very hard to do. First off, if you're looking to purchase something, say a cup of coffee, and you notice that there's a fair trade option available at the shop, buy fair trade. From there, go out of your way once in a while to find fair trade items instead of just buying the regular not-so-fair kind. Do some research; ask around, check out www.transfair.ca, it has lists of stores that sell fair trade goods in Canada, or try searching 'fair trade' on Google Maps.

A few options you don't have to go too out of your way for:

- On campus, fair trade coffee is sold at the Engineering and Science C&D, Dana Porter, the Grad House, FedExExpress and Brubakers in the SLC;
- Fair trade bananas are available at a couple grocery stores in town, Zehrs and Valu-Mart;
- Clothing made from fair trade cotton can be purchased online from Free the Children's charity partner, MetoWe (www.metowestyle.com);
- EWB will be selling fair trade roses on Feb. 13th in the CPH Foyer.

EWB National Conference 2009

JULIA CHERNUSHEVICH
IN Mechatronics

Completely freezing and covered in snow, wearing nothing but a soaking swim suit, I run back into the hotel's leisure zone and leap into the bubbling hot tub. This to me is taking a break from the crazy activities of the day! After learning about how using flush toilets is a bad practice, 'freezing' in Toronto for two minutes, and making over thirty calls to the media that day, rolling in the snow did not feel too exotic.

Welcome to the Engineers Without Borders National Conference, where 600 engineering students and professionals from across Canada came to learn, celebrate and leave their mark on society. The four-day-long conference was organized by Waterloo's own Engineers Without Borders (EWB) members. Co-chairs Joshua Vanwyck, Andrew Dilts and Vivian Li started planning the event more than a year ago, and last week everything was executed. Of course the three were not the only ones involved; "The volunteers were incredible," says Josh, "one of the most amazing teams I've worked on in my life. Everyone worked far beyond what anyone could ever have expected of them [and] gave everything they had to make it work." And I myself could not agree any less. Here is an excerpt of the conference for those who were unable to attend:

Thursday. The day started with a welcome and an introduction for all delegates, but not quite so for me. My role throughout the conference was to get the media out for our events; so I was in the conference headquarters making calls to local television producers and newspaper editors. After leaving a dozen messages and hearing some positive responses (but no promises) I figured that I had to attend at least a couple of workshops.

On that note I proceeded to an overseas session about Water, Hygiene and Sanitation. Megan Campbell, graduate of Waterloo, began by sharing her experiences abroad, working in the field of water and sanitation in the villages of Malawi. She mentioned the complexi-

ties of volunteer work, the problems she encountered and a certain unease that the people of Malawi felt with regards to volunteer work:

Imagine volunteering abroad and seeing a community with many sick people, and the cause for a great percentage of these sicknesses is improper sanitation; the immediate response you may have is "give them soap and teach them about how to use it". Unfortunately, the situation is not so simple, and Megan did a wonderful job of communicating the dilemma.

Imagine yourself as a local Indian villager in Northern Canada. Dr. Campbell, an M. D., comes to your village and talks to you about sanitation. She says that there are certain bacteria that live within everyone that build up an attack method against our bodies defence systems. By excreting in flush toilets, and using that same water (purified) as drinking water, we are allowing for the bacteria to re-enter our bodies and continuously learn how to make us sick and evolve to do so. To avoid such a problem of an increased risk of getting sick, it would be most effective if you were to excrete in a plastic bag, and throw away the bag into a close-by garbage bin.

Everything that Dr. Campbell (Megan) mentioned is backed up by scientific fact, but how many of you are going to poo in plastic bags? Hopefully, nobody. The reason being is that our lifestyle is rather different from the one she proposes. Although she may have science on her side, we have no incentive to change our lifestyles based on one scientist who visited for a day. As well, who is she to come into our village and tell us what to do; she will leave immediately, so what reason do we have to trust her, an outsider?

A similar mentality was observed in Malawi, and it is just as reasonable. A volunteer was talking to a group of villagers about sanitation, explaining germs and how to avoid them. At the end of the presentation, an elderly lady came up to the volunteer and said, "We greatly appreciate your willingness to help, but our problems in Africa are different from yours in Canada. Yes, in

Canada germs are a problem and they make people sick; but here in Africa we have witches. It is the witches that make our people sick, not germs. I just wanted to tell you this before you go and embarrass yourself in front of another group of people." Not much could have been said at this point; and I can imagine what intricate thoughts were going through the volunteers mind. She sure learned about the intimate complexities of international development!

The remainder of the workshop addressed similar encounters. I walked out of the room in a bit of shock thinking about how many things can go wrong in one day of volunteering in a foreign community.

Not long after the workshop sessions, all of the delegates were driven to downtown Toronto where the Massive Outreach Event was to take place. If anyone is familiar with Improv Everywhere they will understand what I mean when I say that everyone 'froze' for two minutes. While the city life was continuously in action, all 600 delegates stopped in motion to promote Fair Trade. Some spelt out the words 'Fair Trade' with their bodies, others took relevant positions, but all made an impact on those around them. One group had two individuals dressed in vivid banana costumes and either praised them

by holding them on their shoulders or vigorously stomped on them (as vigorously as they could in a frozen shot) depending on whether they were a Fair Trade or non-Fair Trade banana. After the two minutes were over, participants informed passer-bys of the benefits of Fair Trade.

Overall the day was a great success: not only had we, the delegates, learned so much about Fair Trade, but we also informed several thousands of people through the public outreach that we had partaken in that day. And to ends things off, there was an organized game of water polo, African dancing, and as I mentioned at the very start – a Jacuzzi and a lot of snow!

This experience will last with me a lifetime and I am so grateful to everyone who made it happen. I'll let Josh say the rest of the thank you's, "Thank you to everyone who helped make this event possible. The event was organized not only through the help of volunteers, but also through sponsors and through the University of Waterloo, that contributed significantly, and through the graduates of the University of Waterloo who've come together to help out with the conference."

Thanks again, and I can't wait until next year!

Stratford Campus Update



CHERRY HO
IT ELECTRICAL

Another UW campus! The Ontario government has invested \$10 million in the University of Waterloo to help support the creation of the new campus in Stratford. The project is part of a plan between the City of Stratford and the University to celebrate an important milestone. And what's so special about this milestone? The milestone involves an effort to develop a part of the university to focus on global business and digital media.

The work and planning for this new campus began in Spring of 2006 during the Southwest Economic Assembly. Discussions were raised between the president of UW and the mayor of Stratford, who suggested creating a satellite campus in the city.

The new campus will feature smaller classes and projects which are client-driven. The Open Text Corporation will collect pledges for funds and donations from the private sector.

The Stratford campus will be a rich environment where science, creativity, commerce and innovation meet, all while driven by digital media and fresh technology.

Engineers On Ice



MICHAEL SELISKE
2A COMPUTER

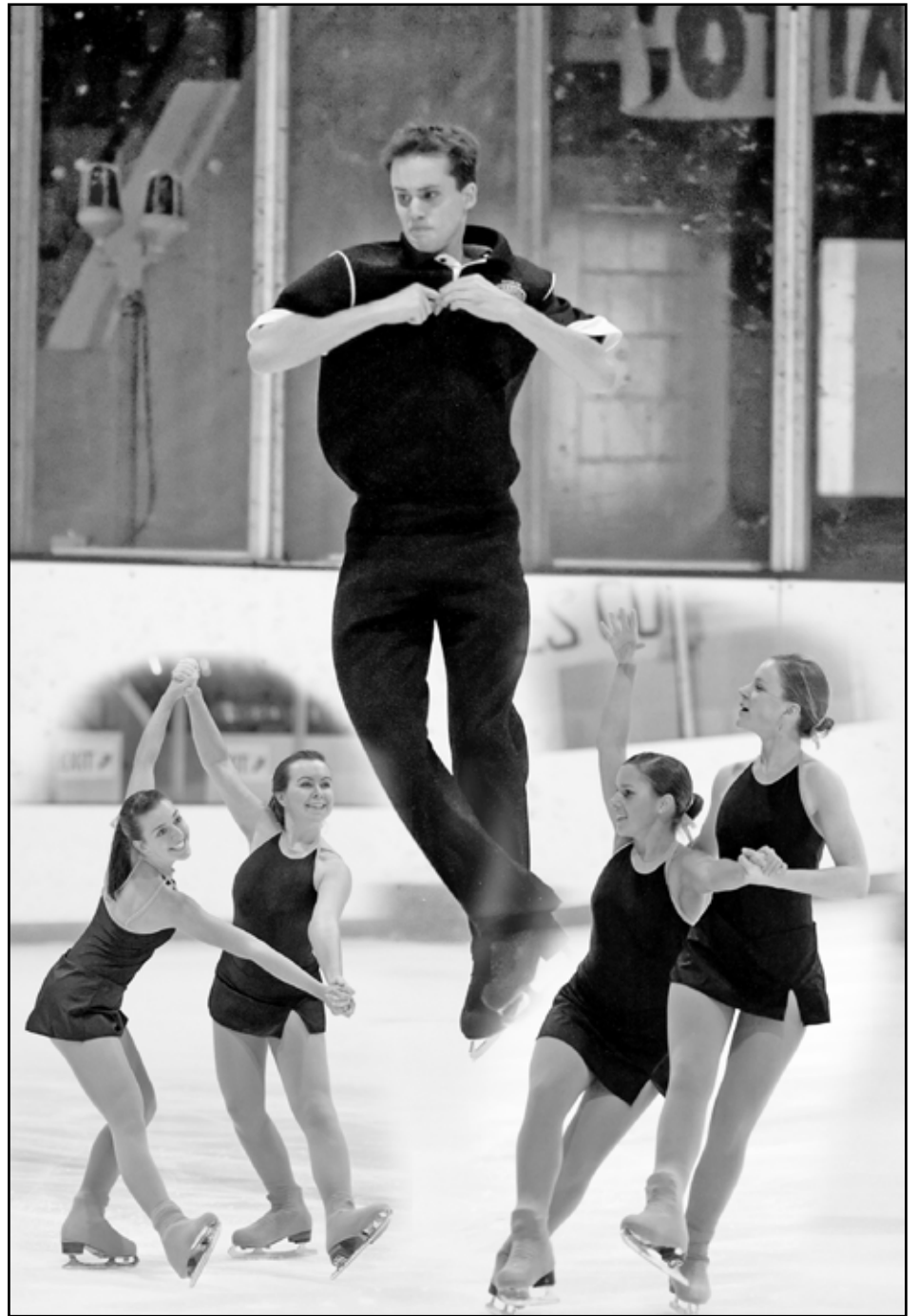
There is a strong stereotype in engineering that we are not artistic or athletic but I wanted to comment on the people who don't fit in with this stereotype and actually do both at the same time. I know there are plenty of people within engineering that are artists or others on Varsity teams who can be called athletes but not many people can claim to have both skills demonstrated at the same time. As many of you may know I am a figure skater and this is currently my second year on the Varsity Figure Skating Team. Hold Up, what did I just say? Waterloo has a Varsity Figure Skating team? That is the response I get from a lot of people and it is true, there is one and engineers make up a good portion of it. These people may go unnoticed in the halls of UW engineering but I feel that it is important to recognize those Athletes/Artists who wake up for 6:30 practice 3 times a week, make regular gym work outs and attend mandatory off ice sessions Sunday night. I also wanted to clear up the common reaction I get from people when they find out that I am a male figure skater.

There are currently six engineering students on the roster of the skating team and they span across all disciplines. We've got First years Erin Matheson (chemical), Angelica Ruszkowski (Mechatronics) and Dante Di Domenicantonio (Nano), second year Michael Seliske (computer), third year Sasha Smith (Chemical) and Matilda Miller (A Swedish exchange student). These 6 individuals have dedicated a great deal of their time and effort to

the University of Waterloo athletics all while attaining a top level engineering education. Figure skating has been a life long passion for many of these skaters with Dante skating at a competitive level out of Ottawa and Matilda winning the world Synchro championships in 2007 as a member of team Sweden. Sasha was on one of Canada's national synchro teams and I won the starskate national championships in 2006.

The main purpose of this article is to highlight the achievements of our engineering athletes and make people aware of the Varsity skating team. Many people consider figure skating a girly sport or one that may not be intense as hockey or football, but let me assure you figure skaters are highly tuned athletes who require strength, balance, grace and incredible stamina to get through their 4 minute programs and look good while doing it. Figure skating requires intense training and mental preparedness that I think transfers well to an engineering education. I think I can talk for everyone on the team when I say that getting up at 5:30 three times a week really sucks, but the reward you get when competing for your school at the Ontario championships as well as being in shape while many of us gain the second year 10 or the third year 5 is priceless.

Male figure skating is also a facet of my life that I am proud of and although as time has passed and people have gotten more mature the laughing and comments have subsided, but at times it still happens so all I want to say is that for 18 years of my life I have been a figure skater and if you don't like it laugh all you want but I am proud of what I do and am proud to call myself a warrior as I think the other engineers on the team would agree.



Michael Seliske

ECE Symposium Hits

From TOP FIVE on Page 1

manufacturers can use it to make more personally tailored ergonomic footwear.

Design Team: Adam Wislesky, Justine D'Souza, Tom Wang, Ugo Landry-Tol-szczuk, Vassili Skarine

#3: Home in your pocket

No, it's not a miniature replica of your home that you can keep in your pocket. It's actually a feature on your cell phone that allows you to control different household appliances. Imagine being stuck in traffic while your favourite show is being aired. What if you're halfway to where you're going and realize you accidentally left the stove on? With this feature installed on your cell phone, you can record the show and turn the stove off remotely from your car!

The system operates using a central unit installed in the house, and an add-on unit for each appliance you would like to remotely control. Suppose you want to turn on your DVD player in mid-traffic. By calling a special number that connects your cell phone to the central unit via your LAN line, you can control the DVD player by punching in various key sequences. The central unit translates these key sequences into instructions that tell the add-on units what you want to do with your appliance. If mass produced, the central unit would cost around \$40 and each add-on unit would cost around \$5.

Design Team: Lawrence Wu, Kai Xiang Hu, Qing He, Amit Vashista, Weikang Shou

#2: Telepresence Robot

What's the problem with online video conferences? You can't move! Well the days of immobile communication across the world may be ending a little sooner than later with the telepresence robot.

At first, the robot might seem like a lifeless structure with a screen mounted on top—but with just a few clicks on your end, the screen can light up with your friend's face and become a human-like companion. Your friend halfway across the world can control the robot using the internet. You won't be glued to your seat anymore; you can walk around and have your friend follow you at their end. The robot can operate up to 75 meters away from a wireless access point and would cost less than \$2000 if mass produced. You don't even have to let your friends have all the fun. You can use it yourself. Wanna check on your dog while you're at work? Wirelessly connect to your robot at work and navigate through your home with ease!

Design Team: Bryan Sachdeva, Joshua Daigle, Nicholas Hayduk, Ryan Smith

#1: Vapour Rockinator Air Guitar

Let's play guitar without a guitar! That's right, with the Vapour Rockinator, you can strum air and still produce music. The Vapour Rockinator is a black glove with attached accelerometers and resistors. The accelerometers detect quick hand motion that simulates the strumming of a guitar. The resistors, lined along the fingers, identify which fingers are bent to determine the chords that are being played. Currently, the glove sends all this information through wires to a computer where the sound is generated, but in the future, wireless technology might be integrated. The design team estimates the cost of the entire system to be around \$170 if it goes into production. So next time you're due at band practice, you don't need to lug around a huge guitar. Just stuff the glove in your pocket. How cool is that!?

Design Team: Ross MacDonald, Matt Battig, Kevin Liu, Mark Rushby

Addicted to Jobmine?



ANGELO ALAIMO
2A ELECTRICAL

I'm addicted to JobMine. There, I said it. I have an addiction to the online Job Matching software run by this lovely University of ours. Apparently I'm way too cool to get a normal addiction like cigarettes, morphine, or WoW. That's ok, because I haven't heard as much wonderful things about them as I have about JobMine.

How can I be addicted to JobMine you might ask? Well I'm the one who has to check JobMine every twenty minutes at anytime of the day - hell, I even check at 11:59 PM, then again at 7:00 A.M. just to make sure I didn't miss any changes during the downtime. I'm not viewing new jobs, or anything related to searching for new jobs. I'm addicted to the post job-search activity - the waiting game of observing "Applications Available" switch to "Screened".

Then along comes "Selected".

If there is any two word phrase to describe this one glorious word, it would be Adrenaline Rush. Yeah I know you've felt that surge of energy before. You immediately tune everything out in your surroundings and focus your mind to the name of the company that decided to interview you, hoping it's not one of your "Plan-B" applications such as PDENG15 mentor.

I love interviews, or perhaps I just love wearing suits. What other excuse can you use during school to regularly wear a suit? I know at this time of the year it's not particularly pleasant with the less than stellar snow removal I've

experienced in Waterloo, but try to wear a suit in class at another school in Canada, and you will likely receive dirty looks. We Waterloo engineering students take this for granted!

I'm pretty sure the route to cure this addiction of mine would be to simply implement a automatic interview notification system. I mean, with many of us on campus with cell phones, blackberries, or those touch screen toys made by some fruit company, a simple text message or email would work perfectly. Us addicted would no longer require frequent access to JobMine; however, knowing me (and my classmates have likely observed me doing the following), I'll just keep checking my phone for a notification - there's really no escape.

Or is there? I think if I simply acquire a job as soon as possible, I can free myself from the addiction. I'll possess no reason to check JobMine, since everything would be organized and set up regarding my employment. The issue remaining is relapse. Even though the addiction ceases for the term, I still have three more work terms remaining with Waterloo. That means three more times of being addicted to JobMine.

On February 27th I'll be F5'ing my browser immediately at 1 o'clock on the second. I'm pretty excited for the day rankings open, so instead of counting down the days to a reading week like everyone else on Facebook, I've decided to count down to rankings day - just 23 more days! When match results open the following Monday, I'll pray to be matched up with an employer. Otherwise, the addiction ensues and who knows, maybe this time I'll require a 12-step program to fix my addiction to JobMine.

Restaurant Review: Meetpoint

Go for the Novelty; Stay for the Fresh Bread, Large Portions, and Cheap Prices



JACLYN SHARPE
4B MECHANICAL

Like most busy engineering students I eat in the plaza a lot more often than sanity should allow, so I was excited to see a new restaurant going in last term between the Second Cup and the barber.

MeetPoint is billed as a Mediterranean and European kitchen and has an unexpectedly diverse menu. There are a number of Italian choices such as lasagne and seafood pasta, but these are far outnumbered by a variety of dishes made with spieß meat (similar to the gyro meat at Phat Cat) and pide (pronounced "peedah"). There were also some pricier choices such as salmon steak, which we ignored because they fell outside of the student budget. The menu offered appetizers, soups, salads, and entrées but did not cover desserts or beverages. I guess you would have to ask about these since I did see some bottles of wine on a shelf and several cakes near the cash. MeetPoint is primarily a sit-down restaurant but it is possible to get your food to go.

The atmosphere is upscale but casual, decorated in warm colours that make the space very inviting. There are large flat screen TV's that, while I was there, were being used to play Jazz on satellite radio. The kitchen is placed along one wall and open to the dining room so you can see your food being prepared. The centerpiece of this is a large spieß rotisserie.

I visited MeetPoint twice: once for a lunch meeting and once for dinner with a friend. On the first visit two people got the Caesar salad and lasagne while the rest of us got meat or vegetarian pide. The friends who got the lasagne and salad were underwhelmed,



Angelo Alaimo

their meals being decent but nothing special. The pide turned out to be something like a pizza that's been folded into a football shape, and comes with a side salad. It was quite good. The crust was freshly baked and was the highlight of the meal. The salad was also very good: made with fresh vegetables and a nice dressing. The topping of the pide was somewhat disappointing however; the "spicy" ground beef and onions turned out to be rather bland, and I'm told the spinach and

feta was no better. It came out to around \$10 per person including taxes and a tip, but I got enough food for two very satisfying lunches.

On the second trip I got a spieß wrap. The wrap itself was a freshly baked flatbread with just the right properties to be very easy to eat while holding the filling firmly together without falling apart. The filling was spieß meat, a mix of fresh vegetables and a delicious tangy white sauce. My friend got a sandwich that was almost the size of a dinner plate and

overflowing with a similar filling to the wrap, and served on fresh ciabatta-type bread. On both visits the service was very good and our food came out quickly.

I was very impressed by the fresh food and good service at MeetPoint, and am tempted to call it the best sit-down restaurant in the plaza. It is probably also one of the less expensive dinner places as long as you stay away from the salmon. Here's hoping it sticks around.

Infusion Angels: Independents Days Game Design for Everyone



JON MARTIN
1B CIVIL

Have you ever finished a video game and said "Wow, I wish I could make something like this"? Maybe you've had that flash of genius - an idea that could change the face of gaming forever. Alternatively, there are always those games that feel like they have totally eaten up your life, only to end with disappointment. You are left with the thought "Even I could have made a better game."

Well now is the time to make that perfect game. That was the message at the

Independents Day event at Feds Hall, on January 29th. The event was organized by the Infusion Angels Innovation Centre, located in the Waterloo Research and Technology Park Accelerator Centre. The event was sponsored by Microsoft, and representatives were there to showcase new features of the Xbox Live Community Games.

The focus of the evening was XNA Studio 3.0, the newest version of Microsoft's free game development software. Anyone with a desire to learn about and design a video game can download the program and begin to make their very own games (check out <http://creators.xna.com/> for the download). Of course, the basis of game design is coding, so don't expect to download the program and be playing your own first person

shooter within the hour. With access to in depth tutorials and training anyone can learn the necessary coding language and start making their game. The big addition to the XNA Studio is the Community Games platform. Once you have made your game, you can post it to the community server, receive peer reviews, and begin to actually sell your game. Yes, you can actually sell your game just like an Xbox Live Arcade game.

In order to develop for the Xbox system you need to join the XNA Creators Club, for a yearly membership cost of \$99 US. As a university student, it is possible to get a 12 month student trial membership for free through Microsoft Dreamspark. The trial membership allows you to develop for the Xbox 360, but you still need to get the full mem-

bership to post the game to the Community.

Independents Day was a huge resource for wannabe developers, thanks to Microsoft executives and a question panel of game developers. The panel included Christian Beauclair, Microsoft's Senior Developer Advisor; Alex Dhanjal, KPMG, Senior Manager; Julian Spillane, CEO of Frozen North Productions and David Flook, CEO for Vector 2 Games. Of course there were also door prizes to give away, including Microsoft computer mice and copies of Fable 2 for the Xbox 360.

The event was a large eye-opener to the world of video game design, as well as offering a challenge: You think you can do it better? Alright, let's see what you've got.

DO YOU NEED WRITING HELP?

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ENGINEERING SENATE CANDIDATES

The Iron Warrior contacted all Engineering Senate Candidates to submit a profile of their campaign. The following candidates submitted profiles by our publication deadline.



DEVIN CASS
3A ELECTRICAL

Devin Cass is an electrical engineering student currently in his 3A term. Throughout his career as a student, Devin has been involved in many on-campus activities as well as an ambassador to the university nationally and internationally. Since his first year, Devin has been a representative to the engineering society for his class in both societies. He has been repeatedly involved with charities and orientation week. Devin is also active in directorships, campus recreation, and many on campus social events. He has written for *The Iron Warrior* and has frequently attended conferences. Devin has been interviewed on numerous occasions for websites, print media, and television. Devin has been selected as an ambassador for the university on many occasions.

Overall, Devin is dedicated to making a lasting impact on the University and its future endeavours, and his peer constituents. As a leader of tomorrow, Devin Cass is an excellent candidate for the position of Engineering Senator.

If you would like to discuss any issues or express any concerns regarding the senate position or university policy, please contact Devin at devin.cass@gmail.com, via Facebook group (Devin Cass for Engineering Senator), or meet him in POETS on campus on Thursdays and Fridays at lunch.

Also running:

Abhilash Jayakumar
(2T Mechatronics)



DAVID LIU
2T MECHATRONICS

Over my past 2 years at UW, I gained experience as Trons' 11 academic class rep, URA, WEEF TA, Residence Tutoring, RCH Help sessions, interaction with UW professors and recent Engsoc VP Education role. From these encounters, I have developed a strong grasp of UW Engineering mission and how our University functions. Through experience from UW residence life don and residence council coordinator, I have learned the importance of diversity, communication and student body involvement. Senator falls in line with the role of VP-Education and I can increase the transparency by being a senator.

I will be fully committed as a senator. The time commitment is about several hours a month and I will be able to manage my time.

As an Engineering senator, I would:

- 1) Be available to hear your voice no matter how small
- 2) Speak in the best interest of all Undergraduate Engineering Faculty
- 3) Update relevant issues at subsequent Engsoc Meeting and Iron Warrior Issue
- 4) Form close connection with other faculty's senators
- 5) Work with Secretary Assistant of the university to combine the role of the Senator and Engsoc Executives.

University of Waterloo has given me so much development in every part of my life and I want to give back by taking this role. I hope for your support.

Lastly but not least, please visit my Campaign website at www.eng.uwaterloo.ca/~s14liu



JAY SHAH
2T MECHATRONICS

Jay Shah's Platform and Goals

- 1) Provide a Senate Update in alternating *Iron Warrior* publications
- 2) Provide a Senate Update at every Eng-Soc that follows a Senate Meeting
- 3) Explore the creation of an Engineering Senator advisory committee to expand undergrad input
- 4) Explore the restructuring of the Engineering Senate seat to accommodate a senator for each A-Soc & B-Soc
- 5) Deploy an online voting system to efficiently gauge engineering undergraduate opinions
- 6) Work with Senators/Exec to convey/act upon the strong desire for change/improvement within PDEng

The 6 points in my platform will only be a fraction of my job. The remainder of my time will be placed where YOU, the engineering undergraduate student feel my efforts are needed. Throughout my 2-year term, I will work with YOU to ensure that the positive changes I implement will increase the present and future value of a UW Degree. I will be the amplifier of your voice, your concerns, and your ideas.

I've sat through Senate meetings before, I know what I'm getting into, and I know I will energetically represent you.

VOTE FOR A VOICE - VOTE FOR FAIRNESS - VOTE FOR REPRESENTATION - VOTE FOR POSITIVE CHANGE

On Feb 10-12, VOTE JAY SHAH FOR YOUR SENATOR

www.eng.uwaterloo.ca/~j4shah



KYLA TAN
3A CIVIL

If you didn't even know the Engineering Senator position existed up to today, then how well do you think you're being represented right now?

So what am I proposing? Let's get personal. Let's cut out the middle man. What I hear on Senate is what YOU hear directly from me. If I can put this much effort into campaigning by finding and using different mediums to let you get to know me, I can do it during my term on Senate. *Iron Warrior* articles, a website full of info, personal visits to classrooms to make important announcements, and an online forum - I'll make myself available to personally hear your thoughts. You'll know me, I'll know YOU. No more of this "what is Engineering Senator?" and "who even has the position?" Finally, I plan on working closely with FEDs and EngSoc execs to get your voices better heard and because we're all in this TOGETHER.

Don't let the overly long lists of qualifications of the other candidates fool you. If they're so involved in other things, how much time do you think they'll have to keep you informed and hear you? YOU will be my main and only priority. I could tell you why I'm qualified for this position, but it's not about me. It's about YOU. It's about hearing YOUR opinions and about keeping YOU in the loop.

When voting, think about which candidate first told you about what the position really means before trying to solicit your vote. Please visit the Facebook group "Kyla Tan for Engineering Senator" for more details about this campaign.

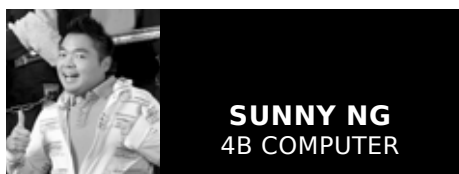
IW RECOMMENDS

CD

808s & Heartbreak

Kanye West

Roc-A-Fella



SUNNY NG
4B COMPUTER

When I first heard Kanye perform the lead single "Love Lockdown" at the MTV VMAs, I was thinking *Mr. West, what the hell are you doing?! You shouldn't be singing!* I was worried about his career when he announced that he wouldn't rap in this album at all. However, I couldn't help myself but enjoy what I was hearing. In *808s* Kanye ditched his usual slow-rapping style in favour of singing using the AutoTune effect. The result is a col-



lection of songs that T-pain could only dream about. From the seemingly never-ending "Say You Will" to the album's highlight "Paranoid", Kanye was able to portray his raw emotions of disappointment, sadness, and uncertainty. Not to mention the production was simply superb. It was a risky move, but boy did he pull it off.

The Iron Chef Recipe

New Year Special

SYLVIA WU
2A MECHATRONICS

Happy Lunar New Year! If you got a red envelope, congratulations, now you can use that money to buy some fresh ingredients and cook a gourmet dish yourself instead of eating campus pizza. If you weren't fortunate/Asian enough to be gifted with cash, the ingredients required for this delicious recipe still won't break the bank.

Pearl meatballs are a dim sum classic. In northern Chinese cuisine, these tend to be as large as baseballs, which are pretty hard to cook. This is the cantonese version involving meatballs in sizes that most of us are used to.

Ingredients

- 1 pound ground beef or pork
- 2 tsp finely chopped fresh ginger
- 1 tsp black pepper
- 1 tbs soy sauce
- 1 tsp cornstarch
- several large cabbage/iceberg lettuce leaves
- 1 cup glutinous rice (best soaked overnight)

Instructions

1. Mix the ground meat, ginger, black pepper, soy sauce and cornstarch in a mixing bowl
2. Make 1 inch diameter meatballs from the mixture
3. Drain the rice and place them in a shallow plate. Roll each meatball gently in the rice until it is coated with a single layer of rice. Do not press the rice into the meatballs.
4. Prepare the steamer: this is the tricky part. Not all of us have steamers. Dim sum style steamers can be bought from a lot of culinary stores for around \$5. However, a footed metal pasta drainer or colander can do the job too. Put this in a large enough pot and line it with cabbage or lettuce leaves.
5. Place the meatballs on the "steamer" in a single layer. Do not pack the meatballs in as they'll stick together. Leave some space between each one.
6. Steam for 30 minutes or until done. These won't overcook so it's better to be patient than biting into raw ground beef, unless you dig that.

Serve 4-6 as an appetizer.

Engineering Music Exchange Concert Night

When: Friday, February 6th @ 6:30pm

Where: SLC Great Hall

Cost: FREE!

UW's With Respect to Time

U of T's Skule Stage Band

U of T's Skule Stage Band Blue



ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report



CAT HAY
PRESIDENT

*Now, this is a story all about how
I've been busy trying to make you say
"WOW"*

*And I'd like to take a minute
Just sit right there
I'll tell you what I've been doing and
why you should care*

... and I ran out of Fresh Prince steam. But there are lots of important dates coming up, so mark your calendars:

- Feb 4: GLOW Ally training. Join us at 4pm (location TBA) to learn more about the Queer and Questioning com-

munity on campus and ways you can help make EngSoc a more inclusive community.

- Feb 4: Paul and Paula Plummer nominations are due. This is the most prestigious EngSoc award, given to students who have "contributed to the benefit of the Engineering Society in such a manner to be outstanding and commendable" and is given to fourth-year students at Grad Ball.

- Feb 5: Election process open forum. Come out to our open forum to brainstorm methods of involving all engineering students in our election process, regardless of how coop-school streams work for their department. Location and time TBA.

- Feb 5: GO Transit Info Session. Find

out more about the new GO transit line which will run through KW. The community info session is from 6-9pm at St Andrew's Presbyterian Church (details on the board across from the Orifice).

- Feb 10-12: FEDS Elections. Hopefully you had the chance to attend our candidates forum on Tuesday. More info about the elections can be found at vote.feds.ca

In less date-related news, we are trying to pass a new policy manual for the society which will encompass many of the day-to-day procedures we already follow. Specific areas of interest are: finances, communications, services and facilities, internal and external society relations, and operations. The new manual was presented at last week's meet-

ing and will be revisited this week and voted on at our Feb 25 meeting. The full manual is on the web: <http://engsoc.uwaterloo.ca/www/society.php>

At the latest Council of Presidents (COPS) meeting we discussed a school-wide charity initiative "Spread the Net". Paul Nogas has been selected as our faculty representative - stay tuned for more details from him. Other COPS initiatives include: a cross-campus exam bank, sharing the FEDS online voting system for all faculties, and improving the events submission form to help with cross-campus advertising.

If anything I can say this article was rare

But I thought 'Nah forget it' - 'Yo homes to the librai'

VPF Report



SCOTT RANKIN
VP FINANCE

This is an Iron Warrior article; it will contain information about EngSoc's finances... hopefully. I also hope it will pass with proper technical and English content, and will not require a resubmission.

It was a gloomy day last Wednesday; the rain felt like ice cold needles jabbing into my skin, I slowly stepped into the third floor hallway of the CPH. My fluorescent green muscle shirt flowed elegantly in the wind that bristled through the engineering buildings. I stepped into room 3385 (aka 3607) and gently placed my carefully prepared budget options on top of the overhead projector, panicking, I quickly turned on... (Nice), the projector and displayed all the options to the council. The stress

was building, a bead of boiling hot sweat trickled down my chest hair, but thankfully the budget was voted on in record time... thankfully.

Last week I almost could not control myself, I was super excited, it was pretty awesome, the second Novelities T-Shirt design contest started, it's pretty sweet, logos get submitted to the Facebook group, then voted on, the designer of the winning shirt gets it for free.

POETS will be getting AV upgrades soon, how cool is that, the bulk of the upgrades will be two HX-5B Array Speakers, and one FB120B Sub Speaker, and the purchase will be split by both of the societies.

Donations are coming up, those of you who would like to request donations please have your proposals in before reading week, so I can set up some options for that.

Best Regards,
Your VP Finance

-Butch Cassidy and the Sundance Kid

VPI Report



LAURA SISSON
VP INTERNAL

Recap time! Semi was on Thursday January 22nd. It was held in SCH and dinner was fantastic. The TOOL showed up for a photo shoot and everyone got a chance to get all dressed up and get their dance on. Highlights of the evening were Halford rocking out to air guitar and Sasha dancing the night away.

DUSTED was last night (It is currently January 30th as I'm writing this article) and was a super success. We completely sold out of our 140 tickets and reached capacity. The staff and locals were wonderful and really enjoyed having us there. I got yelled at by one of the locals for not calling to tell her that it was a pajama party! It also seemed that everyone

there not from Waterloo played country music and took turns performing. All in all, awesome night!

Currently, Scavenger Hunt is going on in the hallway outside the Orifice where I'm writing this. I'm hearing screams from the Management Engineering girls from the excitement of winning the duct tape to the wall event. After all of exec finish writing our articles, we will be joining in the festivities.

By the time this article is published, the curling bonspiel will be over. I'm excited to be participating in that tomorrow!

In terms of upcoming events, not too much in the forecast since midterms are coming up, but stay tuned for more events after reading week!

-Laura
VP Internal

VPED Report



SASHA AVRELINE
VP EDUCATION

So guess what everyone!

I can't believe how fast time flies. It seems that only moments ago we were starting the semester, opening POETS, having the first EngSoc meeting and all of that fun stuff and now we are only days away from the start of midterms. Oh no! Sorry to break the news to you guys. But guess what, we have the means of helping everyone out! Have you checked out our exam bank lately? Over the fall semester there has been over 250 exams added to the exam bank. So please check out the exam bank online at [\[soc.uwaterloo.ca\]\(http://soc.uwaterloo.ca\) and get studying, and get 100%! On that note, if you have a past exam sitting around somewhere that you wish to submit, please please bring it into the Orifice and get P**5 points for it! You are guaranteed to get at least 50 points and as many as 150 points per exam!](http://eng-</p>
</div>
<div data-bbox=)

Anyway I have some good news for you guys! First of all, the PDENG Independent Review should be sent out to the reviewers this week, if it hasn't gone there already. Also even though the recession is in progress, career services states not to worry! To all the job seekers out there - please stay confident in yourself and be patient - you will get a job! However, I would like break it to you that if you heard any rumours about it being easier to get an engineer-

ing workterm credit due to economic troubles they are completely FALSE - CECS WILL NOT be lowering any job expectations.

Finally I would like to pass on to you that CBET (Centre for Business, Entrepreneurship, and Technology) will be hosting a couple of workshops this term on Building/Maintaining Credibility as a Leader, Conflict Management and Succession Planning for your Organization. Please let me know if you are interested in attending - space is limited.

That's all I got this week - sorry for the lame report but I have to be professional (Unlike this guy Smokey I know)

Sasha
VP Education

WEEF Report



MATTHEW BESTER
WEEF DIRECTOR

Hey everyone!

I hope that everyone is having a stellar term so far. The WEEF Return period is now finished. The return rate was similar to previous terms and you can look forward to some nice graphs in an upcoming IW.

Now that the returns are done I will be having office hours every week on Wednesday from 12:30-1:30. Feel free to stop by or send me an email at weef@engmail.uwaterloo.ca if you have any questions.

Last week the Funding Council had their first meeting of the term. This term the council decided they would like to focus more funding towards departmental proposals.

We also changed the funding guidelines to better reflect how the funding

council feels about how the funding should be allocated. All the guidelines can be found on the WEEF website at www.weef.uwaterloo.ca.

That's all for this article. Remember the proposal time is just around the corner so keep an eye out for any ideas. The last day to submit a proposal is Feb 24th, 2009.

Matthew
WEEF Director

VPX Report



CARA KENNEDY
VP EXTERNAL

Hey everyone,

I hope the last two weeks have been good to you and you are ready for midterms!!

This past weekend, January 30 - February 1, five first-year students and myself travelled to Ottawa to the First-Year Integration Conference (FYIC). This was a great opportunity for us to meet up with other schools in the Engineering Student Societies Council of Ontario (ESSCO) and learn more about some other Ontario engineering organizations. We enjoyed presentations by Professional Engineers Ontario (PEO), Ontario Society of Professional Engineers (OSPE) and even a presentation by the Canadian Federation of Engineering Students (CFES). Good times were had by all and if any of these organizations interest you, stay posted next term for more conference opportunities!

Over the next two weeks, keep your eyes out for the EWB and Charity pancake breakfasts and updates from our Interfaculty Relations activities.

Have any questions, comments or concerns? E-mail bsoc.vpext@gmail.com.

Take it easy,
Cara

Hello From Your EngFOC '09

Hello Everyone,

We hope you are as excited about Frosh Week 2009 as we are. We are your Federation Orientation Committee (FOC), and our job is to make next year's frosh week run as smoothly as possible. If you would like to be a part of the week, then you will need to sign up. A little bit about us is attached!

Still want to sign up to be a BIG? Please submit your application by going to www.eng.uwaterloo.ca/~foc

Good luck

Love,

Your 2009 EngFOC

Grant Campbell
Matt Hunt
Marissa Bale
Mark Cremasco



Matt Hunt

A Man of Style, a Man of Passion, a Man of Many Guises. Matthew 'Munt' Hunt is irresistible to women and men alike. Having that charming-yet-alooof air about him, his charismatic presence is impossible to ignore. Known for creating a grandiose entrance, heads turn and envy flares in every heart when his Suave, Debonair and Downright Sexy self arrives. The master of blade craft, technology, and hand-to-hand combat. Trained to the highest level in espionage and covert operations, and soon to be a Mechanical Engineer, this International Man of Mystery straight out of Stratford has seen it all, and done even more. Keep your eyes on him, or you might just find yourself drawn into the vortex of awesome.



Mark Cremasco

Mark grew up in the Amazon somewhere in Southern America. At an early age, just when Mark was getting his legs, his mother was killed by hunters. Mark was all alone and eventually was shipped off to live with the Monks in Tibet. He lived with the Monks for a total of 16 years, learning and learning. Little did he know, the whole time he was there the Monks were fund raising for his airline ticket. Finally, they had enough to send him economy to, of all places, Waterloo. He has now been here for over 3 years and his training has helped him along the way. Because of his deep concentration and lightning-quick reflexes, he has achieved the role of FOC and plans to do wonderful things with it. But don't be fooled by his Buddha-like concentration, he can snap at any moment and retreat to Tibet, any mention of his youth and you will surely feel the repercussions.



Marissa Bale

'Born' in 1988, Marissa was considered by most at the time to be some sort of advanced robotic alien life form. After years of storage in a warehouse somewhere on the outskirts of Barrie, Ontario, she escaped. Forging a path of indeterminable destruction towards more of her kind, located in Waterloo, she arrived to find her programming had been altered. With a peaceful new way of life ahead of her, she settled in for a nice education in Chemical Engineering and for the last three years has lay dormant until such time as her fiery instincts rise once again and cause her to lay waste to the world.



Grant Campbell

Once upon a time, a young prodigy named Grant Campbell was born in a lake up north. Fortunately, being the well-prepared baby he was, he came out wearing a wake board. He then proceeded to do a back flip just because he could.

Soon after his birth, Grant took a job in the Far East, training a young martial arts prodigy by the name of Charles Norris. Apparently this guy went on to be a star in a tv show and a couple movies. Nothing big.

Now a toddler, Grant began to hone his skills as an academic. The earliest work that his name can be found on was helping

one William Gates with some high tech calculator of sorts.

This is the part where Grant's story becomes a little foggy. It seems that he bounced around from bar to bar for several years, only once appearing in Detroit working as a fashion consultant for a young start-up rapper named Marshall Mathers.

After all his work, in the fall of 2005, Grant decided to attend the University of Waterloo to study Civil Engineering. Sure, a weird choice given his experience but look at the rest of his story. As this school can often do to people, Grant began to have difficulty understanding when

people told him he was wrong. In fact, he still believes that Thursday is the fourth day of the week.

Though he did not know it, Grant had a calling in life, one he did not realize until the summer of 2008. When 'The Dark Knight' was released and the world was introduced, for the second time, to 'The Joker'. When this movie ended Grant was so convinced, that he immediately began to tell stories of the time when "I made the pencil disappear". Grant's infatuation with this character still survives.

Grant's life experiences have earned him the responsibility of 2009 EngFOC. Though it is safe to say that nothing he

Adventures Down South Episode 0: In Omnia Paratus



SYLVIA WU
2A MECHATRONICS

What's a lonely engineer gotta do on Valentine's Day? All your closest friends suddenly disappeared for some quality time with their loved ones. Movie theatres and restaurants are filled with lovebirds. You can't even take a stroll in the mall without feeling left out of the "holiday" spirit. Being an escapist, I've decided to go on a reading week adventure with my trusty VW Rabbit, hoping there won't be roses and heart-shaped balloons on the highway, down south.

There is no destination in particular. I just want to go somewhere warm enough for one layer of clothing and sandals. I've longed for a rush of warm air when I roll down the car window, not snowflakes attacking my nostrils. Maybe Myrtle Beach will suffice, maybe I must make it to Tijuana.

Since my adventure will not happen for another two weeks, I can only divulge what I've planned so far. One of my favourite phrases is "in omnia paratus": prepared for all things. One must be braced for dangerous and sticky

situations for an adventure in foreign lands down south. Here's my list of must-haves so far:

1. A towel. It's the single most important item to get one out of dangerous and sticky situations. Douglas Adams has already outlined the towel's many practical uses in his famous Hitchhiker's Guide to the Galaxy. Most of these uses apply to earthly situations as well. I shall wrap the towel around myself while still crossing the border, lie on it when I've hit Daytona Beach, sleep on it when I've run out of money for motels, wet it to fight off bandits, wave it as a distress signal around when my car commits suicide on the highway, wrap it around my head to avoid inhaling toxic fumes in SoCal, and of course, dry myself with it when it's clean enough.

2. An equally lonely friend to keep myself company, so I wouldn't resort to talking to a volleyball. After all, you need a buddy to go fetch gasoline if you are stranded in the mountains of North Carolina.

3. A GPS. Paper maps are so last century. Besides, it acts as sort of another person in the car as it dictates directions. If I can't find an equally lonely friend, the GPS might have to do.

4. A snuggie. If you don't know what a

snuggie is, look it up. Who needs a sleeping bag when you've got a snuggie and a towel?

5. Bearspray. According to a traveller much more experienced than myself. A bearspray is a must have while traveling through the dense forests down south.

I will be back in three weeks with the actual

adventure. If I make it back up north alive, that is. I may very likely perish while swimming to/from Cuba. If you see a follow up to this article, my list of must-haves was adequate. Otherwise...

- Sylvia Wu

2012 TRON

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POINT VS. COUNTERPOINT

POINT

COUNTERPOINT

Do Engineers Make Good Significant Others?

KEVIN LING
2A ELECTRICAL

Since the beginning of time, human kind has realized that the best profession to become involved with is Engineering. The engineer has the ability to not only be a reliable provider, but also be the most compassionate, loving partner that the Earth has ever seen.

In writing this article, I had to consult several experts in the field of dating engineers to determine the exact appeal of the common engineer. It was a little difficult for me to come up with on my own, but with some collaboration we seem to have broken it down to several key points.

Primarily, engineers are generally well endowed in income. Even before they graduate, their semesters of well paid co-op give them the chance to make large sums of money. When they are not spending this money on beer, they are happy to spend a little on someone else. This makes them prime subjects to be turned into sugar daddies and sugar mommies.

You know how every family has that person designated to do technical support? By dating an engineer, you no longer have to worry about relying on that relative. Going steady with an engineer pretty much guarantees you your own personal 24/7 network technician to fix your computer, cellphone, etc. Never again will you have to pay to send in a piece of technology for repairs and be without it for weeks. And don't underestimate the engineer's fix-it abilities. They can generally also provide plumbing and home theatre installation services too, pro bono.

Most engineers can also be counted on for manual labour. No one ever wants to mow their lawn, so a carefully selected engineer could be picked up to perform this duty for you. During the summers, lawn mowing is the bane of my existence. I would totally be up for dating an engineer if it meant no more lawn mowing. Don't have a lawn? What about a car stuck in the snow? Engineers are excellent at moving vehicles by force. This prowess is clearly displayed each year when they gather *en masse* and combine their power to pull the ultimate vehicle: the bus. If you get an engineer significant other then you won't even need to buy winter tires. You can just let them ride shotgun whenever you're out in the middle of a snowstorm with your all season tires. As soon as you get stuck, you deploy the engineer and all is well again. There is absolutely

no need to spend \$600 on a set of good winter tires when you can simply find an engineer boyfriend or girlfriend. And the best part is that the supply greatly outweighs the demand at UW so you can pick them up pretty cheaply. You won't even have to settle for a used one.

As you all know, male engineers greatly outnumber female engineers. However, there are positives to getting involved with both. If you are a female dating a male engineer, there will rarely be situations that could make you jealous because they are rarely around other females. If you are a male dating a female engineer, you will realize that the female is around males so much that she knows how they work and what they like.

Another great thing about engineer significant others is that they have been well trained in their schooling, and we don't just mean that they can find the solution to an inhomogeneous second-order differential equation for you. At the University of Waterloo, all graduating engineers are required to have passed the PDEng program. In the very first installment of PDEng, engineering students are educated on the importance of emotional intelligence. This makes them good at reading people, so you never have to tell your engineer boyfriend/ girlfriend what is wrong when you are having a bad day. Even if they ask you "what's wrong?" or say something along the lines of "Seriously, is it something that I did? I have no idea why you're mad at me. You are being completely irrational, how was I supposed to know that hitting on your sister all night would bother you? I was just being friendly," you don't have to tell them anything. Engineers are smart people, they can figure it out. PDEng also enforces the importance of being punctual. Anyone who has been unfortunate enough to be subjected to a complementary workshop knows that if you are even a minute late, there is a huge chance that you might just fail. By using the transitive property, engineers can see that this also applies to dates and that showing up late can result in complete rejection. Thus an engineer will never be late to a date or stand you up. When they set a meeting time, they stick to it.

While I can't guarantee that an engineer won't give you up, run around, or desert you, they do seem to have some pretty useful traits that could easily be taken advantage of. Don't wait, get your engineer today!

TREVOR JENKINS
1B MANAGEMENT

Okay guys and gals, it's time to be honest with ourselves. We're in engineering-- the hardest, most demanding faculty in every university that has one. We could have gone into Arts and have classes two days a week for three hours, or gone into Recreation & Leisure and gotten a degree in gym. But we didn't. It's time to admit- and this is going to be a big admission- WE'RE WEIRD!

I'm not talking about the kind of weird like the kid in your class who doesn't ever talk, no matter how hard you try, or the guy who only talks in lines from Monty Python or the people who are in MC every hour of the day. I'm talking about the weirdness that I like to call *enginweirding*. It's not obvious on the surface; most of us seem like normal social people who live happy lives, but we're all weird.

It's only when we venture outside of the campus bubble that it becomes apparent, especially when we go on a date with someone who isn't in engineering. While we have awesome qualities that make us appealing to potential lovers, like high starting salaries, automatic approval by the parents, the fact we know what those "other" buttons on a calculator are for, and the fact we're all unquestionably good looking, we still have a lot of off putting qualities that make us bad soul mates.

The fact of the matter is we're not always the most attractive people. Jeans and a sweatshirt are okay to wear for those early morning lectures where you can't be bothered, but we have a tendency to overdo the relaxed casual look. Sweatpants to a bar isn't the most effective way to pick up a date. (Shameless Plug: Check out Bryan and Erica's latest fashion article in this edition of *The Iron Warrior*). Add on top of that the fact that half the lecture halls don't have windows and you've got the strong possibility of super pasty people who need to go outside and get a tan.

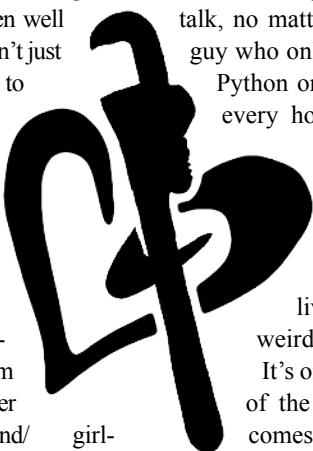
Not to generalize here, but there are a lot of us that are lacking in the social skills depart-

ment. This might be a surprise for some of you, but actually talking to a potential lover is a big part of being in a relationship. Asking someone out on Facebook is just wrong. Most of us don't have to worry, but a good indicator that you might be socially challenged is when the number of in-person conversations you have in a day is less than the number of forum posts, Facebook messages, and Twitter updates. We've all had one of those days, but if it's more like months than you need to get out a bit more and experience the "real world".

And for those who can carry on a human conversation long enough that there's actually a potential spark, don't blow the chances by talking in *engineese*, the language of engineering acronyms, inappropriate sounding words and lame jokes that only we could understand. Pick-up lines like "Wanna come to POETS for BOT to see if my class wins P**5?", "I'm good in relationships. I can handle stress AND strain!" and "I know it's not the length of the vector that counts, but how you apply the force" just don't have the same meaning outside of these halls. And for the love of god, don't ask if they want to see your RIDGID Tool!

Most prominent of all though, the average engineer doesn't have the time to actually be in a relationship. Early classes and meetings at work means no romantic morning kisses, and late nights in the lab and overtime to get the big project done, means no sunset walks together. If you're fine with having a relationship that consists entirely of hot sex every night and a yearly vacation to Europe, then an engineer would probably make a good lover. For some, this wouldn't be a problem, but for those who want more to a relationship, this could be a dilemma. I suspect these people would be a small minority; about the same amount as passed 1B ManEng last winter.

It's unfortunate that this weirdness causes the problems that it does when we try to interact with the outside world. Based on the fact that this is likely a life-long trait, the only solution to it is either a life of celibacy, or finding your own engineer to spend your life with. While the latter would probably lead to a far more fulfilling life, the statistics aren't in everyone's favour. For those who lose out on the search, I'm willing to bet you could just find some Tron guys who'd build you a life-like android to take home with you.



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

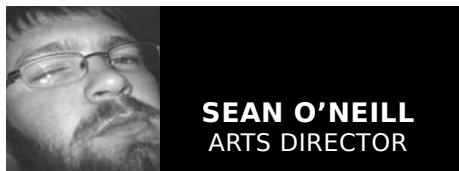
Engineers Without Borders

- Alternative Drinking Water

Other cases currently in use include:

- Foot Brace Design

Party On With Your Arty-On



SEAN O'NEILL
ARTS DIRECTOR

Welcome Arts-Fans!

Boy oh boy do we have some special stuff lined up soon. I'm just going to take this time to remind you all to check out the arts board across from the Multimedia lab in CPH for info on any of our 6 running contests. You can also email ARTSINEER@GMAIL.COM at any time with art or to ask for info.

Our Mural Contest has only one submission right now, and I'd like to give everyone a fair chance to submit their ideas. So the contest deadline is going to be extended to February 13th. Get your ideas in, or just send me an email if you are interested in knowing more.

Come to CPH Foyer on Wednesday at lunch between 12:30 and 1:30 on February 25th, March 11th or March 25th to do finger painting, macaroni art, popsicle stick construction, and colouring book mayhem for P**5 points.

POETS POETRY SLAM: THIS FRIDAY, 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 email the address above or sign the sheet on the orifice door.

Short Story Contest: Submit one of your best short stories to the email and if you win, you'll get a fabulous prize! Submission deadline is Friday February 27th (MOT). If it's short enough, we'll try to run it in the IW as well.

We've got a brand new contest running this month called M.S. Paint a Masterpiece. Submit your best MS paint drawing following the theme 'the future' and you could win one of my super awesome prizes. The winner of every contest gets a prize, just so you know.

Finally, the winners of our weekly photo contests, as promised, will get their work published below. The contests are still running weekly, so make sure you check the arts board for the theme of the week and submit your entries by 5:00pm each Friday. The pictures can be taken at any time and place, and the interpretation of the theme is up to you. Its possible to win more than once, so keep submitting your photos and congratulations to all our fine photographers. The decisions are very hard to make and all compositions are to be commended.

Now Go Read a Book.



Week 2 Winner: Paul M from 4B Systems with the theme of 'Anger'



Week 1 Winner: Graham Stonebridge with the theme of 'The Outdoors'



Week 3 Winner: Mike Seliske 2A Computer with the theme of 'Water'

The Future of Gaming: The Console War



JON MARTIN
OBIJON1138

As an Xbox 360 owner, any perceived bias towards Microsoft is a result of my lack of disposable income. If I could, I would also buy a PS3 and a Wii, but as a student, that is not possible. Please forgive any disproportionate coverage; I do my best to cover issues that affect all consoles, without focusing on or neglecting individual systems.

Browsing any popular game site will normally result in a total of two types of articles; ones about the hot new games, and ones about the console "war". I included the quotations because I don't think we can actually call the current generation, or any generation, of video gaming a "war".

Wars have winners and losers, eventually one side will be defeated by the other, enslaved or have their rights taken away. The winners triumphantly stake their claim over their new territory and start to look ahead to the next group to conquer. Video gaming is fundamentally different, it is a business fought by multibillion dollar corporations (not to say that many wars haven't been fought for commercial reasons) who will never admit defeat. A

console manufacturer will never lose and have their technology claimed by the winner, because there are never any winners or losers, there is just a new system.

If we look at the last generation, the contenders for "winner" were Sony's Playstation 2, Nintendo's GameCube, and Microsoft's Xbox. Microsoft entered the console market much later than its competitors, and managed to introduce revolutionary games, like Halo: Combat Evolved, to the industry. GameCube continued to mine their ever present licences; Sonic and Mario. Sony brought out heavy weight entries like God of War and numerous Final Fantasy installments. Each console also encountered its own issues.

For Nintendo, the biggest problem was when they reached the limits of the GameCube's capacity, both in graphics and memory capacity on the disks. As a result, Nintendo began to fall behind in graphics, as Sony and Microsoft continued to stretch the boundaries of their respective systems' capabilities. The miniDVD format used by Nintendo was intended to prevent unauthorized copying of disks; unfortunately the smaller size provided only 1.5GB of space (compared with 4.7 GB on a single layer DVD and 8.5 on a double layer). The smaller disks also meant that the GameCube did not function as a DVD player like its competitors.

Microsoft ran into technical issues as

well, though they were the result of the components used to create the system. The Xbox owed its simple development method to the fact that it was built from standard computer parts. This came back to haunt Microsoft when its competitors discounted their systems as the components within became cheaper to produce. Since Microsoft was not in control of the manufacturing of the Xbox components they couldn't increase productivity, and so it was impossible to drop the manufacturing price of the console. Losing money on every system sold, it is not difficult to see why Microsoft was quick to start the next generation.

Sony is generally called the winner of the last console generation, and it is well deserved, as they continue to profit from the PS2 even now. Though developers initially had difficulties producing games for the new architecture of the system, they were soon making some incredible games. When the PS2 entered the battle they put very little focus on online gaming. This changed significantly when the Xbox was released and introduced Xbox Live. Sony also benefitted from being the only system in the battle (before the Xbox was released) which could work as a DVD player, this helped increase sales as people started to adopt the new media format.

By looking back at the last generation, it is clear that one system can be selected as

the "winner", but the other systems didn't lose, they were replaced just like the winner. It is only possible to select a winner years after the generation is over. It's like deciding who won a bet on a hockey game ten years ago - who cares?

In the current generation there continues to be ups and downs for each console, especially in the current economy where people are less likely to splurge on a gaming system. Console sales will continue to be driven by the values of individual consumers; they will buy the system they want to buy. A consumer is not going to be steered away from a system because it only sold 31,800 systems last week compared to 32,500 the week before. Purchases will depend on which console is the cheapest, has the best games (which is a personal viewpoint of the consumer), and the play style of the consumer (whether they play online or not).

Just like the last generation, none of the consoles will be defeated; instead they will be replaced, as all consoles are. Even now, there are rumours of the impending "next generation" consoles, which most critics believe will be released in 2010 or 2011. For this reason, I won't be commenting on the state of the console "war"; check out Gamesradar.com or IGN.com for that. I am talking about issues that affect the entire industry, as well as new games and hardware.

HUMOUR AND SATIRE

The Adventures of Dangerman

The PDEng Sonnet



Dearest Reader,

A very long time ago, when I was still a wide-eyed frosh of 1B; having recently completed my first offering of PDEng I decided to express my derision poetically in the Iron Warrior. Inspired by the genius of Dr. Seuss, it was my first published work and miraculously it still seems to get read today.

*“That PDEng, that PDEng,
I do not like that PDEng,
I do not like it here or there,
I do not like it anywhere.”*¹

Alternate Identities



Hey Good Lookin' How You Doin'?

Now that we've all settled in for the term, handed in our attractive looking work term reports, and started cracking away at the mountains of homework before us, I want to pose a question to you, my fine-lookin' readers. What if you could become a whole new person? A newer, sexier, more confident, more charming, more attractive you. A you 2.0 if you will? No, I'm not talking about plastic surgery, wearing a bag on your head, or a new wardrobe. What I mean is getting yourself an alternate identity. Bruce Wayne, Clark Kent, Floyd Lawton and many others have tried it, why can't you?

One of the most alluring things about an extra identity is all the things you can do with it (WINK). It doesn't have to be a super hero, but it can be a mark-ed improvement from you 1.0 and adds a little mystery to your real personality. Your alternate identity should be constructed with care, and like any personality, it requires time to develop. It's not easy to step from being you into being not-you for the first time, but if you keep at it, eventually it will be as much a part of you as you are now.

First you need to get your significant extra a really good name. You can't have Chad Sexington or Dangerman though, as those ones are already taken. Try to think of a name that really personifies the way you want your second you to be, and make sure it stands out so that people will remember it. You could then make your extra you extra sexy, supremely suave, or downright dangerous if you want. You can take all the parts of you that you aren't happy with and eliminate them from that other person. You'll also need to get creative and give yourself a little history. Things you've done, people you've known, places you've been and most importantly, have a good story for the origin of your name.

*I do not like PDEng with Eng
I do not like it or the message it
sends.”*¹

Perhaps the most remarkable response I received from this poem was from Professor McGregor herself, who genuinely encouraged my creativity and was altogether a very good sport. She brought a Dr. Seuss T-shirt to my PDEng45 workshop years later, but was kind enough not to actually wear it. Those of you currently or recently enrolled in PDEng25 might notice some content about the above poem and PDEng being a Green Eggs and Ham experience. I'd forgotten of its existence until earlier this week when I received a mysterious text message from a friend demanding to know why I was part of her 25 content. Those

Once you've crafted the ultimate alter-ego, take yourself out to bars, parties, or awkward social situations and let the magic happen. Introduce yourself to as many people as you want. Your other self doesn't have to be intimidated, put off, or scared of anything and it lets you fall right into character. You 2.0 is the master of every situation, and is always calm, cool, and collected. Your identity is like a ninjas mask, if you ever need to you can just take it off and slip unnoticed into the crowd, blaming everything on your identical twin.

To round out this discussion, I'd like to offer a few words of caution. While wearing your alternate personality can be a fulfilling and wondrous experience, it can also become addicting. If you spend too much time as your other self you run the risk of forgetting about the original you, where all of it came from. Also, if you don't take care to revert back to normal self mode once in a while, people could start to miss the real you altogether and only identify with your other identity. You run the risk of becoming a character rather than a person, and that's not the rewarding experience you intended when you started down this path. Finally, if you meet someone you really like, you might want to give them your real name so they can find you again without getting odd looks from people. So try on a new personality, and if it's not right the first time refine it a little. Go out and have fun. If you meet another person wearing their personality you're sure to be in for a good time.

As a final note, Chad Sexington has been getting a lot of questions lately from a lot of sexy people, and is happy to answer them. But in order to reach as many people as possible with unsound advice, I've decided that I might start answering the questions in this column. So if you happen to have a question and want me to answer it in the IW, feel free to email Questions4Chad@gmail.com. I take any and all comers.

Until Next Time,
Stay Sexy

of you that remember this may also recall that in that piece Prof. McGregor threw down the gauntlet of sorts and suggested that by the time I finished PDEng55 she hoped to see me write a full sonnet about PDEng. So, while it's long overdue; Carolyn, this one's for you.

Dangerman's PDEng Sonnet

*What vile monkey now rides upon my
back?
Flinging hypocrisy like so much poop.
The professionalism it pretends to pack
Is hidden deep in bureaucratic goop.*

*Nightmare of work term, scourge
of Wednesday night,
Your request for grace day is not
granted.*

*Resubmit till you've lost all will to write
And Waterloo leaves you disenchanted.*

*Education hijacked, corporate ideals,
With no trace of accountability
Frustrations of thousands go
unreveal'd.
Criticisms met with hostility.*

*Politics; for the sake of saving face
Student quality of life is erased.*

Till next time,
Dangerman
Eric.dangerman@gmail.com

¹ “PDEng – Adapted From Dr Seuss” is available on the IW Archives (S05-1)

The Iron Chef Recipe

Valentines Butter Chicken

ERICA WAUGH
4A CIVIL

An ex-roommate of mine made a special surprise trip out to see his girlfriend on Valentines Day. He made it to her house and prepared dinner all before she came home from work. He is mediocre in the kitchen and he made this recipe. It's very tasty, a bit different than usual and has awesome leftovers.

The night before, or at least 2 hours ahead of time, combine the following in a medium bowl:

- 1 cup 'balkan' style yogurt (Astro makes it, red and white tub)
- ¼ cup lemon juice
- 2 tsp ground cumin
- 2 tsp ground coriander
- 2 tsp cayenne pepper (less if you don't like a bit of spice)
- 1 tsp garam masala
- ½ tsp tumeric
- 2 tbsp minced garlic (about 4 cloves)
- 1 tbsp minced fresh ginger (you can get it in the produce section, peel it and then use a cheese grater to mince it)
- 2 tsp salt
- 3 lbs chicken thighs or breasts, boneless, skinless

Poor mixture into a large re-sealable bag and refrigerate for at least 2 hours, overnight is best. Once the marinade has set, pre-heat oven to 400 degrees F. Dump out your chicken and marinade into a large glass dish and bake for 20-25 minutes, until juices run clear.

Step 2, the sauce:

- 6 tbsp butter
- 1 large white onion, small chopped
- 4 tsp whole cumin seeds
- ½ tsp chili flakes (less/more depending on your spice preference)
- 2 cloves garlic, minced
- 1 cup crushed tomato
- 1 cup heavy cream (I use 35% whipping cream)

In a large sauté pan, melt butter, add onions. Cook for 5 minutes on medium heat. Add garlic, cumin, and chili flakes. Continue to cook for 3 minutes. Add tomato and lower heat, let simmer. Add cream; simmer additional 2-3 minutes. Once the chicken is done, chop into small bite sized pieces and add to the sauce. Allow to simmer for 20-25 minutes, stirring occasionally.

Dangling *Pointers;

So awkward they'll make your toes tingle. So sweet they'll make your teeth ache. Our dear readers have sent in an extra dose of pointers hoping to lose the dangling status in time for Valentine's Day.

Dearest Poster Boy,

You have no idea who I am, but I know everything I need to know about you. Ever since that poster of you went up in Retail Services, I've been lost in thought about you. Every time I walk by your poster my heart jumps a little inside my chest. You're big burly image, and the stance that you take makes me get lost in your eyes. I can't wait to take you home: I just need to work out a plan about how to distract the woman behind the desk. When I get you home, you'll see all you want of me.

- FanBoi<3

Loveliest self,

You have always been there for me, on every Valentine's Day. I just want to tell you how much I love you again, as I do every day and every night. Who said you needed a plus one to make yourself happy?

--Mr. Independent

Dear Yogi,

I attend your Thursday evening sessions at the PAC. How you manage to effortlessly form a perfect reverse V with your divinely tight body makes me gush on the inside, every time. However, you really don't have to put your head between your legs that often, I'm perfectly willing. Namaste.

-Your devoted disciple

Dear Terribly Arousing,

I don't see why we have to live how they tell us to. These restrictions on the student-TA relationship are too harsh for our love. Your elegant equations are too teasing and I can't hide it any longer. You are my kind of cute, and I would like to schedule some one-on-one office hour time with you.

--Trying2Learn

Better Know a Beer: Tankhouse Ale



RORY ARNOLD
4B MECHANICAL

Canadians are passionate about their beer. Canada is home to some of the world's best-known breweries. So what does it take to be named the Canadian Brewery of the Year in both 2007 and 2008 at the Canadian Brewery Awards? It takes East Toronto's Mill St. Brewery.

The Mill St. Brewery was founded in 2002 by Michael Duggen, Jeffery Cooper and Seve Abrams and opened the door to its brewery and brewpub in December of that year. The brewery is located in the Historic Distillery District in the same building that was originally home

to the Gooderham & Worts Distillery. They have grown to be one of the most successful microbreweries in Canada and now produce a wide range of creative and tasty brews. Many of these are available in bottles from the Beer Store and LCBO while others are only available on tap at the brewpub and other local establishments.

They brew two organic beers including the Original Organic Lager and Organic Helles Bock. They also brew Stock Ale, Balzac's Coffee Porter, if you enjoy both coffee and beer, Cobblestone Stout, Pilsner, Wit Beer, Fruit Beer, made with raspberries, ESB, IPA, and Betelgeuse, which is a filtered Belgian style wheat beer. They also brew the occasional seasonal beer, such as an Oktoberfest and Barley Wine. One of their most popular beers however is the



Tankhouse Ale. Named after the old tankhouse in which the brewery is now located.

Brewmaster Joel Manning created this recipe 20 years ago and brought it to Mill St where it still remains his favourite drink. Manning also keeps a blog on the Mill St website. The beer also won the Golden Taps Award for Toronto's Best Beer from 2004-2007.

Tankhouse Ale is brewed in the common style known as the pale ale. And it is a very good representation of

the style. The beer pours a nice copper colour with a light airy head. The taste is complex and well balanced between the five types of hops used and the malt. Cascade hops are used to add a bit of spicy to the bitterness of the beer. The beer gives off a nice fruity aroma and is delicious when eaten with seafood dishes.

This beer is an excellent example of pale ales from one of Canada's best microbreweries. Its nice well-balanced flavour gets a score of 90. It is one of my favourite beers from the creative brewery and is widely available. I haven't visited the brew pub yet mainly due to the fact I am rarely in Toronto but I have heard very good things and look forward to visiting in the future.

Fashionable Behaviour



BRYAN SACHDEVA
4B COMPUTER

ERICA WAUGH
4B CIVIL

This week brings a different twist to our fashionable preaching. This time we will be advising on fashionable behaviour. As we stated in our first article, fashion is often sacrificed in the name of studies and laziness. This has also been found true when it comes to behaviour. Such things as dinner etiquette and manners have been forfeit to the powers of too-casual dining and student crazed environments. The form of this poor behaviour urges to be replaced by elegance and class. Let us begin!

Some dating behaviour tips:

The first date seems an appropriate place to start. Finally, you have sucked it up and asked him/her out. Sidebar – I can't help you get dates, just suck it up and ask. Most people will be flattered and polite no matter what their answer is. Yes, rejection hurts, but you'll get over it. Back to your date. You're excited, you can't wait to get to know them, you don't want to mess up; but what are you going to do for your date? Choosing a casual environment that is conducive to conversation is a good choice. Going for dinner or coffee suggest that you are interested in getting to know them and not just sitting next to them. This means no movie theatres right away. If you asked for the date, suggest what you would like to do. This shows that you have thought about it. If neither of you have a vehicle, consider meeting up and walking together eliminating the awkward restaurant entrance, skimming the crowd etc. It will also give you a chance to chat without worrying about eating etc. You only have to worry about walking and chatting, can you handle it??

If you are at a place where you will be eating, please be considerate of table manners. This also includes being polite to all around you including host/ess and wait staff. Acting positively towards these individuals will show your date that you are not putting on an act; you will also get better service as a result. Be aware of how much you are talking, try to balance your conversation and ask questions and then follow-up questions. For example: "Where are you from?" and then "What was it like growing up in a small town?" Avoid questions with one-word answers. Now the classic dilemma: who pays? As a girl who has been on a few dates in her life, I can say it is nice to have the tab picked up. However, it is more modern to say that whoever requested the date, should pay. If one insists on paying, don't

argue; comment that you will get the next one. If you are in front when leaving (and entering for that matter) the establishment, hold the door for your date. Don't make it awkward though, don't be too showy. This will come across as trying too hard. A simple 'after you' is perfect. None of this 'I insist, ladies first, age before beauty, blah blah I'm so charming and chivalrous.' You don't want your date to barf on your shoes.

As you progress into future dates you will get more comfortable with the person you are with; you will just get more comfortable dating and some of these points will just come naturally. Always remember your manners, be polite, courteous, and classy. If it doesn't work out at least they will have something positive to say about you. Oh ya - iron your shirt. He/She will notice.

Some workplace / schoolplace etiquette:

So, what's in for this season... for once I'm actually going to say, pretty much the same thing as last season. For those that watch the show "How I Met Your Mother" you may recall an episode where Robin (the Canadian character) tests the "Canadianness" of a bar by bumping into someone; she apologizes, but so does the person she bumped into. This is a very Canadian trend: over-courtesy. That's the general theme that should be followed when monitoring your behaviour. Yes, I did just say "monitoring your behavior" (for more information Google: metacognition). There are three general fashion tips that I want to go over: conversation, common courtesy, and political correctness. Mastering these will help give off the image of self-confidence and draw people to you.

Conversation is the primary direct means of human interaction. It is also one of the quick ways that people use to assess personality and self-confidence. An overt and self-assured person generally starts conversations and leads discussions, while a more self-conscious individual is thought to shy away from them. I'm not saying that this is necessarily accurate, but this is how people tend to quickly categorize others based on conversation. Hence, it is important to take the time to converse with others, for things other than work and school. Casually stop someone in the hall to ask their opinions, ask what they're doing for the weekend. As Erica points out, it is also important to follow-up your questions to demonstrate sincerity (you don't want to make it seem like you're just asking for the sake of asking, even though you are). Also look for balance, let them do some talking, and also respond in turn. Avoid cutting people off, or relating the

conversation back to you and your experience. Throw in some compliments here and there, and people will really feel like you care about them. This draws them toward you. In terms of fashion, this season is a great time to complain about the weather, talk about the results of the Super Bowl, or the up-coming Valentine's day.

Of increasing pain at UW is the clear lack of consideration that people have in common areas. Specifically, I'm referring to the following: congregating in the middle of hallways and near exits, talking loudly in a meeting / group of cubicles / in class, and of course making a mess of common areas & publicly visible areas. It is incredibly rude to stop in the middle of a hallway and have a conversation. Why? Because it impedes others, and it shows that you don't have the ability to consider your surroundings. Demonstrating thought of one's self & impact (metacognition) is a key example of maturity. It is considered a positive thing to be perceived as behaviourally mature. For the same reason, talking loudly within the earshot of others is also a faux pas. One big issue I have is with people keeping messy cubicles, or having to throw out empty coffee cups at a computer. Again, you want to show that you are over-considerate, thinking about your every move and how it impacts oth-

ers. There is a very key distinction to be made between being self-conscious (being worried about what others think of you) and being self-aware (understanding the impact that your actions have on your surrounding and on others).

Finally, keeping on the theme of consideration, it is incredibly fashionable to be politically correct. A lot of the emphasis lately is due in part to the celebrity status that Barack Obama has achieved. He is an icon for being an up-standing individual that is welcoming of all. Also, being politically correct avoids unintended exclusion. You don't know how many times I stop paying attention to ads that unnecessarily assume heterosexuality. Likewise, using terms like "gay" to mean "ridiculous" are a big turn off. But moreover, when talking to someone about their relationships, never assume sexual orientation. Instead, ask "are you seeing anyone?" or "do you have a significant other?" When describing someone, avoid using characteristics over which people have no choice (i.e. race). Instead, try saying something like "you know, the very loud person with a funny haircut" (vocal projection and hair style are very self-determined characteristics).

I look forward to meeting the new you!



Michael Seliske

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.

Animal Engineers: Up For Grabs For Your Co-op Positions



SYLVIA WU
2A MECHATRONICS

Disclaimer: This article is NOT about people who practice engineering on animals. The author loves animals and PETA (please do not send me any more videos of chickens being electrocuted). This article's sole purpose is to promote appreciation and respect for animals.

Are you a frustrated co-op employer who can't find a suitable student for your super low-paying position offering long hours and repetitive work? Look no further, the University of Waterloo offers non-homo-sapiens engineers who are up to the challenge of doing voluntary work without ever voicing their complaints, at least not in a comprehensible way. These co-ops are born with amazing engineering aptitudes, so in a way, they are even better than the traditional co-ops who may or may not have learned their skills well in school.

Below is a list of recommended candidates for a variety of fields. Please be advised that the University of Waterloo has no ethical way of enforcing these co-ops to attend interviews or accept your job match, hence all onus is on you to negotiate with the candidates and get them to show up to work.



Beaver: B.App.Sc., Honours, Co-op, Civil & Environmental Engineering with Water Resources option

This candidate enjoys working the graveyard shift. It specializes in building dams in both still and turbulent streams. The employer does not need to provide tools or materials to the beaver: it cleverly uses driftwood or chews down trees (usually birch, poplar, or willow) to build the majority of the dams, and will mix in mud and stones to re-enforce the strength of the dams in stronger currents. Housing needs not be provided for the beaver even if the work site is in remote areas (i.e. 2 hours north of Fort McMurray). The beaver will gladly build its own lodge near the work site.

Large projects are readily taken on by the

beaver. Its largest known project spans over 850m long, situated in Northern Alberta, about 190km to the north-northeast of Fort McMurray, south of Lake Claire.

The beaver also holds an honorary degree in Environmental Engineering due to its talents in restoring wetlands, as well as removing pesticides and herbicides from stream water. Beaver dams collect silt and sediments, thus the beaver pond becomes shallower and shallower over time. Eventually the water will drain out, but the rich layer of dead organic matter (branches, leaves, etc.) and silt left behind create an excellent habitat for wetland species. Water cleansing is done by the bacteria that proliferate at the bottom of the beaver dams due to the collection of cellulose from branches and barks. These bacteria metabolize and decompose toxins, and reverse the damage done by humans.

The beaver is not only good for water-work construction or environmental restoration companies, salmon fisheries should also consider the beaver for employment. Beaver dams are ideal nurseries for salmon. They provide deep water to protect young salmon from predatory birds. They also provide ample nutrients and calm water so the young can maximize growth for the adventure to the sea.

New Caledonian Crow: B.App.Sci., Honours, Co-op, Mechanical Engineering with Machine Designs option

This candidate hails from the distant land of New Zealand, also known as Middle Earth. It specializes in the invention and innovation of tools. Similar to the beaver, the employer needs not provide expensive raw material to this co-op. It readily fashions tools out of twigs and leaves. Need an insect-collecting device? The crow will snip and tear you one out of screw pine leaves. You can even choose from narrow, wide, or multi-stepped (with both narrow and wide ends) options! Need to collect insects out of holes? Ask the crow to strip bare a twig for you! They can even make scrapers out of their own molted feathers.

This co-op is even smart enough to quickly fashion tools out of materials previously unseen. While on exchange in Oxford University, a Waterloo student Betty was provided with a hook to retrieve a bucket of food from the bottom of a clear plastic tube. However, her good-for-nothing male colleague Abel stole it. As a strong-minded woman in engineering, Betty decided to make another one herself. She took a piece of straight wire and bent it into a hook. The scientists working with her were so impressed they asked her to do it over and over again, and each time she managed to make the tool in a more efficient way. What more can you ask for in a co-op

student? Innovation, determination, and un-animal-y intelligence, Betty has got it all!



Bee: B.App.Sci., Honours, Co-op, Architecture

If your architecture firm is losing its competitive edge, chances are that your designs are trite and uninteresting, and you need a talented Waterloo Architecture student to bring novelty-loving customers back. The bee can most definitely do that for you. You don't need to invest in bricks, concrete, mortar, or even a construction team! Just grow a patch of flowers and watch the architects carry out the construction themselves with beeswax.

Forget about rectangular rooms. The bees will build you hexagonal cells which utilize building material much more efficiently given a certain volume (think about all the cost savings!). The interior will also tend to be beautifully painted (think yellow, ochre, cream). The exterior will no longer be a boring rectangular prism, think elegant rounded domes that do not even need foundation. The bee is also an incredibly hard worker. If E5 and Quantum-Nano were commissioned to the bees, they would be done already! However, depending on the background of the specific bee, it may be a team player or prefer to work alone. Bumblebee nests are built entirely by the queen, while honey bees build their nest in swarms.

If you still have a pea-sized bit of doubt after reading our marvellous candidates' profiles, consider the following benefits to hiring critters

- over human students:
- They never take 30-minute coffee breaks
- They will not ask for an entire week off in September to have fun with frosh during Orientation Week
- They will not ask for overtime pay, or any pay at all
- They will likely be willing to live on work sites
- Work term length restrictions are out of the question. You can have them all season if you want to!

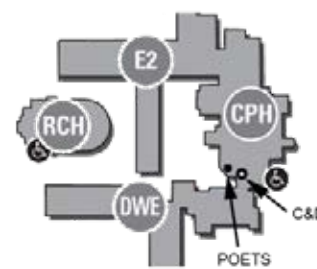
Convinced yet? Hire an animal engineer today!



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!



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

ENGINEERING SOCIETY



Last Issue's Puzzle Solutions



Black's move. Black wins big material.

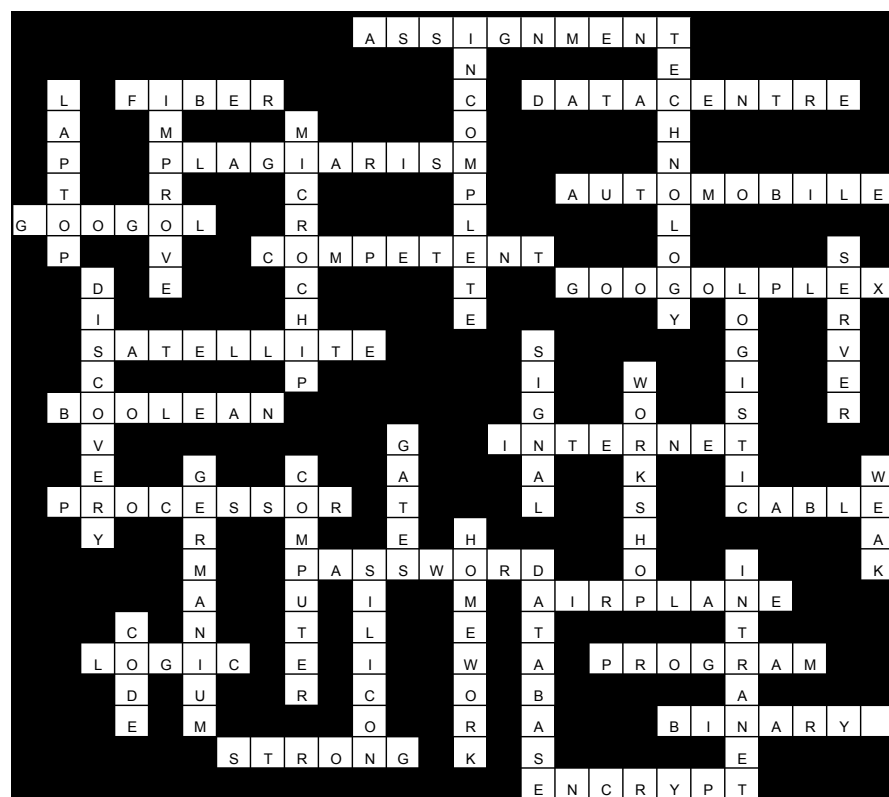
Difficulty: 1.8/5

Answer:

- | | | |
|----|-------|-------|
| | white | black |
| 1. | | Bxh2+ |
| 2. | Kh1 | Bg3+ |
| 3. | Oxh7* | Kxh7 |

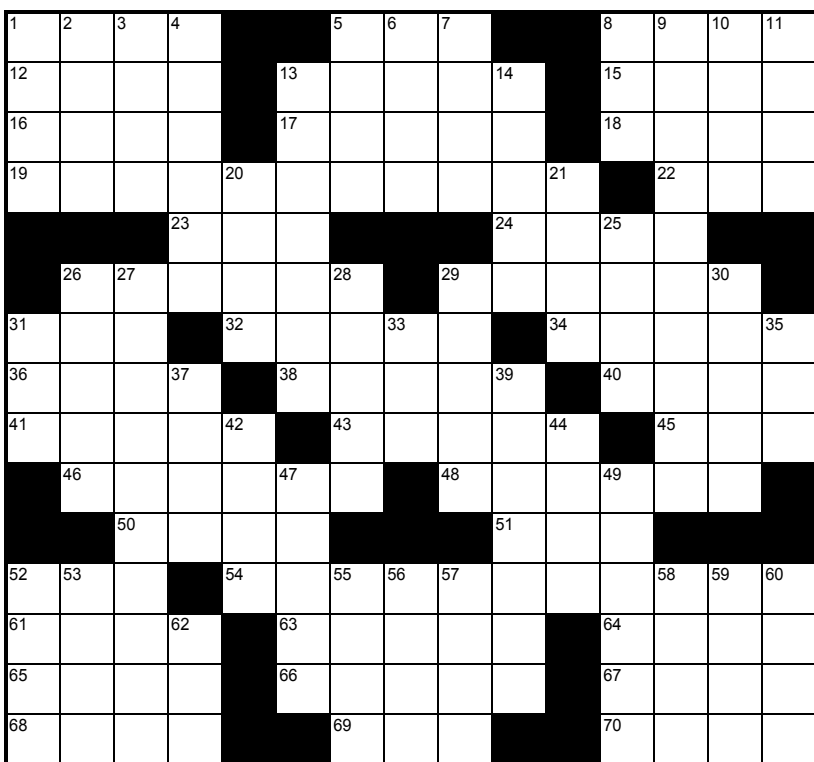
* Otherwise, Kg1, resulting in Bf2++, which is results in white losing the game.

In the end, Black wins the queen in the process by trading it with the rook.

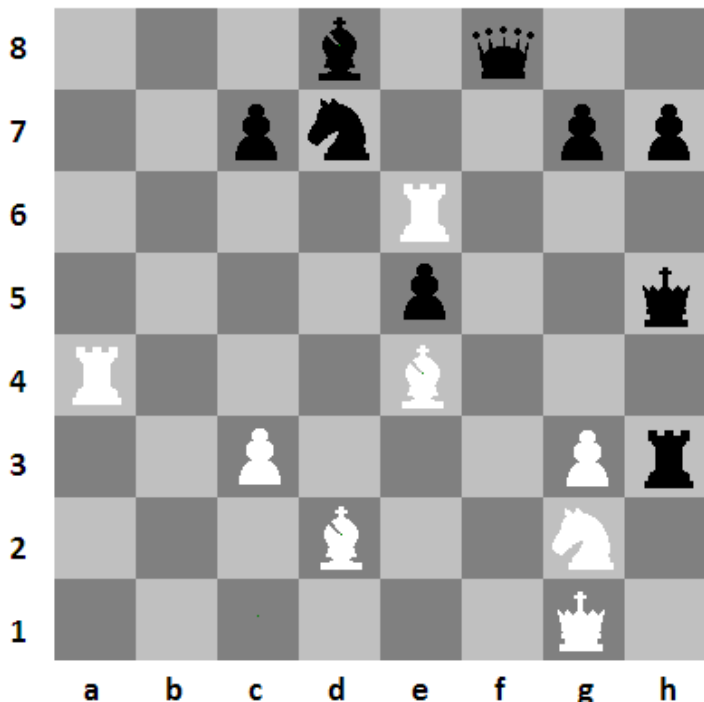


The Iron Crossword

SAMREEN ALIM
4B ELECTRICAL



ROB GRAHAM
4B COMPUTER



White's move. White mates in two.
Difficulty: 2.8 / 5

Crossword Clues

Across

1. Fee
5. A common singular personal pronoun
8. Smokey
12. Paul Atreides Sister in Dune
13. Loud ringing of Bells
15. Classical Greek Wife and Sister of Cronus
16. The Plural of a Constellation
17. Licorice Flavored Mediterranean Plant
18. Real first name of Jack from Dawson's Creek
19. Remove the water from my Juice
22. Informal Acknowledgement
23. Yours changes annually
24. First name of latest Bond girl
26. To Register
29. Slang for sign
31. Primate
32. Give the Impression of Being
34. Comparative of Sneakiness
36. Almost Old English
38. To remain for a while
40. Writer of "A Death in the Family" (1957)
41. Requirement for Ice Cream
43. Many thoughts
45. Killed Cleopatra
46. Plural process of cooking food
48. Silicon Analogue of Methane
50. Lack of Motion
51. Tennis: Hitting the ball high and deep
52. Parental participation outlet (abbrv.)
54. Cancer Specialists
61. UW Faculty
63. Those ride a slower canter
64. Singular of a common bar game
65. In place of
66. The act of increasing accessibility
67. A great lake
68. An ore deposit
69. Termination
70. State that promotes mold

Down

1. Ingredient in Baby Powder
2. Shock Absorber
3. Second Largest living Cat
4. Indian Militiamen
5. Previously dispatched
6. Found Exclusively on mammals
7. Scandinavian Elizabeth
8. Big Ship
9. Trick
10. Sandwich also known as a hoagie
11. 0.9144 m
13. Covering of rigid components
14. Attack (2 words)
20. Acts according to reality principle (Freud, plural)
21. Large Species of Deer (plural)
25. Western Chubs
26. Grand Drama (plural)
27. Previously consulted to a settlement
28. One of the explorers to first reach the Pacific over land
29. Many landmasses surrounded by water
30. Campus kings in the spring
31. Solution (abbrv.)
33. New Age Apothecary (abbrv.)
35. Slang for gang status
37. Used Agricultural tool
39. Garment customizers
42. Musical form in flamenco
44. Cricket Shot
47. Global supply chain company for integration of supply chains
49. Endured
52. Casket covering
53. More than a duo
55. Deal
56. Computer software modifiable by all
57. Give
58. The proper name of Sally
59. Reduce slightly
60. Stride
62. To file a legal complaint

profQuotes

"The nice thing about being old is that you didn't die young. So you guys aren't out of the woods yet."
- R. Andre, Math 118

"If we ever lost our accreditation then your degree will just be a piece of paper, like every other degree."
- D.W. Harder, 2A Welcome to ECE Presentation

"Nobody likes unpopular music... although some people like Slipknot... and some people like Celine Dion."
- S. Wood, Music 246

THE IRON INQUISITION

Michael Seliske, 2A Computer

"What do you think an engineering senator does?"



Kyle Hamilton
2A Environmental
"Provide a link between UW Senate and EngSoc"



Geoff Lee
3T Nanotech
"Sit in a room and vote on things"



Spencer McEwan
Engineering Senator
"They represent, listen, and observe until an academic issue arises that requires action"



Zachery Feld
3A Mechanical
"Decides where the money goes; we pay tuition so someone needs to decide"



Amalia Gil
2N Chemical
"I have no idea"