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THE IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

VOLUME 31 ISSUE 9 | WEDNESDAY, JULY 7, 2010



Your Freedom Isn't so Free

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VIVE LE TOUR!

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The Brew Man Group Drinks Europe

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<http://iwarrrior.uwaterloo.ca>



Happy 143rd Birthday Canada!



Check our pages 6 and 7 for a recap of Canada Day events from Waterloo to France.



A Toolbearer waves to Canada Day revellers during the Canada Day Celebrations at Columbia Ice Fields

Angelo Alaimo

Changes Pending to 1A Promotion Rules

ALEX HOGEVEEN RUTTER
3A ELECTRICAL

As part of ongoing efforts to mitigate first-year failure rates, a new option will be offered to 1A students on a trial basis starting this Fall term with full implementation projected for Fall 2011. Students who find themselves in trouble between midterms and finals will be able to drop 2 of their courses, presumably enabling them to focus on and pass their remaining courses.

The two courses will be re-taken the following summer, along with "Special Topics in Engineering," a course designed to develop students study habits, note-taking skills and generally prepare students for university life. Only common courses can be dropped, as the remedial classes will see students from all programs combined: those struggling with concept courses are out of luck. Similarly, each program may place additional restrictions (eg. Chem Eng students may not drop Che 102).

4-stream students who already have a job would still go on co-op as regular, while those without a job are given the option to drop co-op as well. 8-stream students

would also gain an extra co-op the following fall or winter before joining the next year's cohort. While the exact implementation is being worked out with the pilot and is difficult to explain in text, students will graduate 1 year late with the extra 'half' academic term, one extra co-op, and one term off (or possibly another extra co-op).

This option came as one of 25 recommendations from the First-Year Performance Task Force, designed to address first-year failure rates that have been rising since the elimination of Grade 13, with a 1B failure rate of almost 20% in recent years. It's clear students entering from high school are less capable of handling the university workload: while UW can attempt to address this cause, the bulk of UW's power lies in what to do with students once they are here.

Other recommendations from the First-Year Performance Task Force include creating a 'hell week' for midterms, revising the 1A curriculum to incorporate study skills, revising admission standards, quicker marking and feedback on student performance and improving the quality

See 1A on Page 3

The Queen Comes to Waterloo; Visits RIM HQ

ANGELO ALAIMO
3A ELECTRICAL

This past Monday, Research In Motion (RIM) rolled out the red carpet at their Philip street production facility giving Queen Elizabeth II and her husband Prince Philip a tour of production lines.

After leaving Toronto on a short 25 minute flight, the royals were shuttled via a motorcade of limousines to RIM's campus for their tour. Premier Dalton McGuinty, and RIM co-CEO Mike Lazaridis was also present during the tour meant to display RIM's technological accomplishments to the Queen.

Onlookers lined Philip street in front of the production facility hoping to catch a glimpse of the Queen before she entered the building.

Donning a white electrostatic discharge preventing smock emblazoned with RIM's logo over her outfit, the Queen toured the building. Along with Prince Philip and many others, she observed the assembly of BlackBerry Smartphones from start to finish.

The Queen, reportedly an avid Black-

Berry user, received a new white BlackBerry Bold 9700 smartphone from RIM co-CEO Mike Lazaridis before leaving the property and returning to her waiting plane at Waterloo Regional Airport for her return flight to Toronto.

From her arrival to departure, the Queen's trip to the Region (more so just to visit RIM), lasted just over an single hour.

Prior to Monday's brief visit, the Queen last toured the Waterloo Region back in 1973.

Yesterday, the Queen finished up her 22nd royal tour of Canada before leaving for New York City from Pearson International Airport in Toronto.

Her tour began after her arrival in Halifax, Nova Scotia last week Monday. Her travels brought her to the Canada Day celebrations in Ottawa where she made an address on parliament hill.

After spending several days in Ottawa, the Queen and Prince Philip became the first passengers to Winnipeg's new international airport before jet-setting off to Toronto for the final leg of her tour.

Letter From the Editor

In this issue.. and an explanation on how this paper is produced.



ANGELO ALAIMO
EDITOR-IN-CHIEF

Hello readers, busy, busy week for me, so let's dive right into this issue. First off, wow, 20 pages!

A couple interesting events happened since I last wrote to you. The G8/G20 summits rolled through Toronto like a freight train derailing from its tracks, the World Cup continues in South Africa, and Canada celebrated it's 143rd anniversary of Confederation.

Overall, slow news issue this time around. I had some more news pieces planned from around the University but they were unable to be compiled in time for this issue. C'est la vie, you'll see them next issue.

The G8/G20 has been beaten by the media stick so many times before this issue, I'm not really sure if I wanted to mention anything in this issue, but alas, we bring you an article by four engineering students who were arrested during the protests on Sunday at Queen and Spadina. You'll find that on page 4.

The Iron Archives feature a banner from the mid-nineties where I noticed many of the issues beginning to stray from the tradition news format to more of magazine type publication. In fact the last issue of the term of which I plucked the banner from actually has "magazine" in the banner itself. You'll see more of it in the next issue as we progress over the years with *The Iron Warrior's* transformation. In my opinion, the "news quality" of *The Iron Warrior* plummeted during the 90's, and is one of the reasons the decade is feature so sparingly in *The Iron Archives*.

Luckily, several *Iron Warrior* staff were in various places celebrating Canada Day. As a result, we have compiled their stories and photographs into a Canada Day Spread on pages 6 and 7.

On the Sports side of things, we bring you a lengthy but concise article about the Tour de France which began this past Saturday. Thought it was just men with massive legs dressed in tight spandex roaming through France on road bikes? I thought so, until I read the article on page 10.

On page 11, June Lowe, whom you might remember from 1st year classes celebrated 40 years with the University. We have a quick recap and photographs on page 11.

Moving along and continuing on the sports world, if you have been following the world cup, you already know the controversies, but if you haven't, a quick summary can be read on page 14.

The Brew Man Group, more specifically, "the Dan half" brings us up to date with his European travels as he continues to hop from country to country sampling the many beers which we have a hard time finding here at home. Even if you don't like beer, I recommend reading this article as Dan's humour makes the article very entertaining.

As this issue's Letter from the Editor reaches its maximum word count (I wrote the second part of the editorial first), we bring you some humorous articles in the latter half of the issue in the form of "How to succeed in the workplace." If you

haven't read the first installment from last issue, be sure to catch up with the series by reading it first before continuing to the second one. <http://iwarrior.uwaterloo.ca/?p=2771>

On the back cover, Bhavya Kashyap returns to the IW with her amazing drawing skills with a comic on the last page of the issue. As a result, we've moved the sudoku to page 15.

OK, that's all I'm going to go over for this issue. I've had a blast putting it together for you, so enjoy!

Next up in my editorial, I go over how I put together the newspaper over two weeks, so read on!

My fourth issue as editor-in-chief means my second to last letter from the editor. As the weeks progress, I find it more difficult to write the policy-manual mandated text that fit's into the space of page 2 of every issue.

The first letter from the editor rolled off my fingertips onto the screen like British Petroleum's malfunctioning blowout preventer; as did my second. I suffered partial writer's block for the first time on my third after a lengthy production weekend likely due to a midterm hangover, but was able to piece together what I planned on writing as an article into my editorial.

Now as I write my fourth editorial, I once again suffer partial writer's block, but want to take the time to discuss how *The Iron Warrior* comes to your eyes 5 times a term. I also figure the production of *The Iron Warrior* has changed over the years so it's good to write it down how it's produced for history's sake.

First, meetings take place ever week on Monday in our office where dedicated volunteers of this newspaper and I brainstorm ideas for articles. Before the meeting, I scan the websites of the University and faculty for upcoming events and recent news to produce articles ideas to present at these meetings. If an article interests a volunteer, they will sign up for the article and begin the process of gathering the information.

Generally if people don't sign up for articles I REALLY want covered, I'll try to voluntell the article out to my staff. It works... sometimes. Apart from that, staff will come up with their own ideas for articles and then write them on their own.

Leading up to the submission deadline, we try to solicit advertising for the paper to pay for our publication costs. As I've mentioned many times, *The Iron Warrior* does not receive any fixed funding from engineering society student fees in terms of X dollars per student to cover our costs. We have the opportunity to apply for EngSoc donations each term, but no amount of money from EngSoc is guaranteed. Our capital purchases in terms of computers and software are completely dependent on WEEF. We generally have enough money to cover our publication costs, but only just.

Deadlines are always on the Friday at 6 PM the weekend of production. Articles tend to slowly arrive before and after the deadline which eases my mind. The email notification on my BlackBerry is music to my ears. After receiving the articles, they are placed onto our website backend for the copy editing work flow.

Our dedicated team of copy editors can log in from anywhere to begin the copy editing of each article. In total, each arti-

cle goes through three rounds of editing - a first, final, and finally I will go through each article to do a publication edit before placing the article in the issue.

After all the articles have been edited, layout can commence. At *The Iron Warrior*, we use Adobe Indesign CS4 for our layout purposes. Our template has evolved over the years, and it's quite advanced and complex, so layout goes pretty smoothly. During my first production weekend as editor, I likened layout to playing tetris. Trying to fit the pieces as perfectly as possible, but instead of consistent rotating blocks, I have oddly shaped article bits and photos. I try to place them within similar sections, but sometimes this is very difficult and word spacing and titles need to be adjusted as necessary. My first three issues practically laid themselves out, but I found this issue to be particularly challenging.

Once layout is mostly complete on a page, awkward white spaces tend exist. To me, and *The Iron Warrior*, we don't like white space. To see an example, check out the white space on either side of the sudoku on page 15. With our limited financial resources, white space is seen as a waste of money as text or photos could be placed into the spaced to be presented to our readers. I know it may make our paper look cluttered and unattractive with solid walls of text but I really stress trying to get as much content as possible into our issues to make sure no submission gets left out.

After battling with layout which can take upwards to 20+ hours on a given production weekend, the draft is finalized and sent out to the mailing list which is then looked over by our volunteers for any glaring errors. Most errors get found, but some do unfortunately make it's way through to the printed copy.

The final PDF is sent printing Monday just after noon when I have time after my lectures to get into the office and finish the last few corrections before sending the final press optimized PDF to our publisher.

Two days later the issues arrive at our office all boxed up and ready for distribution. Our distribution managers distribute almost all 2,000 copies around the campus with issues also being sent to the Architecture campus and being mailed out to many other Engineering Societies and Deans across the country.

Without the very dedicated army of volunteers of this newspaper, none of the above would occur and our publication would not likely be here in your hands today. Also, I want to mention Mary Bland in The Orifice who takes care of invoicing to our advertisers. Without her help, my life would be exceptionally more hectic than it already is.

If you, the reader are still reading this editorial, it's likely you care about *The Iron Warrior* enough to read my rant every week. If you've read the ending of all my editorials, I always end with the email address to send me suggestions to improve. I haven't received any so I'll attribute this as no news is good news. However, if you feel this newspaper can be improved, I implore you, the reader, to send me your feedback. Better yet, attend our meetings on Mondays at 5:00 P.M. in our office E2-2349A.

Cheers.

Angelo Alaimo

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THE IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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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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Issue #5 Deadline: Friday, July 16th at 6:00pm for publication on Wednesday, July 21, 2010

Send your submissions to iwarrior@engmail.uwaterloo.ca

Spring'10 Publication Schedule: July 21

FROSH ISSUE DEADLINE: AUGUST 13, 2010

Province Pledges \$300M for Waterloo Region LRT



JON MARTIN
2B CIVIL

The provincial government has pledged \$300 million for the Region of Waterloo's rapid transit system, causing hope for some and anger for others. The rapid transit system has been under consideration for several years, with a plan submitted to the provincial

and federal governments for funding. The project is estimated at costing \$790 million, now putting pressure on the federal government to match the funding pledge.

The proposed rapid transit system would be composed of electric trains between Fairview Park Mall in Kitchener and Conestoga Mall in Waterloo, with fast buses connecting to Cambridge. As a result of this imbalance the Mayor of Cambridge, Doug Craig, has objected to the project, proposing a system of rapid

buses instead. The system was proposed to help promote housing and jobs in the downtown areas of the region, connecting the cities along 18 stations which could become the hubs of redirected Grand River Transit buses.

The public reaction of anger is a result of the difference between this pledge and the provincial government's pledge in 2007 to pay up to two thirds of the project, approximately \$512 million. If the federal government sticks to the one-third amount anticipated it

would leave the municipality responsible for the \$212 million difference.

Politicians have remained hopeful though, as this pledge will help keep the project moving forward towards construction and completion. Without the promise the project could easily have failed before it was even under consideration. Eyes are now on the federal government to see what they will pledge, and how much will be left to the Region.

Formula SAE Gives Back



ERIN MATHESON
2B CHEMICAL

This past Wednesday, June 30, members of the Big Brothers Big Sisters chapter of Kitchener-Waterloo crowded into the south campus C parking lot to watch a display put on by our very own Formula Society of Automotive Engineers (SAE) team.

Members of the team showed off their new car to the kids in attendance, gave a brief talk on some of the basic science and engineering principles that went into the car, and then took the car out for a test spin around the lot. They demonstrated the three events that make up their major competition; acceleration, braking and driving around a SAE-style racetrack.

Kids of all ages sat at the sidelines in awe of the vehicle's roaring engine, rapid accelerations, and tight turns. During the acceleration portion of the demonstration, the car reached a top speed of over 100 km/h before quickly coming to a controlled stop at the other end of the parking lot.

In partnership with Research In Motion, one of their major sponsors, the SAE team participates in outreach programs with elementary and middle schools in the local area, working to get kids interested in areas of engineering, technology and science.

Over the past several years, the team has given numerous talks at local schools, and has participated in workshops hosted by RIM that gives teachers additional tools and ideas to use in the classroom to encourage interest in these fields.

Friday's event was the team's first with the local Big Brothers Big Sisters group, and it was a hit.

The event was a conclusion to the Big Brothers Big Sisters chapter of Kitchener-Waterloo's annual daylong picnic, and even after a day of activities the kids were still extremely excited to see the car and watch it drive around the makeshift track outlined with cones in the parking lot.

It was a fun afternoon watching a University of Waterloo engineering student team give back not only to the community, but also to a few potential future team members as well.

Thumbs Up/Thumbs Down



Thumbs Down to Waterloo Regional / Campus Police for trying to make the Tool / Toolbearers leave Canada Day Celebrations



Thumbs Up to Waterloo Regional / Campus Police for accepting our traditions and letting us stay



Thumbs Up to a free trip to Paris!!



Thumbs Down to Ghana losing in penalty kicks



Thumbs Down to the doors still being locked on weekends!



Thumbs Up to Montreal for proving that the cake is definitely not a lie.

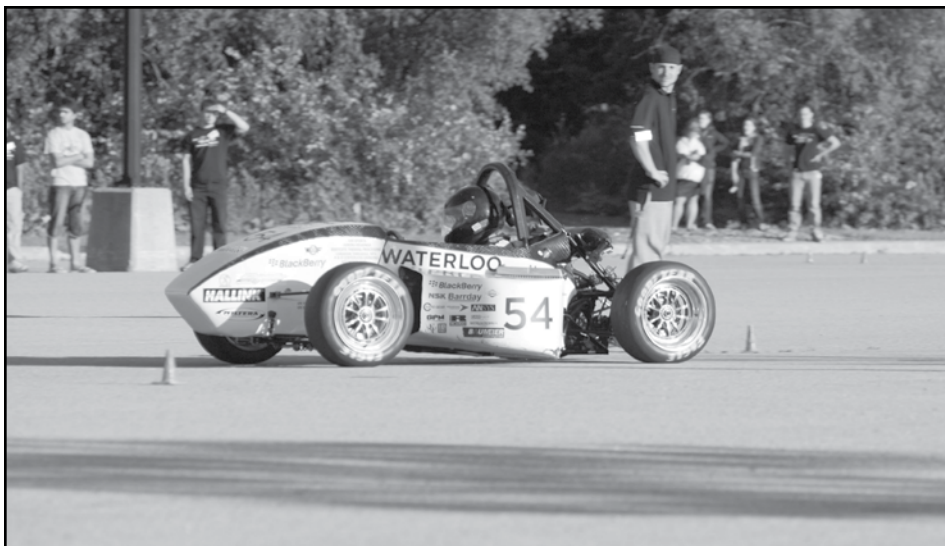


Thumbs Down to the Queen visiting Waterloo only for RIM



The Formula SAE team poses with the 2010 car.

Angelo Alaimo



The 2010 Formula SAE team car rips around parking Lot C after performing an acceleration test and a emergency braking manoeuvre.

Angelo Alaimo

1A Courses Can be Dropped

From 1A on Page 1

of teaching through the Centre for Teaching Excellence. It is incumbent the student executive hold administration accountable to these recommendations and hopefully many of the 25 recommendations will be implemented and create a positive impact on mitigating the first-year failure rates.

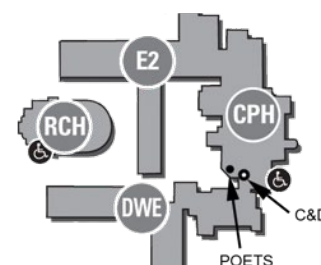
One of the more controversial aspects of this measure is that it replaces a previous transitioning measure in the form of a lowered passing standard (50%) for 1A students. The main problem with this rule was that over half the students passing 1A with a mark between 50 and 60% subsequently went on to fail 1B. Rather than displacing failures to 1B, the new measure is designed to help struggling students self-identify and improve their preparedness for university before moving on to more difficult terms. The measure was largely student-driven, as students were concerned about failures appear-

ing on their transcript negatively affecting future job prospects. While graduation may be delayed a year, the new measure will ideally give students the skills they need to be successful at the University of Waterloo, while not leaving a black mark on their transcript.

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



Your Freedom Isn't so Free

CONNOR ALLABY, CYRIL FRANCIS, BRAYDEN MCNEILL, AND UMAIR MUHAMMAD

Editor's Note: This article contains a very revealing first hand experience from four engineering students who were in Toronto protesting the G8/G20 summits. Consequently, the four were arrested by police at the intersection of Queen and Spadina during the Sunday of the summit weekend. This article also contains opinions and views that do not necessarily express the opinions and views of The Iron Warrior, or the Engineering Society.

"Get out of here before I smash your f***ing face!"

So ends another would-be civil conversation with one of Canada's proud peacekeepers during the protests at the G20 in Toronto. Here are some more of our favourite cop quotes from the weekend of June 25th:

"If you protest we'll arrest you."

"I hope you've learned your lesson" (after being arrested for protesting)

Hi. We're four of your fellow classmates here at UW, and our names are Brayden, Connor, Cyril and Umair. All four of us, along with about 200 other people, were arrested on June 27th at the intersection of Queen and Spadina. We were told that three of us would be charged with "breach of peace" and one with "conspiracy to commit mischief." The latter implies that destruction of property was being planned. We were detained for up to four hours before being let go unconditionally.

We'd like to tell you the full story. Let's start from the beginning: what are the G8 and G20 and why were we even there?

Canada played host to both the G8 and G20 summits from June 25th to the 27th. The G8 met in Huntsville, while the G20 summit was in Toronto.

The G8 (the Group of Eight) is a gathering of the 8 most rich and powerful nations from across the world. The G20, a relatively new and increasingly prominent institution, is essentially an expanded version of the G8.

The problem with the G8/G20 is that they are anti-democratic. There is already an international forum for discussion and planning of international affairs. It's called the United Nations, and it brings together all the nations of the world, not just the rich ones. The existence of the G8/G20 undermines the authority of the UN; the rich countries don't want to worry about getting outvoted by the poor ones.

Granted, the UN has its problems, but it is the preeminent multilateral institution of our day. In a time when we should be trying to increase the effectiveness of the UN, the G8/G20 seek to circumvent it, and in doing so, are further polarizing our already divided world.

Something prevalent in media reports about the G20 was mention of the large number of issues being protested. The media presented this as if to suggest that protesters with different issues of concern were disunited or even adversaries.

The protesters were united. The vast majority of them came from the progressive side of the political spectrum and although they might themselves have represented one or a few issues at the protests, they stood in solidarity with each other. Someone who is concerned about

the unjust exploitation of the third world's mineral resources will find affinity with those raising their voices for other social justice issues, such as the environmental crisis, indigenous and minority rights, the wars in Afghanistan and Iraq etc.

The protesters were all united in the belief that the G8/G20 is an illegitimate forum and should be abolished. That is the primary reason why the four of us went to Toronto; to protest the very existence of the G8/G20.

The Toronto G20 agenda included discussion of the world economy and global financial reform in light of the ongoing economic recession. The idea of 20 rich countries discussing issues that will affect the entire world and the implications of the decisions they make is something not covered very well in the media. The communiqué released at the conclusion of the G20 states that the participating developed countries would cut their deficits in half by 2013. At the same time, it instructs countries to keep the reforms they make "growth-friendly." In other words, corporate tax rates will remain low, spending for social programs will decrease, and the average person will pay the bill for the bankers' crisis.

Deficit cuts would be great, if they were accomplished by beginning to tax big business at reasonable rates, reducing military funding, or promoting environmentally sustainable economies.

However, keeping in mind the history of economic reform in the developed world, it is predictable that none of these progressive reforms will be implemented.

The cost of the G8/G20 meetings should also be kept in mind. You've likely heard about the \$1.1 billion it took to host the joint summits. The UN's budget for an entire year is about \$2 billion. For three days of discussions, Canada spent half of what the UN spends in a year.

In addition to the fact that the G20 shouldn't exist, in addition to wasteful spending it has created, the G20 refuses to address pressing issues that need to be addressed.

For example, the state of the global environment weighs heavily on our minds; as the minds of the world leaders ponder how help keep the bankers rich. The following is a list of very troubling facts

about what we have done to the environment:

Half of the global rainforests are gone. At the present rate of removal only 10% will remain by 2030.

90% of large fish are gone, victim to wanton predatory fishing practices.

Half of the world's wetlands were destroyed in the twentieth century.

The rate of species extinction is a thousand times greater than before humans existed.

At least 300,000 people die every year as a result of global warming – the vast majority of them live in the third world, the part of the world least responsible for climate change.

We have drastically altered the face of the world we live on, but it is not too late to stand up and commit to drastic change. Yet select world leaders get together to find solutions to the crises we face and only give lip service to the environment and climate change. It's certainly a case of misplaced priorities.

Security costs for the summits amounted to more than \$900 million out of the total budget. 19,000 police officers, brought in from around the country, were posted all over the City of Toronto. It was difficult to walk a few blocks without seeing the large groups of police.

Images of burning police cars and broken windows filled news reports about the protests.

The fact that only a small number of acts of vandalism and supposed violence occurred, while the overwhelming majority of protesters demonstrated peacefully, was not reflected in the media.

The conditions under which the vandalism took place are in themselves suspect, however. It is our belief, and has also been covered by some in the media, that the police created the conditions for the vandalism to occur. This was done in order to avert attention from reports of abuse of power by police, justify the bloated security budget, and stifle dissent expressed by protesters.

A couple of us were present as police officers drove a police cruiser into a street full of protesters, got out, and left the area. The cruiser was spray painted and damaged by a few of the more daring

protesters present. After we had left that we heard that the cruiser was eventually set on fire.

We questioned a police officer about why the police abandoned the cruisers. His response was: "Just because a car was left there didn't make it alright for anyone to set it on fire." Well, that's exactly right; people shouldn't vandalize or destroy property. And it's the police's job to make sure that people who would want to do such things are stopped. It's not the job of the police to instigate destruction of property. This was a display of extreme irresponsibility, and we claim this to be unlawful behaviour by the police. Conspiracy to commit mischief was a charge that was going to be brought against one of us; it should in fact be brought against the police officers who hatched and deployed the plan to bait protesters into destroying police cars.

In any case, the issue of vandalism at the G8/G20 is unimportant. What should be discussed across the country is the large-scale suspension of civil liberties because of the meetings. If you have ever read the Canadian Charter of Rights

The fact that only a small number of acts of vandalism and supposed violence occurred, while the overwhelming majority of protesters demonstrated peacefully, was not reflected in the media.

and Freedoms, you will know something of the freedoms afforded to all Canadian citizens; freedom of belief, opinion and expression, freedom of peaceful assembly, freedom of mobility within the country, freedom

against unreasonable search and seizure, arbitrary detainment or imprisonment, the list continues.

We have personally witnessed and been victim to the suspension of each and every one of the rights listed above. Throughout the G8/G20 the police regularly intimidated demonstrators and violently disrupted peaceful protests. Hundreds of people were subject to unlawful searches. Movement throughout the city was restricted by thousands of police officers.

While the mainstream media continue to report on the violence and vandalism perpetuated by the protesters, Canadian citizens should consider the scale of the crimes committed by police against peaceful protesters. What will be the implications for our democracy if dissent and protest is outlawed?

EngPlay Presents:



The Birds: A Modern Adaptation by Don Zolidis



July 15th, 16th, 17th

7:00 pm

AL 113

\$5

Tickets Available in the Orifice



THE IRON WARRIOR

Monday, February 14, 1994

The Forum of the University of Waterloo Engineering Society

Issue #2

From The Iron Archives

80's UW Image, 90's Computer Strategy, Corporate Responsibility, and a \$25 Air Conditioner



ERIN MATHESON
2B CHEMICAL

Spring 1985 Issue 3, July 1985

The main story featured in this issue was the reprint of an article from the Toronto Star entitled "Whiz Kids Have No Fun", which tore the image of Waterloo students limb from limb, and fully empowered the nerdy, anti-social stereotype often associated with the University.

The article describes campus as a 'go-go-go place where you pound the computer at 4 a.m. to catch up with your classes. And your classes are constant because the competition with other students is tough too.' Although the emphasis on the academic and workplace focuses of the university as a whole can be deemed as relatively valid, the article goes on to depict the university as a whole as some type of institution where bright minds and optimistic souls come to meet their maker and loose all hope.

The writer explains, "There's not much joy to all of this and there's not much spirit either on a campus where the first loyalty is to 'me' and a hopefully prosperous future, rather than to a faculty, a fraternity, a class, a college, or the university itself." I do realize that I cannot speak for the nature of the University at the time, but I strongly oppose this portrayed message. The message 'work hard, play hard' is one that is always recited, especially within such a challenging faculty such as engineering. In the issue, the article is printed in the centre spread opposite the 'Plumbers Forum', or the '85 equivalent of what we know as

the Iron Inquisition. In this they asked, "What was your impression of the article, "Whiz Kids Have No Fun?" and the majority of the six answers published strongly opposed the lackluster social image used to depict campus life, so one can only assume the same message was portrayed back then.

The article goes on to quote a 'lack of university spirit' due to a 20 percent student union vote, and small attendance to sporting events. Although the last B-Soc election was in the 30% range of voter turnout, nowadays, any undergrad engineering society would consider that a good voter turnout. This just goes to show that both engineering and school spirit as a whole has struggled from day one at UW.

Although there are groups within not only EngSoc, but UW as a whole who may feel that there is a strong sense of engineering or school pride and spirit, that is clearly not representative of the entire student body, and it is not that apparent to those around us. The article mentions how there is no 'elitism of Queen's or the country-club atmosphere of Western' on our campus, which is a bit of a catch 22. I'm sure no students here wish to be perceived as arrogant, but there is something to be said for visible school pride, regardless of whatever form it may take. Every generation views it as a new problem, when it in fact has been a problem for decades.

Spring 1990 Issue 3 - June 8, 1990

Shortly following the entrance to an era of computers slightly smaller than a Honda Civic, the majority of content of this particular issue is about the induction of Dr. William Wilson as the new Associate Dean for Computing, and the role of computers within engineering and the engineering curriculum.

One article by a 4th year Chemical student outlines the push to transfer most of the co-op department to an online system, in hopes of removing the need to physically post lists of interviews in on-campus buildings and the amount of hardcopy paperwork sent to employers. After years of planning and waiting, a co-op student was hired in January of that year to work on the project full time, and the online system would be the responsibility of that co-op student until it was completed.

The only additional available aide was one

"full-time" data processing staff member who had numerous other obligations as well. Along with this foolproof development plan, the article goes on to describe that although the co-op department made it seem like this new online system was just around the corner, the department and the Registrar's office had yet to meet regarding content of the students 'mark summary' that would be included in the system.

Although no mention of the potential name for the new system, the article gives the impression that the system will simplify the job searching process to make it feel like the students were searching in a Mine full of Jobs, and that it would be so advanced, there would be no need to add additional servers, or make system upgrades until at least 2010.

Additional articles in the issue go on to explain the computing resources available to engineering students on campus, including the infamous 'WATSTAR' lab, which based on pictures just looks like the Helix Lab as it is today but without colour monitors. Laser printers and the recent upgrade from WordPerfect 5.0 to 5.1 were all the rage.

In an interview, Dr. Wilson goes on to explain that although all of the software is cutting edge now, part of his newly appointed role is assuring that all of the computing labs keep up with the times. "We must have up to date hardware, relevant and up to date software, an accessible environment, and we must integrate computing into course work."

Now, this article being 20 years old, it's more than reasonable to assume that Dr. Wilson has moved on, be it to another position or a sunny beachside townhouse in south Florida. Sadly, he must have taken his mission statement with him and erased it from the memories of all of his successors, which is clearly the only realistic explanation of why my Microsoft Word has to initialize every single time I open it on Nexus.

Spring 2005 Issue 5 - July 26, 2000

Alex Matan, a 2nd year ECE student wrote an opinion piece entitled "Limited Liability: Enough Already!". He explores the topic of how many large corporations are able to continue operating regardless of the hurdles or mishaps (excluding perhaps bankruptcy) thrown their way.

One historical incident he refers to is the Exxon Valdez Oil Spill in 1989 in which an oil tanker carrying Exxon oil struck a reef just off the coast of Alaska, spilling a total of 32 million US gallons of crude oil into the ocean. Matan highlights how the captain of the ship was fined, the owner company of the vessel was sued, and yet Exxon continued to chug along relatively unscathed by the incident.

What at the time seemed like what would be a single incident, although horrifying, begins to sound all too familiar nowadays in the wake of the current BP

incident in the Gulf of Mexico. In time with Matan's accusations, at the time of the spill, BP worked tirelessly to place the blame on the owning and operating company of the rig. Matan raises a highly valid point; how are we, as engineers, expected to operate with such rigid moral values and to make just decisions with the understanding that we are liable for our actions, when in the habitats of the corporations we may one day work for, liability is a four letter word?

The article concludes with a pseudo call to action against this trend, and although this one article was clearly not a strong enough catalyst to provoke change, there was definitely a common public feeling on how corporations were controlling the rules of the blame game. The most chilling and concerning part of this article; the fact that not a single thing has change din the past 10 years.

Spring 2005 Issue 4 - July 13, 2005

The front page article of this issue shows off WEEF TA Geoff Milburn and his '\$25 air conditioner' that brought him some fame and a little bit of fortune.

Milburn had the idea to place coils of copper wire carrying cold water inside a conventional oscillating fan to increase the effectiveness of its cooling. The whole contraption, which he built himself, cost a total of around \$25. After a post on the tech blog Slashdot, the attention and comments came pouring in; Milburn was interviewed by National Public Radio, CBC Metro Morning, as well as the Waterloo Record. Milburn also placed a few Google Ads and turned a decent profit for himself.

Despite the odd project nitpicker and Slashdot 'flame', the project brought Milburn a lot of praise, and a far amount of traffic to the Engineering Computing servers, where his web page was hosted. So much so that Milburn received a letter fro Engineering Computing saying that they would have to remove some of the image links on his website to help the servers handle the traffic.

All of the publicity helped put Milburn in touch with a number of top engineering firms for his next co-op placement, and no doubt into the jealousy books of his friends as well. In true engineering student fashion, the article concludes with Milburn's plans to upgrade his invention, including ideas such as using a fine mesh of copper wire to increase the heat exchanger area, as well as utilizing condensing coils from old refrigerators he found stranded on the street curb.

Although the webpage listen in the article no longer existed (yes, curiosity got the better of me and I checked), there's no doubt that there are still records of this contraption hidden in some strange crevice of the Internet for those looking for a new way to beat the gross Waterloo summer heat in true engineering fashion.

NEED A WEB DEVELOPER?

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Canada Day from Around Ontario and France!

WATERLOO

ERIN MATHESON
2B CHEMICAL
PHOTOS BY
ANGELO ALAIMO

For those of us choosing to stay in Waterloo for the very long weekend, we were lucky enough to have one of this city's biggest celebrations happening up at Columbia Lake. Every year, the Federation of Students (FEDS) along with each Faculty's student society, puts on a massive daylong event filled with performances, activities and great food for students as well as the surrounding community. A total of 60,000 people make their way to North Campus to take in the festivities.

During the day there were countless activities running as well as numerous performances taking place on two separate stages. The mainstage hosted several mainstream-style musical acts and the Children's Stage was host to several local performance groups including UW's own Engineering Jazz Band and acapella group the Waterboys, all of whom drew a large crowd of eager spectators. As always, EngSoc put on its 'Mini-Olympics' events for children aged 6-13, including fun events such as a dunk-tank, potato sack races, balloon tango and the always-popular waterslide. The TOOL and Toolbearers also came out for the day, and children had the opportunity to dress up like a Toolbearer and meet the TOOL. Even Campus Police came out to meet UW Engineering's much-loved mascot.

If games or being aged 6-13 wasn't really your thing, there was still a ton to do. Several food and arts and crafts vendors offered up good eats as well as good shopping to pass the day. There were a number of activity stations open for the young and the young at heart scattered at various locations throughout the field. A personal favorite of mine was the high flyers kite club located at the north end of the field, where large, magnificent kites of fish, scuba divers, and other creatures floated effortlessly in the sky. People of all ages walking by couldn't not stop and turn their heads and look up in awe. Even with all of this available, many people simply chose to kick back along the field's steep hill-sides and soak up some sunshine, since there was a lot of it that day.

When the sun finally set, the crowds swarmed the field in search of the best seat to take in the annual firework show set off from Columbia Lake. I myself have always been a fan of fireworks, as I'm sure many others are, but I can say with confidence that there was a certain 'je ne sais quoi' that made this year's show particularly impressive. I managed to find a seat only a few meters from the edge of the lake, and I had the treat of the large clusters of vibrant colour practically displayed directly over my head. The surrounding crowd of thousands clearly shared the same fascination, as each cluster of explosions was accompanied by unmistakable 'Oohs' and 'Aahs' as the sky lit up. Everyone was so clearly focused on the display that not one single movement could be sensed from the massive group of spectators.

Leading up to the weekend, it always sounded shocking to others that I was choosing to stay in Waterloo for the ever-rare extra long weekend. But I figure, with a grand celebration like this right at campus' doorstep, who would want to leave?



The Engineering Jazz Band With Respect to Time played the children's stage early in the afternoon at CIF



VP Internal Peter Kelly gets dunked at the Waterloo Canada Day celebration



Children had the opportunity to dress up as a Toolbearer and have their picture taken with the TOOL



The main stage hosted a variety of performances throughout the day including Rufus who played immediately before the fireworks began signalling the end of the evening.

TORONTO

AMANDA LEDUC
3N MANAGEMENT

This past Thursday was Canada Day and I noticed that a popular thing to do is go to Ottawa to celebrate. I understand you B-Soc kids got Friday off (lucky slackers) which makes a beautiful four day weekend! Unfortunately, those of us on work term don't automatically get Friday off, so traveling all the way to Ottawa wasn't a (feasible) option. Not to mention Ottawa makes people do crazy things like lick each other in bars, or maybe that was another influence? Either way, my A-Soc friends and I considered traveling from the GTA to Waterloo for the day but also decided that was more trouble than it was worth. The final decision was to stay in Downtown Toronto and celebrate Canada's 143rd birthday on the Harbourfront.

I've always been a fan of Toronto's Harbourfront. Sure its pretty small, smells like garbage sometimes and is always really packed on weekends and holidays, but who doesn't enjoy a good full contact speed walking game to get from one end to the other? With this in mind, my friends and I set out to enjoy a hot afternoon on Toronto's historic harbourfront area.

There were tonnes of free activities and shows going on all day aimed mostly at families. Our favourite was definitely the Diablo juggling act that took place twice on the Redpath Stage. The performer (Veronique) used sticks attached with a string and this spinning yo-yo type contraption to do all sorts of tricks. My explanation of this art is really not so good so you should totally check it out on youtube. During her second act at night, she lit the spinning thing on fire which was super awesome (and slightly scary) to watch this flaming spinning contraption of doom flying all over the stage.

When it was time to eat, we ventured to the Queen's Quay centre to check out the restaurants. As we found out, it was minimum a 1 hour wait to eat on a patio, but no wait to eat inside. As much as it would have been nice to eat outside, waiting around for at least an hour just isn't my idea of fun so we ate inside at the Watermark Irish Pub. I must recommend this place, its definitely one of the nicest Irish Pub's I've ever been in and has a super awesome location (nothing against Molly's, its lovely too).

Later in the evening, we got coffee at Williams and wandered down to the dock area so we could watch the fire works over Lake Ontario. If you are familiar with Toronto's waterfront area, you'll know that the fire works happen at Ontario Place which is a few kilometers away from the dock at Queen's Quay and Spadina where many people (including my group) tend to watch. We could see most of the fire works but I think we were too far away to get the full effect. You know that lovely sonic boom you feel when you sit really close to fire works? Well, we were too far away to really feel it (a good 3 seconds away by Jeff's count between flash and boom). Although the dock we were on was packed, I think if we were to do it again, we would try to get closer or even shell out the grounds admission fee and go to Ontario Place to watch the show up close the way it was designed to be seen.

Overall, Canada Day on Toronto's Harbourfront is definitely worth experiencing despite the massive amount of people and crowds everywhere. If you ever make the journey to this national celebration in Toronto, make sure you stay for the half hour fire works show at 10:30pm which is pretty spectacular.

CELEBRATION IN OTTAWA

CAILIN HILLIER
3A GEOLOGICAL

I was fortunate enough to make it to Ottawa for Canada Day and what a celebration it was. The 143rd Anniversary of Confederation was my first time celebrating Canada Day in Ottawa and it was fantastic. There was so much to see and do, it was extremely difficult to take it all in, and I recommend that every Canadian make the trip at least once in their lifetime. The Ottawa Citizen estimates 350,000 people attended festivities in the downtown Ottawa area on July 1st; saying it was a little crowded is probably the biggest underestimation someone could make. I have never been to an event of this magnitude before in my life.

As most know, Queen Elizabeth II was in Ottawa for Canada Day, and did she ever draw a crowd. She arrived on Parliament Hill in a horse drawn carriage around noon. After O' Canada and God Save the Queen were played, Prime Minister Stephen Harper gave a quick speech regarding the "success" of the G20 in Toronto this past week, then the Queen took the stage. She was wearing a wonderful red dress and a hat with matching red flowers; there was even a maple leaf brooch on her lapel that I later saw in photographs.

Much of the Queen's speech was in French, which I thought was really neat. Standing in amongst the crowd, it was difficult to hear her; however, I was able to view everything on the CPAC channel later on in the day. Queen Elizabeth's words were extremely positive in regards to Canada and the exciting events that have taken place here recently, including the Olympic Winter Games.

Throughout her time on Parliament Hill, the Royal Standard of Canada, also called the Queen's personal flag, was raised at the top of the peace tower. After several other speeches were given and songs were performed, the Queen walked the red carpet through the crowd, waving warmly.

There was a great deal of excitement in the air as the snowbirds were flying over

head in formation and the 21 gun salute was given for the Queen. As she left Parliament Hill by car, the Queen traveled down Wellington Street. The group of Waterloo students I was with were able to see her through the car window as she waved her white gloved hand to the crowd. Within seconds, the Queen's standard was replaced with our maple leaf flag at the top of the Peace Tower and then Canada Day festivities truly began.

The Jazz Festival and museums in Ottawa were free all day and people were able to enjoy everything that there was to see. Street vendors and buskers lined the streets and people milled about in their various patriotic adornments. I have never seen so much red and white in my life. Or dresses made out of flags with maple leaf face paint. Walking along the canal, it was evident that everyone was excited to have the day off to celebrate Canada and enjoy the sunshine.

Later in the evening, musical performances commenced. Two stages were open to the public, one on Parliament Hill and the other in Major Hill Park. Everything started on Parliament Hill at 6pm with a pre-show by the official Team Canada DJs – definitely the best DJ'ing I have ever heard.

The musical acts included a variety of French and English performers, some I have heard of and some I hadn't, but all proving to be entertaining nonetheless. Such performers included Johnny Reid, Hey Rosetta!, Alex Cuba, Michael Kaeshammer, Samian, the Campbell Brothers and Dione Taylor. Joannie Rochette even gave a speech to her adoring fans. Oh, and how could I forget The Barenaked Ladies. They really are as good live as everyone says. Following a priceless rendition of If I had a Million Dollars, fireworks commenced. They were spectacular, providing all the glittery, sparkly, twirling explosions you could ask for. Now, if that kind of a weekend doesn't make you want to switch out of Engineering and go into some form of pyrotechnics, performance art or event planning program, I don't know what would.

GRENOBLE, FRANCE

MIKE SELISKE
2N COMPUTER

I was recently on a surprise trip to France, which had me abroad for Canada Day. It was a little disappointing because it's one of my favorite holidays of the year. It was especially tough because I had to work when everyone at home was off and there was no public display of Canadian spirit anywhere on the streets. However despite having little to no notice about my trip (found out at noon was on a plane by 10pm) I did manage to throw some small "made in Canada" stickers as well as a role of Canadian flag masking tape into my suitcase.

After work on Canada day, I met up with some people from the local BEST (Board of European Students of Technology) group because the Canadian equivalent, CFES (Canadian Federation of Engineering Students) considers BEST as an official partner, and I figured I would meet up with some European engineering students. We met up at a bar where it was happy hour for two hours and drinks were half price. It didn't take long for my stickers and tape to make an appearance and let's just say Canada Day was a huge hit in the bar. Before long the entire bar was covered in "made in Canada" stickers and Canadian flag tape. A fellow Canadian who had been on exchange in Grenoble introduced herself and went on to tell me she was from Ottawa and was

attending the University of Guelph. She was wearing a white dress and red shoes for the occasion but was super excited to see a fellow Canadian to celebrate with.

While the stickers were being spread across the bar the BESTies were explaining to me that nobody does this type of patriotism during the French equivalent of Canada Day and if you did you would be seen as fascist. We soon moved to another bar where there was a fresh bunch of French residents to convert. It started off fairly slowly since they wouldn't let me bring in my stickers but I eventually snuck them in and started passing them around. It was really funny because every 10 minutes or so the bartender would make a noise and then scream "Happy Canada Day!" which was funny and pretty cool. I met some people at the bar who got pretty into the Canada Day thing and everyone was very excited to share in the celebration.

I started off the evening being a little disappointed I was missing Canada Day, but with a few props and some liquid courage the evening turned into a resounding success. I met some new French friends and spread Canadian spirit to a small section of France. The best part was when a coworker mentioned that he saw a girl riding her bike in the morning with Canada stickers (the same ones I had been passing out) all over the place which makes me smile and proud to be Canadian.



Queen Elizabeth II waves to onlookers as she passes in her motorcade. (Top) Posing with some mounties on parliament hill in front of the main stage (Bottom). Photos Courtesy: Megan Pollock



Fireworks rise above Parliament Hill in Ottawa.

Erica Fisher



Mike Seliske



Mike Seliske

Patrons of a French bar plastered with "Made in Canada" stickers and Canadian Flag Tape (Top). A BEST shirt covered with a maple leaf. (Bottom)

ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report



SCOTT RANKIN
PRESIDENT

Dear All Undergraduate Engineering Students,

I would like to apologize to all of you for the content that has been in my recent Iron Warrior articles this term. Although some may say they are comical they have not been relevant at all. The Iron Warrior itself generally receives many articles for each issue and there is a high demand for the space that they provide. Executive reports are, from my knowledge, a required portion of the Iron Warrior so that all Undergraduate Engineering students can be properly informed of the on goings on the Engineering Society and what/how we are trying to improve your life here at the school. Therefore it is very unfair that your Executive have been misus-

ing this space that could have been very well used for something far more useful and that was written by Undergraduate Engineering students such as yourself. On another note, if the Executive did wish to provide comic relief to students then they very well could have written an article entirely separate to their report that did this. For this, I apologize on behalf of the Engineering Society.

Now for my actual report....

Last weekend of June 26th, I attended the Engineering Student Society Council Ontario (ESSCO) Annual General Meeting. If you have read Kevin's article, I'm sure you can find out all about ESSCO AGM, but I personally would like to inform you of what I gained from attending. I learned mountainous numbers of ways to improve the

life of students here at the University of Waterloo, which I intend to implement as soon as possible. Ways to improve our student life, our academics, our image, our involvement, our professionalism, our spirit and our pride. I plan to fix problems that I had only become aware of recently, problems that are not serious, but are stunting our ability as engineering students to fully grow and prosper. If you would like to help add your ideas to mine I would be greatly appreciative. I will be discussing them at the next Engineering Society meeting and would love for you to be there, Wednesday, July 7th 5:30pm in CPH 3607.

Also, the TOOL attended Canada Day and the kids there loved it and they even had the opportunity to dress up as a Tool Bearer. It was a ton of fun.

Thanks,
Scott



The Toolbearers during Waterloo's Canada Day celebrations at CIF

VP Education Report



ALEX HOGEVEEN RUTTER
VP EDUCATION

I have had lots of meetings with admin lately, and I am trying to get student feedback regarding issues like 8-month work terms, field coordinators, TA critiques and WatPD courses so I can share the student view, not just my own. Please contribute to these discussions at <http://engsoc.uwaterloo.ca/forum/2> (Engsoc website->Services->Discussion Forums).

Wat PD-Engineering/PD Eng

The projected in-service date of WatPD-Engineering is January 2011. As of the time of print, the proposals are being reviewed for the new curriculum. If a proposal is successful, and it appears by late August the course can be implemented in time, incoming students will be taking WatPD-Engineering 20 as of Winter 2011, not PDEng 15.

Disclaimer 1: While incoming students will only have 3 work reports, all existing students will need to complete their degree requirements (that is, 4 work reports)

Disclaimer 2: The following is 2/5 through the approval process and is therefore not guaranteed. However, it passed stage 2 (FUGS) with flying colours and an emergency EFC meeting (stage 3) has been called for July to pass it. The administration seems somewhat accepting of breaking their own rules to expedite the changes through stage 4 and 5 in September and October. Eric Cousineau (A-Soc VP Ed) and Jay Shah (Senator) will presumably let you know if admin needs additional

persuasion.

Disclaimer 3: The changes to WatPD are subject to staff scaling, so make sure engineers are applying to WatPD positions for Winter 2011 and beyond.

For those who have completed PDEng 15 and PDEng 25: You must complete three electives from PD Eng 35-55 and/or Wat PD 3-7.

For those who have completed PDEng 15, but not 25: You may complete
a) PDEng 25, then three electives, or
b) complete PD 1, 2 and then 2 electives

For those who have completed neither PDEng 15 or 25: complete WatPD 1, 2 and then 3 electives

For those who fail a course: You may request to take the course on a subsequent academic term

For those who are more than one course behind: Talk to Dwight Apelvich, PDEng director to create a catch-up plan. As of January 2011, this discussion may also happen with WatPD.

For those of you who wish to take advanced WatPD courses but have already completed PD Eng: Not our priority right now, especially with staffing concerns. No official policy as yet, but it doesn't seem implausible.

For those wishing to take a WatPD course on passing the PEO exam: not a priority, but hopefully can be produced in parallel with PD 20/21. Hopefully by Winter 2012, but don't count on it.

A summary of the WatPD electives will be available in the next issue. For now, visit <http://www.watpd.uwaterloo.ca/about/courses.html>

VP External Report



KEVIN LING
VP EXTERNAL

Happy belated Canada Day! I'm having a great weekend and enjoying a nice barbecue as of this writing. Hopefully all is going well with all of you as well.


Over the last weekend of June, I was in Ottawa for the Engineering Student Societies' Council of Ontario's Annual General Meeting. This is a great conference and I highly encourage anyone interested to apply for it next summer. There was a presentation on entrepreneurial business planning by the former president of MedEng Systems, Richard L'Abbé. MedEng Systems, now owned by Allen Vanguard, created the bomb proof suit showcased in the movie The Hurt Locker. As well, we had the pleasure to listen to Drew Dudley speak. Drew Dudley is the Leadership Coordinator at the University of Toronto, and he is a great inspirational speaker. He also spoke at the Canadian Federation of Engineering Students annual congress back in January, but hearing him again was a great treat.

There was also a lot of formal business discussion that took place at ESSCO AGM, such as electing the next group of executives for the or-

ganization and deciding the organization's direction for the next year. I am pleased to announce that Alesia Danelon has been elected as the new president of ESSCO, and Cameron Winterink from A-Soc has been elected as the new VP, Development. As well, the idea of an inter-university engineering newspaper exchange is moving forward and we should be seeing something on that front soon. ESSCO will be working to set up a mailing list to distribute to schools that are interested in sharing papers. As well, they will be looking into the possibility of setting up a database for engineering newspapers to share articles with each other to be published in their own respective papers.

Now changing directions, let's talk about the upcoming Waterloo Engineering Competition (WEC). WEC registration is now closed, thanks to all who registered. If you didn't manage to get a team together in time but would still like to see the event, you could consider volunteering for the event. I still need several volunteers to help out so email me at bsoc_vpext@engmail.uwaterloo.ca and I'll be in touch. Also fire me off an email if you did sign up and haven't heard from the WEC organizing committee yet. The competition's just coming up in a few days so those competing should get ready. It's gonna be a killer event.

Upcoming Events Calendar

Monday July 5	Tuesday July 6	Wednesday July 7	Thursday July 8	Friday July 9	Saturday July 10	Sunday July 11	Check out up-to-the-day event postings on the EngSoc website at engsoc.uwaterloo.ca
Iron Warrior Meeting 5:00 PM E2-2349	7:00pm - 2011 Spirit Event, FrontRow	EngSoc Meeting #5 5:30, CPH 3607 Iron Warrior #4 Out	ENG/AHS Semi Formal, SCH Festival Room, 7:30 PM	Waterloo Engineering Competition Gradcomm Pubcrawl	Waterloo Engineering Competition Charity Wheelchair Basketball, 1:00 PM PAC	Winery Tour, Niagara Region - 10:45am (bus leaves)	
Monday July 12	Tuesday July 13	Wednesday July 14	Thursday July 15	Friday July 16	Saturday July 17	Sunday July 18	
Iron Warrior Meeting 5:00 PM E2-2349 Engsoc Hockey, 3PM CIF	TalEng, 8PM, Bomber/POETS TBD		Engplay, 7:00 PM AL 113	Engplay, 7:00 PM AL 113 IW Deadline (6pm) Alumni Golf Tourney, Cambridge GCC, 4 PM	Engplay, 7:00 PM AL 113	ENG vs AHS Water Polo Game 4PM, PAC	

ENGINEERING SOCIETY EXECUTIVE REPORTS

VP Finance Report



MINA LABIB
VP FINANCE

Hello Friends,

I would first like to start my report with an apology for my last VPF report. I did not intend to be insulting or misrepresentative, but simply aspired to entertain in the absence of concrete news to report. I was in error, and have learnt from this, and now, I definitely have news to report to you, lovely readers.

The first piece of news is not good. Some of you might know that EngSoc had a White Water Rafting trip organized two weekends ago. What some of you might not have known is that EngSoc had to purchase these tickets several months in advance (early winter term). These tickets were, unfortunately, not all sold, due to several circumstances, some of which in our control, some not. As a result, we lost just under \$4000. This was a very unfortunate situation, and I am currently working on an addition to the Policy Manual to help prevent or reduce losses such as these in the future. As for where this loss will be absorbed: a very sizeable amount from several executive discretionary funds will go to cover this. I would also like to thank the directors who have decided to cut their spending to leave money avail-

able for this. I would, however, like to stress that I am not, in any way, asking directors to do this. I do not wish other events to suffer because of this mistake.

In other news, the donation proposals were presented 2 weeks ago at meeting 4. This term, we had \$4000 to give out, and \$20920 requested. As you probably have gathered, making the decisions as to who gets what was extremely difficult, but through the patience and collective wisdom of council, I believe we arrived at the optimal distribution of funds (See table for the approved funding allocation). If you are a part of one of these groups, your cheques should be ready for pick-up this week.

Thank you all for your attention and Sayonara,

Mina

Team/Group	Approved
EngFOC	\$500.00
GradComm 2011	\$500.00
Iron Warrior (IW)	\$500.00
UW Canada Day	\$500.00
EWB	\$250.00
Concrete Tobaggan 'B'	\$350.00
UW Debating Society	\$100.00
UW Rocketry	\$120.00
UW Formula SAE	\$430.00
UW Robotics Team	\$350.00
UW Space Society	\$200.00
Architecture 2B Play	\$200.00
Total	\$4,000.00

VP Internal Report



PETER KELLY
VP INTERNAL

Well the term is coming quickly to a close, but there is still a lot of fun to be had. Semi Formal is this Thursday night, Wheelchair Basketball is this Saturday and TalEng is next week.

Now that midterms are done we can all let loose a bit before the inevitable crunch time of finals sets in.

I have been having a great time so far this term and would like to take this time to just thank all of my directors who have all done an amazing job. Genius Bowl was a blast, all of the music events (coffee house, band wars, open mics) rocked! [pun intended]

and SCUNT, although I missed it was described as an amazingly awesome time. With a few more events to come, this term will end as one of my favourites.

For anyone reading this that has an idea for something they would like to see run in the Winter 2011 term please let me know by emailing bsoc.vpint@gmail.com (all ideas/comments are welcome!) Finally, I will likely be looking for someone to fill the directorship of Foosball League Commissioner. With its great success this term, I am planning on running it again in the Winter, and some assistance would be fantastic. If interested email me for more information and be sure to apply for directorships when applications open in a short amount of time.

Peter Kelly

WEEF Director Report



GRAHAM STONEBRIDGE
WEEF DIRECTOR

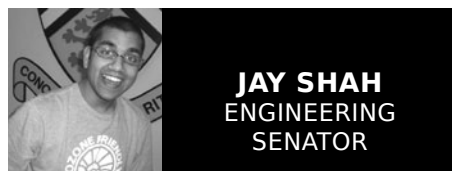
Hey everyone, this is just another update from your friendly neighbourhood WEEF director. In the last couple weeks the WEEF Funding Council (comprising one or two representatives from each engineering class on campus) met three times to decide where \$60,000 would be allocated this term. At the first two meetings students, staff and professors presented their proposals and were asked questions by your class reps. In total there was \$380,132.81 requested this

term.

The third and final Funding Council meeting was Monday July 5th. At this meeting the council decided who would receive which slice of the WEEFberry pie. Unfortunately this IW issue was published before the meeting and consequently there are no fancy tables accompanying this article. Look for a complete listing of funding allocations in my next IW report.

WEEF's Board of Directors will be meeting later this month to finalize the funding decision for this term. Questions, comments or suggestions are always welcome – email me at weef@engmail.uwaterloo.ca

Senator Report



JAY SHAH
ENGINEERING
SENATOR

Senate met on June 21st, for its last time until September (Senate has a 'summer break', in which they do not meet for two months). There was lots covered in the meeting, so I will do my best to give a concise summary:

Item #1, Waterloo Warriors: I'm sure there has been and continues to be a lot of press around the Waterloo Warriors Football team and their alleged use of steroids. I'd like to convey the situation as it was told at senate: Started with a police investigation of two students that led to a discovery of a large quantity of performance enhancing and related drugs. As a result, the University requested that all 62 players be tested. One refused. As a result of the tests and the refusal, 9 students are being reprimanded. The coaches have been suspended with pay. The team is banned from competing, but all services and training to team members who wish to continue will be made available. A formal review of the entire program will be performed in due time. It is worthy to note that during the meeting both student senators and faculty raised concerns that team members who did not test positive were essentially punished to the same extent as those that are reprimanded. Provost Feridun Hamdullahpur remained steadfast in his response that the University treats such incidents very seriously and that all actions are being taken with the student's safety in mind. He drew on correspondences he's had with various parents of athlete students which he indicated expressed strong support of the stance that the University is taking. The Dean of Arts, Ken Coates also expressed praise of our Provost and administration's response in being decisive and holding the decision firm.

Item #2, Enrolment/Admissions: There was some anxiety earlier in the year because application numbers were down year

over year to UWaterloo. However, despite fewer applications, and higher acceptances averages of 2% in 4 of 6 faculties, Admissions has managed to bring in a whopping 6411 confirmations. This number is expected to decrease by the time September roles around due to students changing their decisions over the summer. However, the target of confirmations for this time of year was 5900....so we are quite clearly well over target. I must raise a note of caution and warning here: more students do mean that the University is in better fiscal position; however it also means more strain on student services, faculty, housing etc. We must be vigilant in upholding our standard and committing the necessary resources to ensure our standards do not drop as our size expands. I have seen promising commitments from Provost Feridun Hamdullahpur's desk, and I am comforted that his commitment to student services and student success seems genuine and quite material. I encourage everyone to watch carefully and should we need to act to ensure that UWaterloo is constantly increasing its ability to serve students.

Item #3, Student Success and Services: The University Executive went on their annual retreat to reflect and realign the direction of UWaterloo. As President David Johnston put it, "We must always be asking ourselves, are we doing the right things and are we doing those things right". The executive council came back with four priorities, Internationalization, Total Enrolment Management, Sixth Decade Plan, and Students/Student Services. I want to focus on the latter displaying a copy of the executive council's report immediately below this article.

I am privileged to serve the students of the Faculty of Engineering, and from the perspective that I sit, Waterloo could not be a more exciting place to be, this year, this term, this month. I can't wait to be back from co-op in the whirlwind of constant positive change.

Email me if you think otherwise, I'd love to help rectify the things that may not be great about our University so that we can make it great(er).

Students - Student Services: New Developments - Structural Adjustments: It was recognized that as further emphasis on students and their success is essential to achieving the Sixth Decade Plan goals, we must further our efforts to establishing a student success culture across the campus. A report prepared by the Student Services Committee concluded that for a student success culture, we must achieve:

- increased student satisfaction with the experience at UW, improved student retention rates and effective competitive approaches to attract high quality students
- adaptation to changing demographic conditions of a younger and more culturally diverse student body that is in need of support
- student success orientation linked to maintenance of life-long connections with alumni
- development of the 'whole student' from academic, experiential and social/cultural perspectives

It was agreed that for the next two years priority to be given to:

- New Student Transition Program
- Open Data Initiative, Mobile Applications Development and Student Portal
- Retention
- Early Alert System

The following decisions were reached:

- Follow through on the recommendations of the Retention Task Force
- Change the title of the associate provost, student services to associate provost, students
- Establish, under the associate provost, students portfolio, an Office of Student Success with the following responsibilities/functions:
 - Transition (start-up skills, bridge programs, transition programs, parent programs)
 - Learning Support (supplemental instruction, advising, tutoring, study skills)
 - Student Development (leadership, mentorship, co-curricular record)
 - Career Support (career advising, job centre, placement)
 - Entrepreneurship (centre and programs, Velocity)
 - Applications Management (student portal, mobile apps, incident/alert system)
 - International Student Support
- The following two items will be further deliberated before a final decision is made:
 - Separation of Co-op and Career Services offices
 - Transfer of the international student support function from Waterloo International

VIVE LE TOUR!



ERIN MATHESON
2B CHEMICAL

Although I've slowly but surely been developing a moderate interest in soccer, I mean football, over these past few weeks, it all went down in a fiery blaze this past Saturday when my favorite sporting event finally started; the 97th installment of le Tour de France. As world cup fanatics insist on the term 'football', cycling enthu-

siasts always refer to it as 'le Tour', not 'the Tour', regardless of their language of choice.

What may first seem like a bunch of spandex-clad European boys cycling through the French countryside (which don't get me wrong, is fun in itself) is in fact one of the most fascinating as well as historically and culturally rich sporting events currently in existence. I wanted to share a bit of background, as well as a bit of insight into my obsession with this event, and hopefully persuade a few more Tour followers along the way.

History of Le Tour

At the beginning of the 20th century, what is still perceived as a borderline insane plan was conceived by Géo Lefèvre, a journalist with L'Auto magazine at the time. The plan; a 2,500km long cycle race across France. His editor at the time, Henri Desgrange, saw potential in this plan and backed it fully, and on July 1st 1903, sixty brave pioneers set out on their bicycles from Montgeron on the first ever Tour. After six mammoth stages, including a 471km ride from Nantes to Paris, only 21 riders, dubbed 'routiers', finished the journey, led by Marice Garin.

Provoked by a mixture of astonishment and admiration, the sporting public was soon won over and spectators flocked to

the roadsides by the hundreds. The French people as a whole took kindly to this unusual event that put their towns, countryside, and since 1910, even their mountains in the spotlight. Le Tour has both been affected by and kept up with the times. As did France, it benefited from the introduction of paid holidays in 1936, it has survived both World Wars despite not running for a total of 12 years as a result, it has shared France's economic and political rises and falls, and thanks to globalization, has opened itself up to foreign countries. Despite often being at the forefront of some of the current global sporting scandals, le Tour continues to grow and gain strength from its century of experience.

Le Tour, Explained

As I mentioned before, there is much more to le Tour than simply cycling through the French countryside. Le Tour consists of 21 daily races, or stages, which in total cover no more than 3,600km and alternate annually between clockwise and counterclockwise circuits of France. These stages span over three weeks and usually include a prologue, a mix of flat, mountain and medium-mountain stages, an individual time-trial and sometimes a team time trial, and two rest days, which are also sometimes used to transport riders from a finish in one town to a start in another. The New York Times described le Tour as "arguably the most physiologically demanding of athletic events", with effort compared to "running a marathon several days a week for nearly three weeks", and the total elevation of the climbs compared to "climbing three Everests".

Since 1920, le Tour has been open to teams of riders, first backed by sponsorship, which then switched to national teams in the 1930's, and then back to corporate sponsored teams in the 1950's. Today, between 20 and 22 teams consisting of nine riders in each are invited to compete by the race organizer, the Amury Sport Organization. Team members help each other throughout the race and managers and mechanics in cars follow the bulk of the riders, also referred to as the peloton.

Riders are ranked by the time taken throughout the race in a ranking called the general classification. There are time deductions for finishing well in a stage or being the first to pass an intermediate point. Although rare, it is possible to win overall without winning a stage, as Greg LeMond did in 1990.

At the end of each stage, an award is given to the winner of that stage, and four jerseys are handed out. First, the in-

famous yellow jersey, which is given to the overall leader, being the rider with the shortest accumulated time thus far.

The green jersey is the 'points' or 'sprinting' jersey. Throughout le Tour, there are various sections of the race that are sectioned off as 'sprints', and points are awarded to the first, second and third riders to complete that portion, with the green jersey going to the rider with the highest accumulation of these points.

The king of the mountains jersey, or the white jersey with red polka dots, is similar to the green jersey, except the sections of the race associated with this jersey are steep climbs instead of sprints.

Finally, there is the white jersey, or the young rider classification, which is the newest of the four.

Riders in this category must be less than 26 years of age as of January 1st of that year, and this jersey is awarded to the rider in this category with the fastest time. These jerseys are given out at the end of each stage for their respective winners to wear during the next stage, and the overall winners are declared at the end of le Tour, which concludes at the famous Champs-Élysées.

There are also awards given out for combative riders as well as the award for the fastest team. Although most strive for the elusive yellow jersey, there is also a high level of competition for the other three as well. The 'sprinters' shine during the flatter stages during the beginning and end of le Tour, and the 'climbers' come out of the woodwork during the treacherous mountain stages that climb the French Alps and Pyrenees Mountains, making for an exceptionally exciting competition.

The Equipment and the Controversy

Just as le Tour as a whole has grown, the technology behind the race has grown along with it. What started as a race of simple road bikes has developed into a race to build stronger, lighter and faster bikes and equipment. Bike frames have been made of wood, steel and now sturdy but lightweight composite materials. Sturdier frames are used for climbing stages, and light and thin frames are ideal for flatter stages and time trials. Riders also don the infamous sweat-wicking, skintight riding jerseys throughout the race.

Helmets, although mandatory, have changed shape as well. Standard helmets

for longer stages are specially crafted to offer minimal wind resistance, and special rain-drop-shaped speed helmets are used during shorter time trials to help the cyclists gain maximum speed. Along with these advances have come many scandals and controversy, including accusations of using bikes that are too light, which would contradict the rule outlining the minimum frame weight required for le Tour. Last year there were also accusations of Fabian Cancellera hiding a motor in the frame of his bike, and as a result all frames will be searched this year for motors before le Tour commences.

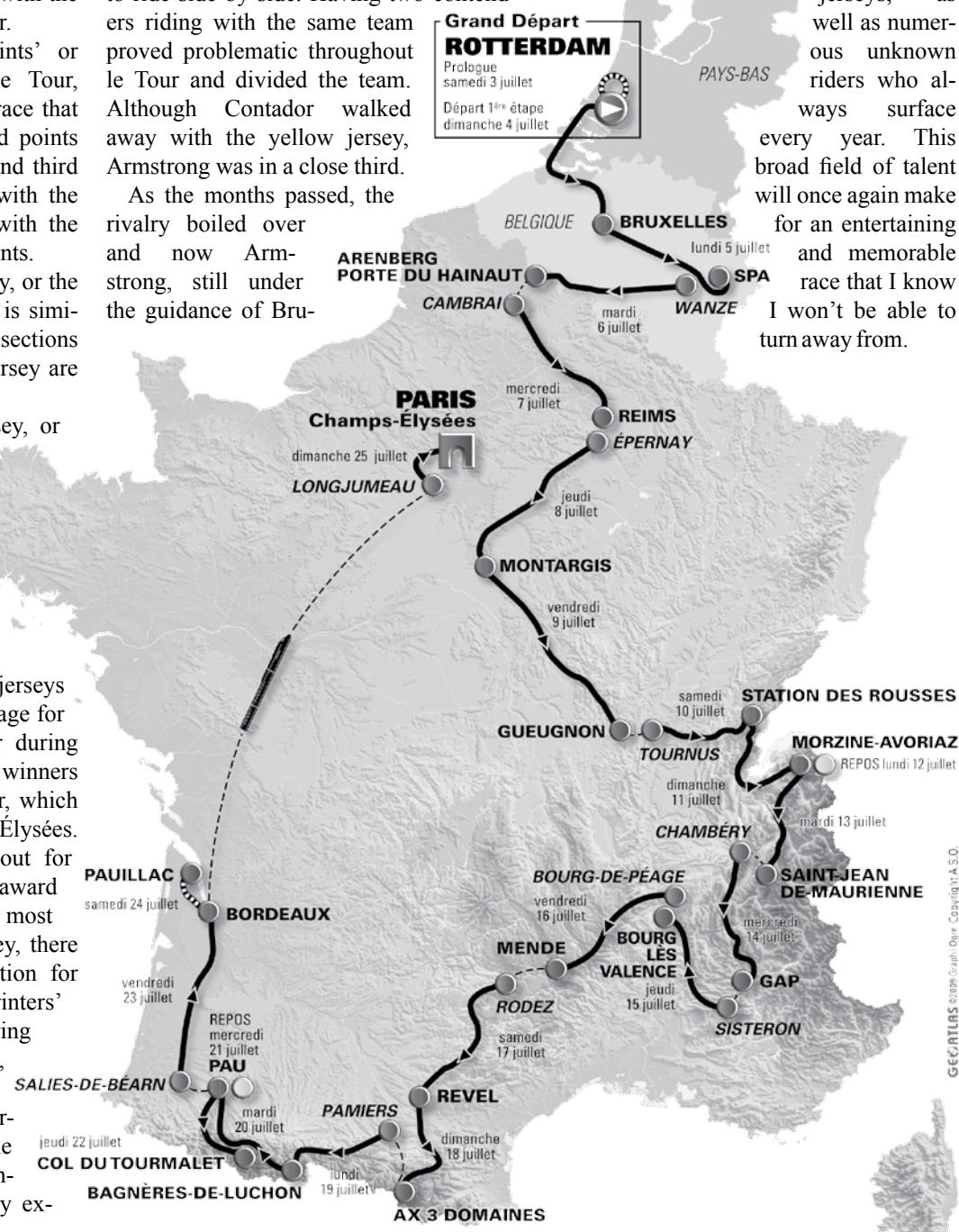
Who to Watch

As with any sporting event, there are some big names and rivalries to watch out for in this year's Tour. First, the famous rivalry between Lance Armstrong and Alberto Contador. Armstrong is a familiar name, and he earned his fame by returning from a near-death battle with testicular cancer to win a record-breaking seven consecutive Tours from 1999 to 2005, after which he 'retired' for the time being. Soon after, in 2007, Contador finally took home his first yellow jersey after being a contender for years.

The rivalry began in 2009, when Armstrong announced his return to le Tour with his former trainer Johan Bruyneel. Doing so brought Armstrong to team Astana, Contador's team, leaving two rivals forced to ride side by side. Having two contenders riding with the same team proved problematic throughout le Tour and divided the team. Although Contador walked away with the yellow jersey, Armstrong was in a close third.

As the months passed, the rivalry boiled over and now Armstrong, still under the guidance of Bru-

yneel, enters this year's Tour under the name Team RadioShack, which includes other big threats such as Chris Horner and Levi Leipheimer. There will no doubt be an intense competition between not only Contador and Armstrong throughout le Tour, but teams Astana and RadioShack as well. Additional contenders include Australia's Cadel Evans, Italy's veteran and 2010 Giro D'Italia (Tour of Italy) winner Ivan Basso, young rider classification dominator Andy Schleck as well as his brother Frank Schleck, as well as Russia's Denis Menchov, who won last year's Giro D'Italia. This does not even include contenders for the other aforementioned jerseys, as well as numerous riders who always surface every year. This broad field of talent will once again make for an entertaining and memorable race that I know I won't be able to turn away from.



June Lowe's 40th Year at Waterloo



CAILIN HILLIER
3A GEOLOGICAL

PHOTOS BY
MYLES TAN

Last Wednesday, a little celebration occurred in the WEEF lab marking June Lowe's 40 years at Waterloo. Old pictures showing her career over the years were on display with cake and coffee being served to all those who were present.

After speaking with June, you truly get a sense of how much she has contributed to Waterloo Engineering and that this place just wouldn't be the same without her. She has some of the best stories about engineering students that I have ever heard.

The following article is a small sampling of June's favourite UW memories and a little background information on June Lowe, the legend herself.

June started in Waterloo taking a grad course after receiving her undergrad in Math and Physics. She became a teaching assistant for the Engineering faculty and hasn't looked back. In 1975, June received the distinguishing teaching award for her outstanding achievements in the

education sector. She is a programming master and even worked as the academic advisor for the committee that wrote the C language!

If you have ever been a student, teaching assistant or colleague of June's, you know of the notorious strawberry daiquiri party she hosts each summer. They have been an annual event since the mid '80s. A day of soccer, volleyball, potato guns, swimming, barbeque and cribbage is topped off by wonderful beverages. The record number of people in attendance was 108 people with a maximum of 35L of strawberry daiquiri consumed in total.

When asked how she puts up with us, June says "there is always something stupid and different that makes it fun!" There have been a lot of pranks involving June over the years. Back in the '80s, June lent out some screw drivers to a bunch of "honest" students. The next day, the first day of classes in the fall term, all of the room numbers in the engineering buildings were mixed around. She was waiting in the WEEF lab for first year students to arrive for their very first class and was surprised to find about 100 students piling into the first floor men's washroom instead. After a great deal of convincing, June managed to herd the students back into

the WEEF lab.

On another occasion, June left campus late one night to find her motorcycle chained to 50 other bikes, leaving her completely stranded and forced to walk all the way home. And anyone who has been in the WEEF lab in the past few years has seen the giant rasterbated portrait of June on the wall. A number of TAs did that years ago, printing the pages off in secret to surprise her. All in all, we are extremely lucky June has put up with us stu-

dents for the past 40 years. Please don't retire until I graduate, June! Waterloo Engineering would be much less fun without you around.



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Professionalism.
Leadership.
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There's more to an engineering education than engineering.

MEMORIAL LEADERSHIP AWARD

IN RECOGNITION OF THE LATE PROFESSORS SAIP ALPAY AND WM. C. NICHOL, AND SAM CECCERALLO, ROBERT ELLIGSEN, LATER FORMER STUDENTS OF THE FACULTY OF ENGINEERING

DESCRIPTION

The Leadership Award is granted to an **intermediate-level undergraduate student in the Faculty of Engineering** who has demonstrated outstanding contributions to the Faculty in the promotion of extra-curricular activities, including, but not limited to: Intramural Athletics, promotion of Engineering Society and Sandford Fleming Foundation events, competitions, etc., and for the support of associations, both on and off campus.

AWARD

The Memorial Leadership Award consists of a certificate, a citation, and an award of **\$1,000**.

The award, certificate, and \$1000 will be presented at the Annual Engineering Awards dinner.

HOW TO NOMINATE A DESERVING CANDIDATE

Nominations for this award can originate from student groups, faculty members, and others, and should document the nominee's outstanding leadership and other contributions. There is no application form.

Nominations must be submitted to the SFF Office Manager. The nomination may be submitted at any time, whether the student is on campus or on co-op term, but should be submitted before the last day of the student's 3A term.

WHAT TO SUBMIT

A LETTER OF NOMINATION by someone familiar with the nominee. This letter should contain an outline of the nominee's activities as they relate to the Award. The letter should also comment on the quality and impact of the nominee's contributions, the leadership displayed, and the attributes which distinguish the nominee from others and make the nominee worthy of this recognition.

LETTERS OF SUPPORT from faculty members, students, and others familiar with each facet of the nominee's achievements and contributions.

Nominations will be considered by the Executive Committee of the Foundation which may rely almost exclusively on the documentation submitted. This meeting will occur at the beginning of October.

Submit Nominations to the following contact information, Attn: Bettina Wahl
E2-3336, Extension 84008, sff@engmail.uwaterloo.ca, www.eng.uwaterloo.ca/~sff

POINT VS. COUNTERPOINT

POINT

The new 1A promotion policy will help students excel in first year engineering.

COUNTERPOINT

BHAVYA KASHYAP
STAFF WRITER

The Faculty of Engineering's recent announcement regarding the new 1A course load policy has left more than a few people astounded. The comments often thrown out, even in casual conversation, have been scathing or completely soaked in condescension. "How do these kids expect to get through the degree if they can't even handle the 1A course load?" I'll hear. "1A was so easy. And I mean, when it was kind of hard, we sucked it up and dealt with it."

On the surface, the sentiment is easy to understand, even if one has experienced failure in the faculty. Speaking from my own personal experience, 1A was not particularly difficult; I coasted along easily, and was promoted to 1B with minimal effort. So did most of my class. However, this isn't to say that I did not have my struggles in first year and so, for a number of reasons, I actually think this is a damn good idea. And not only is it a good idea, but it is also one that will likely ensure that the engineering students who decide to take advantage of it get through. Here's why:

1. Not all high schools cover the same material: The makeup of the faculty is broad given Waterloo's reputation for its technical programs; students who attend are from all over Canada and beyond. Certain other provinces don't cover particular concepts in their entrance-requirement courses (Manitoba, for example, with its exclusion of introductory calculus from its math courses). This can prove to be devastating when you realise that all your peers know half the material in your 1a calculus course while you only know three days' worth. This argument can even be extended to the fact that the Ontario secondary school math curriculum no longer includes a fair chunk of what it used to, even though the first year engineering curriculum has remained the same; the gap is just too large now, and too many students are falling into the abyss of academic failure.

2. First year is a cultural shock: You are on your own, without the supervision of your parents or usual support group. Most likely you know a little cooking, but aren't well adjusted enough to plan out well-bal-

anced meals (but your rate of alcohol consumption increases, causing your overall health to be that anaemic hobo while also turning you into a cheap drunk). Attendance to lectures is no longer mandatory. You are thrown headfirst into a mire of endless temptation. You have no study habits. You are also highly likely to be 18 (and probably lack the maturity to juggle life on your own - even if you are mature, managing all this can be tiring and stressful). I think enough has been said here.

3. Sh-t happens: Sometimes bad things happen. Almost anyone who has done well in any discipline of engineering can vouch that it is necessary to be mentally and emotionally stable in order to successfully take on a full engineering courseload. Unfortunately, when trauma occurs, it's very apparent in the student's results.

Most of these points have been brought up before, which is why some people have argued that this is the reason why the faculty has created a no-penalty variant of term repetition. I'd agree that, in later years, this sort of punishment for failure might actually be what's best. My current opinion, though, is that providing this option will yield better engineers than just failing them and telling them to repeat without penalty:

4. Students who take advantage of it are likely to have the foresight to realise they are in academic trouble: There will always be a few that oppose the rule, but given that there is a price to pay for choosing this option (i.e. the one year waiting period), the students who aren't doing the work in the hopes that they can catch up later aren't likely to decide on this. Remember that this is not a free pass. The people that decide to drop the courses are probably good at gauging how much work they need to put in to get through. The faculty will inevitably be retaining students with decent levels of maturity, and if this makes it easier for them to stick around, then they'll probably do just fine in higher terms.

5. It's a better segue to having the internal discussion about whether they are suited to engineering: Failure can be devastating. Failure is also an easy incentive to quit because it's easy to pass off as "Oh, I didn't like the program anyway", even if it isn't necessarily true. Not having a failure on transcript can make all the

difference for a student who still needs to think about what he/she wants. Having less courses may not only give them the time to think about it, but also to figure out what aspects of the program he/she enjoys and whether it is worth it to stay rather being bogged down by copious amounts of work while they are already uncertain. Again, this is not a free pass, so I strongly believe that those who do end up coming back genuinely like the field and know what they are in for.

Personally, I am glad that this new policy is being implemented. It has been a while coming. I wish the future 1As the best of luck, and hope they enjoy their new policy.

ERIN MATHESON
2B CHEMICAL

I still remember sitting in the piping-hot PAC during Student Life 101 during the summer of 2008, just under two months before I came to Waterloo as a frosh, and listening to Dean Sedra speak to a crowd of incoming Engineering students about what laid ahead of them. He mentioned how most, if not all of us were from the top 5 - 10% of our respective high schools, and that we should come to terms with the fact that for most of us, that was going to change. We were going to be challenged, we were going to have to work, and not all of us were going to make it through. I remember sitting in those wood bleachers and starting to shake in my cowgirl boots a little, and I began to question what I had gotten myself into.

Two years and three and a half academic terms later, it turns out it all isn't quite as impossible as it was made out to be, or at least not until third year. Don't get me wrong, the switch from high school to university was easily the biggest academic kick in the ass I've received to date, but in hindsight not only was it bearable, but I'm grateful for it. When word came out of the proposed plan for the new 1A policy, raising the minimum passing 1A average to 60% but allowing struggling students to drop 2 of their 1A courses and finish their 1A term a year later, I couldn't believe it. I understand that the faculty is trying to raise the percentage of passing students, but I strongly believe that this is not the way to go about it.

There are several fundamental problems with the justification of this plan, aside from the fact that the Faculty runs the risk of filling up their future class of 2016 not with incoming frosh, but rather 2015's who opted for this new course of action. Firstly, the Faculty claims that by adding a special 'study skills course' to the student's two remaining 1A courses in their second academic term, the struggling students will be able to learn the skills needed to succeed in later terms of study, such as study skills and time management. Unfortunately, beyond the basic definition of what these skills are, this isn't something that can be entirely taught in the classroom. The only way you can learn how to balance the four assignments, three interviews, two lab reports and partridge in a pear tree that the average student gets bombarded with in a single week is by actually experiencing it and figuring out the best way to struggle through it. It isn't pretty, but if you've done it once you can do it again, and there is no way any student can fully experience this while taking only three courses. Sure it would be nice to split up your work load in first year, but what about down the road, when the work really starts to pile up, and

you're not allowed to drop any courses? Suddenly the 1A course load doesn't seem so bad.

Another point the faculty tries to make is that some students are not adequately prepared for University level courses in fundamental subjects such as math and chemistry. This may be true, but they're forgetting one thing. It's not that the students aren't learning sufficiently, it's that they're not prepared, which last time I checked my dictionary, means that frosh are showing up without sufficient knowledge in these subjects from their high school days. Having completed all of my pre-university schooling in Ontario, including being part of the post-double-cohort era as well as the guinea pig generation of Ontario's 're-vamped' high school math curriculum, I can fully attest to the fact that it's the high schools' that are dropping the ball. In at least Ontario (which is really the only province I can speak to) the Provincial Government is progressively dumbing down the curriculum simply so public schools can boast higher grades and more grads frolicking off to University (even if it's for an Art's degree). At my high school in particular, whether or not you got anything valuable out of a course was purely based on the teacher, and whether or not they were aware of what material you needed to know to succeed in university, not the curriculum. Should you wish to pursue university, you should be guaranteed to be taught the adequate tools from your high school, not subjected to a lottery.

What scares me the most about this new policy is that it seems to be following the trend set by the Ontario curriculum. I understand that the faculty wants to ease students into their respective programs during the 1A term, but there's a fine line between a smooth transition and dragging every student through their first term. Although I realize there are a number of students who do poorly or fail simply because they struggle with the academic material, there is an equal if not greater number of students who simply either do not want to be in university, do not care, or some combination of the two. Simply reducing the modest workload of what is arguably the easiest academic term in Engineering will not help those lacking motivation or time management skills, especially in terms to come. Focusing resources on first year TA's, support systems for students, and targeting and helping those potentially at risk before they fail while keeping them in school will be much more successful. Many of us pride ourselves in hailing from one of the most difficult, and highly recognized engineering faculties in the country, and our faculty should focus on pushing students to achieve that same standard, not lowering the bar simply so every frosh can skip on by.

Editor's Note:

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

prof
Quotes

Send in your profQuotes to:
iwarrior@engmail.uwaterloo.ca

(In response to difficult quiz complaint) "Remember the cartoon, Jungle Book? Remember the python in that cartoon? Be careful of him." Karim, NE 344

"Now this is where I thrown in my advice on how to deal with your heroin dealer"
- Henneke, CHE 241

"Those derivations were just for fun, you can forget those now." - Xie, ECE 316

Beyond the Ring

Bridging the gap between University and the work force



Peter Smith, B.A.Sc.
SYDE Alumnus
Class of 1979

Engineering to Leadership:
An Accidental Journey

The Speaker Will be Discussing...

Lessons from 30 years of progression up the corporate ladder in the high tech industry

Monday July 19, 2010
1:30 pm to 2:30 pm
PHYS 150

Pizza and beverages will be provided

Adding a tinge of Workplace to the Classroom

What case studies are and what they can do for you



AMRITA YASIN
3T CHEMICAL

When you learn a new concept the first few problems are straightforward - variable a is x, variable b is y, put them in the second formula in the book and you get an answer. For more involved problems you will have to go through a number of steps to find the solution. But if you do the problem enough times it boils down to an algorithm and you know your way, and then you go to your work term and BAM! You are sometimes given problems that you have never seen in your courses before and even if you are familiar with the nature of analysis/data, it is not as straightforward as textbook problems.

UW promotes its co-op program as an opportunity to experience the workplace problems while learning the basics. Wouldn't it be nice to catch a glimpse of some of these 'real' engineering problems

and how they were approached in industry before even going into work terms? This is where case studies come into play.

A case study is a description of an actual problem, challenge or decision requiring situation. To begin with, case studies give the big picture; they describe a situation where an engineer working in a specific company was faced with a challenge. They allow you to put yourself in the shoes of the person making the decisions. The story makes the problem more engaging and enjoyable than chapter 12, problem 5a. Instead of waiting to go to work terms you get to see the application as you learn the concepts.

While case studies are a common practice in business courses, the concept is not as prevalent in engineering. We are all familiar with Case Histories, accounts of spectacular failures, as opposed to case studies, case problems, which are less notable success stories yet current, relevant, and as challenging. At the University of Waterloo, Waterloo Cases in Design Engineering (WCDE), lead by Professor Steve

Lambert, was established to create design case studies for engineering undergraduate courses (<http://design.uwaterloo.ca/>). Many of you have already seen the EWB Rainwater Harvesting, Hydro Quebec or the Elora Home Heating case studies in 1A. WCDE aims to keep its collection of case studies up-to-date across all disciplines and to encourage professors to use cases in their courses.

The major resource used by WCDE to obtain material for case studies are student work term reports. Cases derived from WTRs balance complexity and applicability. They present problems that students have faced so they don't place too high expectations for classroom assignments/projects while still presenting real problems. They also promote the Case Method of learning, which means learning as a group, and fostering teamwork. Since cases are written with the consent and appropriate background of the associated industries and companies, they can help you decide what field or company you want to target for your coming work terms.

Case studies broaden your horizon of work experience. Even if you had amazing job experiences in each of your 6 work terms, that is only 6 experiences out of the hundreds of engineering jobs. Case studies supplement your co-op experiences by presenting problems on a wide variety of topics. It is like coming in on the first day of a study term and knowing what everyone else in your class did on their co-op terms. Even if you have worked at those companies or similar fields, others' experiences might interest you more.

As a co-op student working with WCDE, I read through a variety of work reports regularly; during the process I really liked one of the reports on dye sensitized solar cells, did some research and that gave me a direction for my 4th year design project. As I look back to 3 years of school, if I had seen a relevant case study in every course I would never have asked myself if that stuff ever gets used anywhere except for DWE blackboards.

More information can be found at <http://design.uwaterloo.ca>

May the Best Cup Win



PETER KELLY
4A CIVIL

As I sat in a Tim Horton's on a Sunday morning, I began to wonder. Is Tim Horton's really all that it's cracked up to be? Is the coffee really that good, are the donuts really that fresh, or have we all just been brainwashed by years of hockey commercials, smiling families and Sidney Crosby into thinking that this is the case. Do Canadians really enjoy a cup of coffee from Tim Horton's or so we just think we do, because it is the Canadian cliché.

As I took a sip, I was not overwhelmed with flavour by any means (and often cups taste burnt). To be honest, I have had instant coffee from Nescafe, that taste just as good as that cup did. So, why do we continually pay \$1.52 for a large coffee at Tim's? There are so many other options available. Even on campus, there is our wonderful CnD whose coffee has

never disappointed me, not to mention a slew of different flavours to choose from, and what does that cost

you? \$0.60, that's all, that 40% of what a Tim's cup will cost you. So, in my opinion, you are getting a worse coffee for 2.53 times the price. Is it supposed to be that the worse coffee tastes the more it costs? And don't get me started on Roll Up The Rim, with a large portion of their prizes now "Tim Cards" you end up back in the store having another mediocre cup

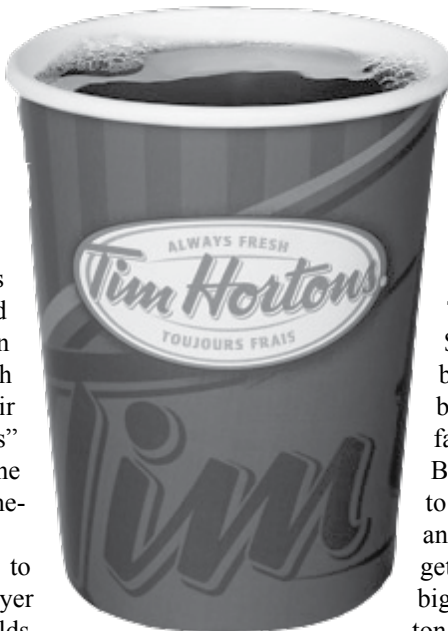
Then we move on to the newest coffee player in the market, McDonalds. Now, you're probably thinking McDonalds coffee is probably terrible, but in fact it's quite the opposite.

Their coffee, in my opinion is far better than Tim Horton's and it costs you less

I was first turned on to McJava during their free coffee campaign, which worked well, since I now buy all my 'drive thru coffee' from them when available. For a medium (comparable to Tim's large), it costs \$1.50, only \$0.02 less, but with how much better it tastes, it's a fairly easy decision. But then you can go up to a large at McDonalds, and for only \$1.65 you get a massive cup that is bigger than the Tim Horton's XL. But of course McDonalds still doesn't really

compete with the CnD.

Now, it may seem like I am biased in



favour of the C&D, and it may have to do with the fact that I work there or that I'm EngSoc Exec, but above all else, I'm biased because I am a fan of value. In my mind, I see no reason for any Engineering student to buy from Tim Horton's for their coffee/donut needs. With the C&D being run by EngSoc, you are going to see that money come back into our school, whereas, Tim Horton's takes the profit and runs. Before you start saying things, I am aware that Tim Horton's does do charitable work, and I'll support them in that. But I would be surprised to see if the money going to charity was more than 2% of their net profit goes to charity (annual net income ~250million)

I'll stop here for now, if you like a good cup of coffee and money in your wallet, I suggest that you fill you coffee/donut needs at the CnD while on campus. If not on campus, I say give McDonalds a try if you haven't already and if you're left with nothing else go to Tim's. Oh and for the record for a regular cup of coffee Starbucks is just costs way too much.

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WATERLOO CASES IN DESIGN ENGINEERING

FIFA 2010 Controversies



LISA LIU
3A ENVIRONMENTAL

This year, or the first time ever the FIFA World Cup soccer tournament is being held in Africa, and as South Africa proudly hosts the world's favourite sport, controversies are abound.

One major controversy of the games is actually the fans. A traditional South African instrument called the vuvuzela has been imported into the FIFA World Cup as a representation of African culture. The vuvuzela makes a loud monotonic buzzing noise that makes the soccer stadiums sound like they are under attack from a large swarm of angry wasps. But when you look closer, it's only a large swarm of angry fans with large horns. FIFA attempted to ban the instrument as it interrupted broadcasting due to its loudness, but to no avail. The vuvuzelas are still being used every game, and the media appeared to have dealt with it using audio filtering technology. Now if there was only real life audio filtering for the folks in the stands.

Of course, the most controversial aspect of this world cup is the refereeing. The first major instance of shoddy refereeing came in the USA-Slovenia game in the group stage. After trailing 2-0 at halftime, the US managed to come back to tie at 2-2. At the 85th minute, another goal was scored by the US team, only to be disallowed by the referee for an al-

leged pull on a Slovenian player. Video evidence did not support this claim at all, but as FIFA rules state, a referee's call is final despite any evidence otherwise.

The second instance of shoddy refereeing came from the Germany-England game in the round of 16. After trailing 2-0, England managed to score a goal to close the gap to 2-1. A second shot by Lampard hit the crossbar and bounced into the net. However, the goal was not recognized by the referee as he believed it did not pass the goal line. Video evidence later shows Lampard's shot on net as clearly a goal for England, so unless the referee's goal line resembles the one shown below, England should have tied the game at 2-2. As a result, Germany went on to defeat England 4-1.

Finally, the Argentina-Mexico game that very same afternoon showed another officiating error when the referee allowed an offside goal from Argentina while the game was tied at 0-0. Argentina ended up winning that game 3-1. However, with so many officiating controversies surrounding goals alone, one must wonder why FIFA has not adopted video replay technology yet. With only 3 referees on the field at all times, the referees are likely unable to always make the correct call. There have been many instances of wrongly issued cards in addition to the bad calls on goals. Adopting video replay would help the referees to make the correct call. In addition, we may actually progress to a society with less soccer street riots. Who knows?



Preview: HTML 5, Doing it Live



BHAVYA KASHYAP
STAFF WRITER

When it comes to the software development, the average person is usually a bit befuddled; discussions about it tend to be quite esoteric, and setting up can involve a steep learning curve depending on the language and IDE. Most young North Americans have, however, had at least a little bit of experience with basic web development or design, be it via work opportunities like co-op, or merely due to the desire to make changes to a not-so-secret MySpace profile page.

HTML (hyper text mark-up language) is thus far the most commonly used language employed by the computer-aware population, and its last major revision occurred over ten years ago (doesn't realising this make you feel old?). Now, after all this time, the W3C, maintainer of both HTML and CSS has finally brought some significant changes to the widely used tool.

Defining the fifth major revision of the language, work on HTML5 has been ongoing since 2004, and has been a joint effort between the W3C HTML WorkGroup and WHATWG (Web Hypertext Application Technology Working Group), with input being provided by all the major browser owners: Microsoft, Apple, Opera, and Mozilla. Previews of the new version of HTML suggest that W3C has taken a lot from observing standard web design practices, making templates for more easily implemented in HTML5 that they would have previously with CSS or JavaScript. There has also been a large emphasis on the readability of source code. Doctype headers and meta tags for defining character encoding have shrunken drastically. A standard template with HTML4 that could have involved a series of floating divs, named conventionally as "header", "footer", "content", "nav", (and so on) can now be replaced by section-themed tags; the containers eliminate the need for cross-browser hacks, but also makes the source-code easier on the eyes and tabbing quicker for the end user.

Newly implemented multimedia tags have also indicated an awareness of the

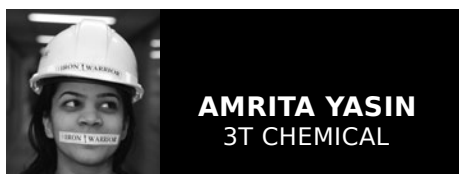
web's general movement towards more interactive websites. Up till recently, embedded audio and video has suffered from some cross browser discrepancies with regards to loading and rendering, save for those files in Flash format. The <audio> and <video> elements now make a variety of file formats embeddable, and should have full cross-browser support upon HTML5's official deployment. The <video> tag also supports "posters", a png or jpg image of the developer's choice used to represent the video when it is not playing. Both Opera and WebKit have recently released experimental builds with partial support for these multimedia tags so that the curious web-dev may muck around. More serious web-developers will also be pleased to know that HTML 5 has integrated a lot of commonly used JavaScript and Jscript features, such as offline data storage, cross-document messaging, and access to the back/forward stack. It should not be left unsaid that they have also finally created a native drag-and-drop attribute that can be used on any element (much fun shall emerge from this)! The full list of new elements can be seen at <http://www.w3.org/TR/html5-diff/>.

Some of the less obvious changes to HTML 5 revolve around how it is defined within browsers. Previous versions of HTML and XHTML have traditionally been defined in terms of their syntax. HTML5 is now being defined in terms of the Document Object Model (DOM)- a tree-like representational structure used by browsers to comprehend the document (it is traversed depth-first for easy element retrieval, for those who are curious).

Work on HTML5 continues to progress at phenomenal speeds, though the official "release" date has not been stated- it is theorized that the release will occur any time between the next sixteen months to several years. The timeframe has proven to be a disappointment to the keen few that follow its advancements. Fortunately, there are numerous channels through which ambitious coders may wish to contribute, and developers are encouraged to contact W3C's HTML WG/WHATWG by subscribing to their mailing lists, wikis, forums, and rss feeds.

Links: <http://www.w3.org/html/>
<http://www.whatwg.org/>

What if you only had \$1.40 left in your pocket?



AMRITA YASIN
3T CHEMICAL

The other day I went to the mall to kill time. After 40 minutes of being picky and bugging sales associates, I fell in love with this black shirt only to realize that I forgot my wallet at my work desk. The bus was due in half an hour, and I had a swimming lesson in almost an hour. Before leaving for the mall I had decided to eat something right there so my muscles don't fail me in the pool. After some fishing I was able to find a loonie, a quarter, a nickel and a dime, thanks to CnD shopping. So there I was - hungry with \$1.40 in my pocket. I decided to get a chocolate or something to distract my brain. A kiosk sold chocolates for \$1.39 which + tax was out of my range. Looking at all the other deals priced at \$2.45 and \$3.97 I wished that I hadn't forgotten my wallet - all I could think of was that this is twice or even thrice of what I can afford right now.

At some point during this disappointing shopping trip I started thinking what if it actually happens - what if most of time I

am unable to buy things as lavishly as I do now or eat out whenever I feel like it? Living at home during the study terms and two of my co-op terms I didn't have to worry about money too much. But like every student right after paying that 4-figure tuition fee, end of study terms, when my job pays less than the previous one or times when I am trying to save for something are always hard. And so I decided to write my own guidelines for budgeting.

Don't consider these as set in stone. People have different lifestyles; some of these tips might work for you while some won't.

1.) Write it down! Rather than just keeping a mental note of everything a written summary will give you a more clear and discrete view of what you are doing with your money. Sticking to my very basic computer skill Ms Excel has been my favourite for years. If you are more tech savvy you can use those fancy mobile phone applications too.

2.) Write the budget for a foreseeable period of time. As a student, 8 months has always worked for me - 4 months of co-op when the inflows are greater than the outflows and 4 months of study term when the outflows are more than the inflows. Also keep in mind things that you need to save

for in advance e.g. two consecutive study terms or even your grad trip ;)

3.) Keep track of your major sources of income such as payroll, scholarships, contribution from parents etc separately. In addition to bookkeeping it also helps to foresee future fluctuations and their overall effect and thus plan accordingly.

Similarly assemble your expenses into categories such as food, clothes, rent etc. Categorize such that your predicted expenses in each category are somewhat constant over certain periods of time. It makes it easier to observe if the expenses alternate by too much between weeks or months. Be careful to not have too many categories or you'll lose the main focus.

4.) If you notice that you are overshooting, try to cut down in all areas such as eating out, clothes etc rather than just one aspect, because chances are you will end up justifying that expenditure to yourself.

5.) Budget reasonably! If you underestimate your expenses to keep yourself under check you will end up spending more anyways, marring the whole point of budgeting. If you overestimate you will provide yourself room to overspend.

6.) Always keep a cushion for unexpected expenses such as health, sudden travel,

etc.

7.) If you are having problems controlling your urge to shop and/or spend, write down the individual expenses as they are incurred such as July 9th, Morty's Wings for \$20.22. Looking at the monthly bank statement sometimes I really can't justify some expenses and think before I do the same thing again.

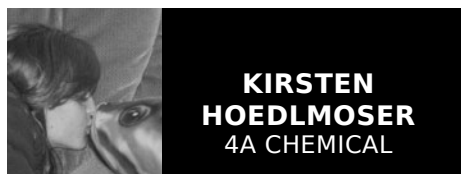
8.) Believe it or not, using cash instead of debit or credit card helps. Whether you spend \$5 or \$200 when you pay by a card it is just a swipe. Actually counting the bills makes you question if the item is actually worth what you are spending.

9.) A couple of times instead of listing my expenses and then deriving my savings I first thought of a certain amount to be saved and then backtracked my expenses from there. This is no hard and fast rule; if the expenses you work out don't seem reasonable change them.

Budgeting does not mean living hand-to-mouth and drooling on seeing others spend. It is to keep a balanced lifestyle; the not-so-recent recession and its effects are still being felt by a lot of us and we should at least try to be prepared for the worst. Treat yourself for your good behavior and stay within limits. Happy Budgeting!!!

Take Your Marks

Tips to Start Your Running Routine



KIRSTEN HOEDLMOSER
4A CHEMICAL

Looking for a challenge? Or a goal to work towards? Look no further: road and trail races are a perfect way to push yourself further or stay motivated.

If you think that road or trail races are only for pro-star athletes who have been running since they were in diapers, you're mistaken! So many different types of people enter races, regardless of their age, talent, or ability, and for a variety of reasons.

First and foremost, remember that races aren't scary things. If you're running a marathon to qualify for the 2012 London Olympics, well, that's a different story. For the rest of us with less lofty ambitions, races can deliver a variety of different and positive experiences.

There's a whole host of reasons why you should consider entering a race, the first being motivation. When you sign up for a race, it gives you a set of definitive goals. If you're a first-time racer, your (A) goal might be finishing the race in a certain time, your (B) goal could be finishing without walking, and your (C) goal might be finishing, period. Knowing what you're working toward helps you get your butt out the door and motivates you to push yourself. You see results faster, whether that's increased fitness, increased speed, or decreased workout dread.

Following a training plan for a race can improve your fitness and health exponentially. Training plans are built to improve your abilities from where you currently stand. They might be designed just to get you to go the distance, like the Couch to 5k (C25K) plan. Others are created to get you to the finish line in a certain time. No matter which plan you choose, any one will make you stronger mentally and physically.

Besides the physical benefits of training for a race, racing can have huge mental benefits too. Finishing a race can give you a huge confidence boost. Once you get to the finish line, the overwhelming feeling of achieving something you once considered unattainable is amazing. When you find yourself in a stressful situation down the road (figuratively speaking), you can remind yourself that you pushed yourself through something you never thought you could do, which makes your current challenge feel beatable.

Think of races as a celebration of all your hard work and dedication. When you're

training for a race, you often expect yourself to perform well once you get there, and can freak yourself out pretty easily. Remind yourself that you've already proven to yourself that you can cover that distance and run it well, which makes the race seem more like one big party. If you run further, faster, or just plain finish, that's a personal victory.

There are tons of different races you can try. In terms of distance, the standards are the 5 km, 10 km, half marathon (13.1 miles, or 21.1 km), and the marathon (26.2 miles, or 42.2 km). There are also races called ultra-marathons, which are any distance greater than 42 km. The most common distances are 50 km, 50 miles, or 100 km. If you've never ran a race before, it's probably a good idea to start with a 5 km or 10 km race and work your way up from there. That said, if you have your sights set on a longer distance for your racing debut, don't let anything hold you back!

Beyond different race distances, there are different types of races. There are road races, trail races, and plenty of multisport options. Road races are run on roads (big surprise there), and trail races are run on trails (surprise again). Multisport is also exactly what it sounds like: a combination of different sports within one race. The most common example of a multisport event is the triathlon. Triathlon combines swimming, biking, and running all in one race. There are sprint distances, which are usually 0.5 km swim, 30 km bike, and 5 km run; Olympic distances, which are 1 km swim, 40 km bike, and 10 km run; a half Ironman distance, and a full Ironman triathlon. Beware: if you're on a tight budget, this sport can get expensive. You can also sign up for tri-a-tri's, which are essentially mini sprint triathlons. If swimming isn't your bag, duathlons follow a run-bike-run format.

There are tons of training plans out there to go with the variety of races and racers. Runner's World, at www.runnersworld.com, can design a plan made especially for you using their Smart Coach system. And yes, it's free. They also have some pre-made plans you can pick. For longer distances such as the marathon, there are also Hal Higdon's plans and the FIRST plan.

If you need a group to train with to help keep you motivated on your way to the races, come join the Accelerated Masses. If you have any questions about what you've read here or heard elsewhere, email acceleratedmasses@gmail.com. We meet Mondays at 6 and Saturdays at 11.

Run happy!

Next IW issue: **Mixing things up**

The Iron Sodoku

ERIN MATHESON
2B CHEMICAL

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What's an ESSCO AGM?



ALESSIA DANELON
2B MECHANICAL

The weekend of June 25, 2010 gathered engineering students from across Ontario for the Engineering Student Societies' Council of Ontario's Annual General Meeting, more colloquially referred to as ESSCO AGM.

ESSCO, a networking association for Engineering Student Societies (ESS) across Ontario, holds the conference every year in the hopes of helping EngSocs, engineering undergraduate programs, and the engineering profession, grow and become more widely recognized across the province.

This year's meeting saw faces from 15 undergraduate engineering schools, as well as many professional representatives from the engineering industry. Guest speakers included representatives from the PEO and OSPE, as well as established engineers from industry and inspirational speakers. Sessions were held the entire weekend, encouraging the workings of proactive engineering students from undergraduate schools universities across the province for the betterment of engineering.

With a vast array of conferences and organizations running simultaneously in the modern world, one cannot help but beg the question, what makes ESSCO and its AGM stand out? What does it offer to an individual as an engineering student, professional engineer, or a member of the general public? In fact, many ask, What does ESSCO do? In the interest of providing a proper, and descriptive answer to these questions, one must begin, not surprisingly, at the beginning.

ESSCO, in its mission statement, outlines several objectives the council strives to achieve, including "to establish and maintain a professional and effective communication network amongst its member engineering societies... to facilitate constructive information exchange and professional development for its delegates" as well as to "perform outreach to the community-at-large". Put more simply, ESSCO exists to provide the means for which schools can communicate with the proper professionals, or ESSs, to pursue the betterment of engineering education, professional development or advocacy at their specific institution. Most benefits of ESSCO occur in the form of networking, to allow for the exchange of advice, recruitment of talent, or even co-operative work between societies and organizations to pursue those initiatives which ESSCO members find worthy of execution.

A prime example of such an initiative was the "Newspaper Exchange" proposed at one of the AGM sessions. This idea, put forth by the University of Waterloo's Society B, proposes the exchange of engineering publications from each undergrad-

uate institution to all other undergraduate schools. This provides the means for keeping up to date on the happenings of each school across Ontario, providing the opportunity for other schools to learn from the events occurring across the province.

The Annual General Meeting itself, allows the representatives from all members active in ESSCO to come together, and bring forth ideas, much like the newspaper exchange, and brainstorm possible opportunities to promote engineering, the PEO and OSPE. This information is communicated to the VP Externals of each society. The overall hope is that, VP Externals, in representing their institutions, not stop at communicating the doings of external organizations to their schools. Instead, it is expected they also act as a means for the ideas and innovations of engineering students at their schools to reach the proper external organizations, and hopefully come into execution. Students often possess inspirational suggestions for the betterment of engineering education, of ESSs, or pursuit of a P. Eng, or engineering advocacy. Many are unaware of where to go with their ideas, or even unaware of the possibility of having their ideas come into execution. This is why ESSCO exists, and this is why its members gather for the Annual General Meeting.

For the 2010 AGM, almost all member schools gathered and did exactly this. Students offered suggestions and advice to member schools to help each society successfully pursue common goals. This included sessions on "Engaging your Engineering Society", "National Engineering Month", "Women in Engineering" and many others. It also provided information sessions by any of the key engineering groups in the province and country. Organizational representatives from the Canadian Federation of Engineering Student, Professional Engineering of Ontario, and the Ontario Society of Professional Engineers, all provided valuable information about their organizations and how each student, society or professional can use these organizations to the best of their advantage. Members also came together for the election of their 2010/2011 ESSCO executives, and subsequently, a plenary session providing direction for ESSCO and its members in the coming year. The pursuit of ESSCO's initiatives and goals will be overseen by the newly elected executives. Consisting of President Alessia Danelon from the University of Waterloo "B", Vice President Communications Josh Levitan from Queen's University, Vice President Development Cameron Winterink from University of Waterloo "A", Vice President Finance and Administration Stephen Schauer from Ryerson University, and Vice President Service Ryan Farrugia from the University of Ontario Institute of Technology, this year hopes to provide many new opportunities to the professional and undergraduate members of ESSCO, as well as for engineering profession in Ontario.



The new ESSCO Executive.

The Brew Man Group Drinks Europe

Exploring Europe's beer offerings in their home countries.



DAN ARMSTRONG
3T MECHANICAL

First and foremost, I, the Dan half of the Brew Man Group, would like to thank Neil for covering the last issue of our column, and for allowing me to go solo in this issue with what shall be a summary and analysis of awesome beer in Europe.

As alluded to in previous editions, I've spent the last two months wandering a continent that could fit inside our province, admiring the art and architecture, appreciating the natural geography, and making friends with the hundreds of other Canadians (we like to travel, apparently) doing the exact same thing. But most importantly, I've gone one tipsy step further and sought out the native (and worthwhile) beers in every single country, and this is the story I now present to our readers. From the tiny pubs of "bad weather, worse food, Mary f**king Poppins"

England, to Colin Farrell's only successful attempt at acting in Bruges, I shall bring forth the word of good beer and the quests required to seek it out.

England: Everyone knows this country is all about the pubs and the the cask ale. While there are innumerable unique, flavourful, delicious ales to be had in England, they can be tricky to find unless you venture out into smaller towns. While in London, it seemed almost every pub was happy to pump out Greene King IPA and Old Speckled Hen. Cambridge, on the other hand, had dozens of regional craft brews to offer. My favourite stop was The Elm Tree, a tiny tavern specializing in microbrews and heavy metal (effin' eh). Further North, the York Brewery produces some incredible ales and has a few of their own pubs scattered about the ancient walled village. Sip on their Centurion's Ghost at the Three Legged Mare before enjoying a Cornish pasty (don't I sound British!). If stuck in a large city, then craft beer bars can be found (with some difficulty). I'd suggest asking a local but everyone in London seemed to drink pale lagers. Leeds was better, plus the people in the North are nicer.

Ireland: Guinness, right? Yep. Guinness, and things owned by Guinness, are about all you'll find when it comes to Irish beer. I must digress, the tour at the brewery is very impressive (visually, anyway). After wandering through displays on Guinness history, beer ingredients, cask manufacturing, and Guinness' famous advertisements, you exchange your ticket for a pint in the massive, all-glass Gravity Bar which has a terrific view of Dublin. Plus, there are enough old couples who can't drink more than two sips that you just might get handed a free pint (or two, in my case). Also available in Ireland are Kilkenny, Smithwick's, and Harp Lager, all owned by Guinness (and served at every Irish pub in the world).



Dan with his Westvleteren 12 in its proper glass.

Apparently Ireland isn't too into the whole microbrewery thing, so don't feel too guilty if you spend most of your time there drinking Guinness. If you can, have Murphy's instead - it's like Guinness, but better. Alternately, drink Guinness Foreign Extra Stout, a 7.5% stout that uses the actual (original) Guinness recipe, not the watered down draught version we're all used to.

France/Spain/Italy/Hungary: Welcome to the land of the generic Euro-lager. Just like we have Molson Canadian, France has Kronenbourg, Spain has San Miguel, Italy has Peroni, and Hungary has Dreher. Great domestic brews are simply hard to find. My one success story came about in

an Italian supermarket, in the form of two extremely expensive pint bottles (4.50 euro each, more than I ever paid for a bottle of wine in Italy) from a brewery called Birrificio Degli Archi. The Regio (a Scottish ale) and Ossessa (a stout) were both stellar, and motivated me to look up the brewery. Turns out they only started in 2008, are very small, but seem to fall in with a recent trend of good Italian microbreweries (perhaps some sort of anti-wine revolution?).

Czech Republic: You know Pilsner Urquell? Yes you do, it comes in a green and gold can at the LCBO, has a crisp hoppy taste, and probably ended up in your last 8 pack of mixed cans. Well it's important to know that this was the very first pilsner in the world (it was named as such because it comes from Plzen). It's also important to know that this beer is freaking awesome when it's fresh on tap. The fresh, grassy, floral hops make this an addictive session beer. Thankfully pints tend to cost about

\$2, so it's an easy habit to sustain.

Germany: Munich is the beer capital of Germany. Almost all the best and most popular German beers are made there (Weihenstephaner, Andechs, Hacker-Pschorr, Paulaner, etc.), they have massive Biergartens that sling litre glasses of cold brew, and they host Oktoberfest every fall. But wait, I'm staying in Berlin the entire time? Oh. F**k. On the plus side, I did visit the oldest Biergarten in Berlin and had a pint of my favourite hefeweizen (Weihenstephaner... grab it at the LCBO) while watching everyone else get way too excited about the world cup.

Rarer beers can be hard to find (only two good bottle shops in Berlin; the one on East side of the wall is reportedly racist, so go to Ambrosetti on the West side), but the popular awesome beers are everywhere. Bars are a guaranteed good time, but I felt way local and cool walking around Kreuzberg with road beers for a few hours, ducking into convenience stores for a new one whenever necessary (don't worry, they have bottle openers at the register!) Don't forget to fill up on currywurst on the way home.

Belgium: Honestly, this place is everything I dreamed it would be. I spent three days in Brussels, four in Brugge, managed to try 35 different beers, and drank the number one ranked beer in the world; the elusive Trappist ale, Westvleteren 12 (for the record, it might have in fact been the best beer I've ever tried).

Amazing brews are everywhere. Bottle shops like Beer Planet or De Bier Tempel carry hundreds, sometimes over 1000 different Belgian beers, grocery stores and internet cafes put the LCBO's selection to shame, and then there's bars like the Delirium Cafe with the world record

for most beers at a bar (2004, to be exact). I should rip on Neil for missing out on this but I just can't; this is a paradise all beer lovers deserve to experience. One highlight was sampling Lambic beers; sour ales created by spontaneous fermentation, meaning they use the wild yeasts that exist naturally in the air. In Brussels I visited the hundred year-old Cantillon brewery, snuck in on a private tour, and learned tons about this unique process. It's curious to note that if the building were to burn down, all the special yeasts living in the ceiling and floor would perish and the brewery could never exist again.

As I write this I am in Amsterdam. Unfortunately I have not yet sampled many Dutch beers, but after Belgium, it's like, what's the point. My palate will no longer tolerate anything less complex than a David Lynch film. Plus, Neil told me about this herb that's in the same family as hops that I'm supposed to check out. Speaking of which...

Props to hops // Dan (and Neil, in spirit)

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Sarah's Gone to Ghana: Fact vs. Fiction

SARAH GRANT
EWB CORRESPONDENT

Disclaimer: Please keep in mind that my "facts" are actually not facts, but rather discoveries that I've made during one week in Kpandai, Northern Region, Ghana. These discoveries are realities for a 22 year old white Canadian, and may not be applicable to Ghanaians. So please keep an open mind and don't just accept what I write to be true!

Idea: Africa is not safe.

Before I came here, many people were concerned for my safety, and this includes health concerns as well as concerns that arise from knowing the war torn history in African countries that began after colonization.

"Truth": During my week in Kpandai (pronounced Pan-Dye), I've discovered that it will be very difficult for anyone to cause me harm. Last night, I awoke in the middle of the night. You know when you're half asleep and disoriented and you think shadows are moving? I thought my door was moving, and therefore I thought my door was a person. I screamed loudly, and when I discovered it was just my door, I tried to turn my scream into a rooster call. I was unsuccessful, and several members of my host family came to my rescue. It took some time to explain that I thought my door was a person and therefore screamed like a rooster. Moral of the story: people will look out for you. In addition to that, I'm NEVER alone. Even if I wanted to be, which I often do, it's impossible. I'll leave my home to go to the market, and find a little Ghanaian hand in each of mine – my host sisters like to come with me everywhere. Not that 5 year olds would be great at defense but you get the idea.

That's not to say there aren't parts of the entire continent of Africa, or even parts of Ghana that are unsafe. There are many countries that are in political unrest that may not be safe to travel to. But Kpandai, Ghana is not one of them! I actually saw a few children with sticks tied together to make rifles, and they were pretending to shoot things. I was pretty worried, and when I approached them, I heard them talking about Blood Diamond! They'd gotten the idea of child soldiers from the Hollywood story set during the civil war in Sierra Leone, just as any child in Can-

ada would. I also watched their mothers scold them afterwards, just as many mothers in Canada would.

As for the health – well I'm not really a model for that. The food and water and hot weather haven't been agreeing with me for the past few days. I went to church with my host family on Sunday morning, and about 2 hours in I had to leave...I couldn't pay attention anyway because the entire time I was praying that I would not throw up or poop in the church.

The health care is stellar here. There are a few practices I'm unsure of... I had a pretty high fever last night and one of my host mothers, Mama Delfina, told me that in some households, if you have a fever, they crush ginger and pepe and stick it up your bum, then make you jog with it. I thought she was joking and trying to scare me (which she partly was – she thought it was hilarious)...but when I asked the doctor at the clinic he said that it was true! Luckily it's not common in clinics or hospitals...

Idea: There are no flush toilets, no electricity, no vehicles, etc. in Ghana.

Truth: This is true for most of the rural villages I've seen thus far, but it isn't true for the towns, especially the major ones. Cars, but more likely motos, whiz by. Kpandai gained electricity in 2000, although "lights out" is very common and usually happens about once a day for an hour or more. I've seen 2 flush toilets in Kpandai – I'm sure there are more. Where I'm living, there's a really nice latrine. I invented a game called shoes vs. stones for the children in my host family to play at night. Half the kids get stones and half get shoes, and whichever team can kill the most cockroaches in the latrine wins! They seem to really enjoy it.

Idea: Poor Ghanaians/Africans need and will benefit from our (westerners) help.

"Truth": Ahhhhh. I'm struggling huge with this one. There are different forms of "help". Let me share a story with you that will identify a few different kinds:

This Saturday morning, after I finished with my laundry and swept my room, I hopped on the back of my coworker's moto and we headed to Onyumbo Village, a short distance from Kpandai. The DDA (District Director of Agriculture, the

head honcho of MoFA in Kpandai and the one I report to), a few AEAs (Agriculture Extension Agents – experts in agriculture, and the ones who meet with farmer groups and provide them with inputs and knowledge), and a Ghanaian researcher from Tamale were already at the village.

The purpose of the visit was to conduct a community participation approach called Participatory Rural Appraisal (PRA) with the farmers to determine challenges and best practices for improving yam yields. The researcher had a list of about 50 questions, and the hope was that men and women alike would contribute freely.

I was very excited. I had my Birkenstocks on and my Moleskin notebook ready, and I was eager to hear what the farmers had to say! There were over 100 farmers gathered under the mango trees with us, about 15 of which were females. Whenever the researcher would ask the females directly (and this would be necessary, otherwise they wouldn't speak), he would look at me and smile, as if to show me proudly that the females are also being involved. I can only hope that when I'm not there, they're still asked, especially since there were a few instances when their answers were completely different from the males! When asked if the women were involved in any planting decisions the response was laughter, so I was very happy when the Ghanaian researcher stated "Before I plant, although I am the head of the household, I sit down with my wife and we decide together, because two heads are better than one, and she understands the market". I wonder how he was viewed upon saying this.

After several hours of occupying the valuable time of these farmers (and after about half the farmers left when they realized we didn't have anything to give out), we had a slightly better understanding of what the issues were for this village. Three main points included:

- 1) No access to good seeds
- 2) Infertile lands
- 3) No education therefore no planning prior to planting (this is somewhat my role within MoFA!)

Apparently the researcher was going to write a paper for the government (not sure which level but my understanding was regional). I can't help but wonder if it will ever get there, and if it does, will the government respond? And if they do respond, how much of what the farmers were really

trying to say will be understood?

A MoFA employee explained that one barrier that makes the government hold back spending for training for these farmers is that farmers often aren't following best practices as provided by MoFA anyway. This makes me wonder how the government knows that, and what is MoFA doing wrong?

ANYWAY, that's not the meat of my story. After the questions were finished, I noticed a big white pick up pull up to the village. In the back there were tons of minerals (soda pop), and crackers to be handed out to all that attended. Suddenly, everyone in the village appeared, and I heard a colleague of mine within MoFA grumble about how every time he returns to the village, they will expect something from him. As a white person, I knew how he felt. When I arrived, I was asked to fund a church in the village by the chairperson of the meeting. Only after I gave an impromptu speech about "Agriculture As A Business" (my work) was I left alone (Warning to all future JFs: There will be times when you will be asked, in front of over a hundred people who can't speak English and have rarely, if ever seen a white person, to give a 10 minute speech on why you're in Ghana, so be prepared).

My director gave me a few packages of biscuits to eat. I only ate one, and haphazardly tossed a package to a guy sitting by a tree – he had been at the meeting and looked about my age. After about an hour of people arguing over who would get the minerals and crackers, a man came up to me. He had two young children by his side, and he handed me a giant yam. I was super confused until I realized it was the same man by the tree. He was so grateful for the package of biscuits that he showed me his family and presented me with a yam! (No, I couldn't accept the yam)

It is so easy to stay motivated when you receive instant gratification. You know, in the short term, you're doing something, whether it's sending clothes off or funding a church. My biscuits filled that man's belly for about 45 minutes. But in the long run, is that really what "development" looks like? I can only hope that what I'm doing will be sustainable, and not just fade away as soon as I'm gone. I hope that it'll touch that young farmer, without him even realizing that I had a part to play in it.

Iron Warrior Sports Briefs

The Madness called the NBA Free Agency

Sopranos.

The Knicks opened their video presentation on Thursday July 1st with a scene from The Sopranos, a LeBron favorite. Suddenly James Gandolfini and Edie Falco were Tony and Carmela Soprano. Maybe for the last time, Tony hadn't been killed off by David Chase after all. He was wearing a beard and living with his wife under the cover of the witness protection program, and Tony was telling Carmela he had an important friend coming to town. A friend who needed a place to stay; A friend named LeBron James. Carmela scanned her computer for the ideal midtown spot (read: Madison Square Garden), and when she told Tony she'd found the right place for a man of James' stature, the final shot wasn't half as suspenseful as The Sopranos' final scene in the diner.

Apart from the Knicks, the New Jersey Nets, Bulls, Heat, Los Angeles Clippers and Cleveland Cavaliers, his team for

the last seven years, are scheduled to meet with James.

Get ready for All-Pro levels of misdirection and misinformation. The sports media is already covering this story as if it were a presidential election, and every NBA "insider" worth his salt will anonymously feed reporters the latest rumors, which will be tweeted in an endless stream of speculation.

Already, we've heard that LeBron to Chicago is a "done deal," though that would be pretty difficult to pull off since radio host Stephen A. Smith tweeted that "LeBron James is heading to South Beach with Chris Bosh to team with Dwayne Wade and Pat Riley." The Knicks are really focusing on Hawks free agent Joe Johnson, since they think he's a better player than LeBron; but wait, one Knicks exec says "we still think we're in" the LeBron sweepstakes. By this time next week, you'll be sick of all the talk, and begging these guys to just pick a team, any

team, and play ball.

As of July 4th : Joe Johnson was on the brink of accepting a 6 year 119 million max contract, Dirk Nowitzki resigned with the Dallas Mavericks accepting a 4 year 80 million contract. Steve Blake signed a 4 year 16 million contract with the Lakers. Forward John Salmon reached an agreement with the Bucks on a 5 year 40 million contract. The Phoenix Suns have signed forward Hakim Warrick on a four-year, \$18 million contract, a deal that likely foreshadows the departure of All-Star Amare Stoudamire. Closer to home the Raptors and forward Amir Johnson have agreed on a 5 year 34 million contract.

Draft wrap up: The 2010 Draft threw no real surprises with University of Kentucky's sensational Point guard John Wall being selected the number one overall pick by the Washington Wizards. The Raptors with the 13th pick drafted Tar Heels forward Ed Davis.

LOHIT SARMA
4A COMPUTER

As the clock struck 12:01 a.m on July 1st, the biggest free-agent season in sports history began, guaranteeing that the NBA landscape would be torn apart and rearranged. LeBron James, Dwyane Wade, Chris Bosh, Amare Stoudemire, and Joe Johnson along a collection of other stars no longer under contract, can be wooed by teams like the New Jersey Nets, New York Knicks, Chicago Bulls, Miami Heat, and other franchises with the salary cap flexibility to spend millions.

The ringleader of this bunch is LeBron James, the self-proclaimed "King." Even before the clock struck 12, reports indicated that teams had moved in as early as 12:01, filing into his hometown of Akron, pitching James on their grand plans to deliver him his first championship. The New York Knicks went as far as creating a special episode of

Future of Gaming: Buy It..Or Else!

Xbox 360 Slim: The new shiny lemon?



JON MARTIN
OBI JON1138

With the conclusion of the Electronics Entertainment Expo (E3) news is understandably short for this issue, at least from Sony and Nintendo. Microsoft on the other hand has had quite of few noteworthy stories relating to the release of the new slim Xbox 360, as a result this article will be mostly Microsoft Xbox related – sorry fanboys – but still discussing industry wide issues as well as some of my own opinions.

Microsoft surprised everyone by launching the slim 360 so soon after announcing it, as well as keeping it under wraps for as long as they did. When the Xbox 360 Elite was released, pictures and spec leaked a couple of months early, leaving very little for speculation except when Microsoft would unveil the ‘secret’ system that everyone already knew about. The slim Xbox 360 on the other hand was rumoured, but actual pictures weren’t leaked until about two days before the Microsoft press briefing. Once unveiled I think everyone was expecting a fall or holiday release date, not the next day; with the attendees of the press conference getting one for free.

I have often wondered how much of these ‘leaks’ of technology are actually planned and how much is genuine. In the instance of the Xbox 360 Elite as well as the leak and subsequent legal battles of the iPhone 4 I think they are genuine errors. In both cases the press leak had the effect of killing any suspense and anticipation

in the market, once everyone knew about the new versions the actual announcement and release were almost useless. Compare those cases with the new 360, with the photo leak in a European advertisement all eyes were on Microsoft when their press conference started, waiting for the official announcement (with all the specs and prices thrown in) or the classic “We do not comment on rumours and speculation.” But what was the cause of this difference? I think it all comes down to timing, and the complacency of consumers. In my first two examples Microsoft and Apple both tried to cover their tracks and stick to their scheduled announcement schedule. This resulted in everyone in the industry and market knowing everything they were going to say before they said it. With the new 360 Microsoft was able to use the leak to their advantage to gain even more press coverage than they would normally have had – and that is why I wonder if it was staged, the timing is just too coincidental.

So, on to some Xbox 360 Slim dissection, courtesy of Anand Lal Shimpi (www.anandtech.com). Microsoft seems to be discontinuing a few current accessories that aren’t performing as they should. In light of the recent firmware upgrade that allows the Xbox 360 to utilize generic flash drives for saving games and other Xbox Live purchases, the market on Xbox 360 Memory Units has plummeted. Why pay \$20 for a 512MB memory unit when you can buy a flash drive with 4GB for about \$10 on sale? Microsoft has clearly reached the same conclusion as they have removed all memory unit slots from the Xbox 360, replacing them with extra USB

ports. Another accessory that has changed is the faceplate – remember that removable plate on the front of the 360? Yeah, it seems no one else does either. When the 360 first launched Microsoft showed off the individuality of the system through customizable faceplates. Unfortunately no one really wanted to spend the money on one of the few designs that were ever released. Also many people pointed out that since the side panels were not removable as well the faceplate just looked stupid on a stand-alone system. The new 360 uses a shiny black case made of three pieces, all attached using the same annoying latch system from the original – only worse.

While not announced at E3, Microsoft has confirmed that there will be an ‘arcade’ equivalent for the new system this holiday season, selling at \$200. There will also be bundles with Kinect as well, selling for \$300 and \$400, for the new arcade and standard slim respectively. In this case the deconstruction I mentioned shows how the price reduction will probably be done, at least in my opinion. When the case is removed a small compartment is exposed in the new system, with a small circuit board in it. This is the wireless N module, which connects to the main motherboards by an internal USB port. As far as I see it, the only reason to not hardwire the wireless module into the system is if you intend to have it be optional so that you could sell the same system without it for a lower price point – something like the new ‘arcade’ slim for instance. Another obvious change is the size of the hard drive, if 250GB is going to be the new standard I’m expecting 60 or 120GB in the new ‘arcade’ version. As games get larger

the days of the hard drive-less Xbox 360 are numbered.

Talking about the hard drive brings up a point I am a little angry about – change without change. The new 360 uses a different sized hard drive case, making it impossible to use an existing drive in the new system. The interesting part comes when you take both hard drive cases apart, to reveal the exact same model of drive within. Not a single thing was changed, except the case and connection to the system, yet all current hard drives are rendered useless if you ever upgrade. This leads to my last point, the death of the current model of the Xbox 360. Don’t get me wrong, I think the new 360 is great, if I had the money lying around I would go out and get one right now, but I don’t, and there is nothing wrong with the system I have. Ignoring the new form factor the new 360 doesn’t have any big feature changes, as both a 250GB hard drive and the wireless N module are available separately for the current system. But the current system has been discontinued, with only the new systems currently in production. What this means for current owners is a future abandonment for accessories; memory units will no longer be made, the current hard drive will be dropped, white controllers and accessories will be replaced with gloss black. The systems that every 360 owner currently has will soon be obsolete, unless you fork over the money to get the newest, shiniest, and most up-to-date technology there is.

Well, hope this article wasn’t too cynical. Hey Microsoft, if you send me a new system, I’m sure I would write a great review ;) Keep on gaming!

What a Wonderful Time to be a PC Gamer



LISA LIU
3A ENVIRONMENTAL

Author’s Note: This article is just one fangirl’s excited ramblings about the upcoming PC titles of 2010 and possibly beyond. There are many other fine games to be released which will not necessarily be covered in this article.

2010 is shaping up to be a big year for PC gamers everywhere. With the recent gaming buzz coming out of E3 coupled with the imminent release of Starcraft II, it is a good time to be a PC gamer. Just within the next few months are some

much anticipated game titles such as Starcraft II, Civ V, Star Wars – The Old Republic, World of Warcraft Cataclysm, and Portal 2.

Of course, the big ticket item is Starcraft II (SCII). The decade long wait for real time strategy fans is almost over. Due to be released July 27, the second last day of class, SCII is bound to tear apart many UW gamers, unable to decide between gaming and passing. With the world-wide success of the first Starcraft (I’m looking at you, Korea), the second title is sure to become a hit immediately. With sneak-peeks and battle reports releasing over the course of the past two years, the anticipation has been building until the recent beta-testing release. Many fans had a chance

to test out the game for themselves, and I must say I am already formulating strategies with all the new units available to be experimented with.

The other title that has me on brink-of-my-seat excitement is Civilization V. The fifth PC game to be released in the popular Civilization franchise looks even better than Civ IV, if it’s possible. Civ IV has already perfected the franchise in many ways, but Civ V somehow managed to push the envelope even more. With a new introduction of hexagon tiles, upgraded graphics, new leaders, ranged bombardment, and new modding capabilities, Civ V is promising to be another game which will rob days, if not months, of my life. Luckily this game is not released until

September, when most of us will be on our work terms.

Of course, there’s the new expansion to World of Warcraft which is promising two new races, a higher level cap of 85, new high-level zones, and more raid content. As if gaming crack wasn’t addictive enough, Blizzard has found yet more ways to suck the time out of our fingers. In addition, there are the ever-promised Valve titles such as Half-Life 3 and Portal 2. I’ve resigned myself to the fact that Half-Life 3 will forever be in development on Valve Time, but the recent announcement of Portal 2 at E3 had me giddy like a school girl again. After all, who can resist a reunion with GladOS and our best friend, the Companion Cube.

3D Glasses Heading to Obsolescence



ALEX HOGEVEEN RUTTER
3A ELECTRICAL

Fashion mavens beware. Those incredibly rad 3D glasses may be a fad of the past, with technology to project 3D images without the glasses becoming cheaper and widely available. The physics behind the technology is not new: use lenses cut at specific angles to project a different image to each eye, with the combination of the two images designed to give a 3D look, much as the two images filtered by 3D glasses create an image.

Thus far, users have been forced to view from a pre-defined range: wherever it is the lenses are designed to project. One method around this limitation is to use an array of

lenses to project 3D images to a sufficient number of spots as to appear seamless. Samsung has created a screen (exhibited at CeBit, the world’s largest computer expo) that can split the 3D image 64 ways. Fraunhofer, a German company, demonstrated a different approach: that of using cameras to track users’ eyes and adjust the angle of the lenses to the viewer. This approach takes advantage of a natural synergy: that of tracking users’ movements for control, or even interaction, as part of a video game.

A perhaps more familiar application is through Microsoft’s Xbox Kinect-presented at the E3 Expo this year in Los Angeles. The much anticipated video-human interaction from Microsoft and others really only makes sense with quality 3D visual displays-if we move in 3 dimensions, a display in just 2 will seem lacking, regardless of the games’ other virtues.

While tracking users’ movements to readjust the angle of the lenses is not exactly novel, this technology has really been enabled by advances in computing power. The lenses are controlled by LEDs which must use incoming data from the viewers’ eyes to recalculate the projected image at the refresh rate of 240 Hz. Microsoft’s technology currently can project to two different locations (viewers). As each 3D view requires a separate image for the left and right eye, the 240 Hz drops to a 60 Hz image when split between the two viewers. As images below 60 Hz will appear jerky, higher frequency LED controls are required to split the image to more viewers.

Another innovation is the wedge-shaped design of the lens, which allows the light to be concentrated within the lens and a focal point on the surface. This has greatly reduced the size and weight of the 3D track-

ing technology. The geometry of the lens currently limits Microsoft’s range to 20 degrees, with hopes of soon increasing to 40.

While the physics and engineering required are not trivial, one can hope that it is only a matter of time to have 180 degree range with a limitless number of viewers. These advances will perhaps pave the way to a revolution in the way we view digital technology, even more so than the adoption of colour television in the 1960s and combining audio and visual in the 1930s.

Viewing technology is closing in on what can be regarded as the communication holy grail equality with real perception. As the final frontier of visual perception, 3D technology may finally enable acceptance for virtual reality and its incumbent social changes, not just allow us to relegate our red and blue glasses to the antique museum.

How To Succeed In The Workplace

Part 2: Pretending to Take an Interest



PETER KELLY
4A CIVIL

Author's Note: This is the second part in a series of three humorous articles on how to 'succeed' in workplace. It does not represent actual engineering conduct.

Everyone, at one point or another, has had a boss who will just talk your ear off about their hobbies or interests no matter how uninterested you may actually be. Some examples of things that people talk about are as follows; fishing, their cottage, children, exercising, sports teams, fantasy sports teams, children, cars, golf, vacations and children. I never have, and likely never will care about little Jimmy's karate competition, and I don't want to hear about how you were able to make a 3 way trade that ended up with you getting, Crosby, Ovechkin, both Sedins and Toews. If I do start caring, well then, I must be sucking up, which brings me into Part 2 of "How to Succeed in the Workplace".

If you are able to figure out what your boss does in his spare time, don't brush it off lightly, rather embrace it and learn about it. By pretending to be interested in

something that your boss is also interested in, then you be able to connect with them on a more personable level, regardless of the fact that your boss may be a heartless, soulless, work-you-to-the-bone type of person. It also provides you with a way to quickly change topics onto something your boss will go on for hours about if allowed. You can then talk about a hobby, rather than about all the work you neglected to do last week. See situation below.

It was a rainy Thursday afternoon at General Consultants and Mr. Johnson was not happy. He had recently found out that they were not awarded the 100 million dollar contract they were trying to secure.

Meanwhile, in a mid-level management office, Markham was harvesting some tomatoes and wheat in Farmville when he heard a knock at the door. "Come In", Markham invited. It was Mr. Johnson and Markham could tell from the look in his eyes, that he was not here for a friendly hello.

"I'm not happy Markham, we didn't get the big contract and were really strapped now! What happened with that proposal!"

Markham responded perplexed, "We didn't get it? That's terrible, I knew I should have helped Hansen out more, but I got caught up closing the Peterson ac-

count." "Right, right, I forgot about that" Mr. Johnson responded somewhat embarrassed. "Well still I expected more so this weekend I'm going to need you to", "Speaking of this weekend" Markham interrupted, "Did I tell you about the new rod I got for Pike fishing? It's titanium cast and has a nickel copper alloy for the spinner. I'm just not sure what type of lure I should be using? I want to catch Pike, but also have appeal for other fish as well. Any recommendations?"

After about thirty minutes of Mr. Johnson explaining the various pros and cons of various lures, he finally made a recommendation for some type that had a sinking feather head, but Markham could care less. He stopped paying attention 29 minutes 45 seconds ago, but made sure to pretend to write down various things that sounded important. It was when Mr. Johnson stopped talking that Markham replied with, "Thanks, that sounds great, I'll be sure to bring you back some of what I catch".

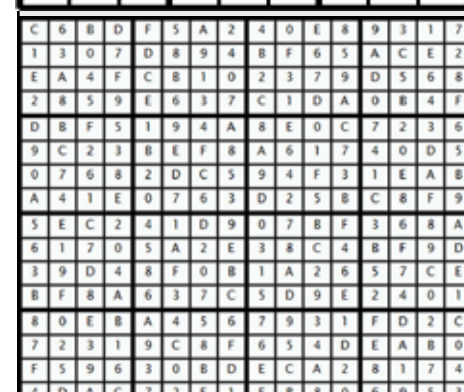
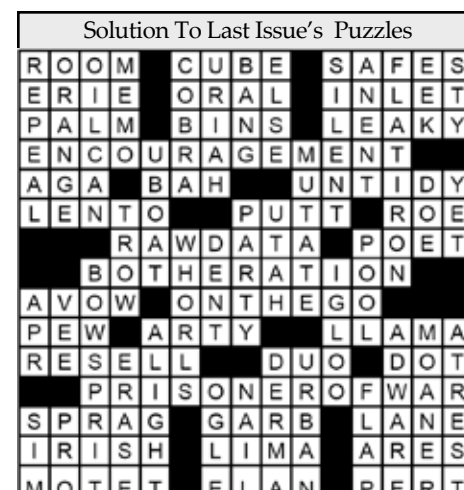
"No problem, I'm glad I could help, have fun this weekend!" and with that Mr. Johnson left the office leaving Markham to return to his virtual crops.

Let's Discuss

Why does this work? Well, when you were undoubtedly about to be asked to

work this weekend, you changed the subject to get your boss's mind off work and onto something he cares about. You're not even going fishing, you're probably just going to nap on the couch and watch television. But that's beside the point, you were able to divert attention, which resulted in you not having to work this weekend. Just keep in mind, you will very likely be asked about it on Monday so a) have a story ready about how you didn't catch anything (you did offer him some fish), b) go to a fish market and pretend you caught something, and c) if you are asked about pictures you have two options c1) didn't bring a camera (which isn't as fun of a story) or c2) you brought one, but while reeling in a real fighter the camera was knocked out of the boat and into the depths of the lake (a bit more razzle dazzle for your tale).

Come back next issue for the conclusion of the series.



Beat the Summer Heat



CHAD SEXINGTON
4Z MANGINEERING

Good afternoon sexy readers!

By now, you're well into the swing of the term with your midterms being over and the hot weather becoming all prevalent-like. I hope you all had a great long weekend and a happy Canadian Birthday and that, as my good friend DJ Mumbles says, "the party didn't stop until you got hit with a mon-goose". I know I celebrated with some red and white goodness that may or may not have involved cake.

Now my sexy readership, if you're like me, you can't keep yourself from thinking the same thing mankind has been wondering for thousands of years: What's the best way to make money without doing anything illegal? Since there is clearly no answer ever to be forthcoming upon such a subject, we'll have to divert ourselves with something new from the Chad Sexington Mail Bag!

It's been quite a while since I've answered emails from you, and for that I apologize,

life has been filled with too many delights to spend time reading hundreds of emails. As always, you can reach me at question-s4chad@gmail.com

Anonymous writes: "Dear Chad, if you were faced with the decision between having to fight a bear, or having to write an essay on politics, which would you choose?"

Really the answer depends on whether the bear is a liberal or a conservative bear. Either way, I would probably go with the bear. A good swift hit in the jibs is really all it takes to put down a bear (or an angry politician).

Mr. Smiley asks: "Chad, what is your solution to the BP oil spill in the gulf of Mexico?"

Genetically modified beavers. Think about it.

PRSDNT1 wonders: "Have you seen my keys?"

Yes, I have. In fact, the last time I saw them they were in your hand and they still are. On that note, if you're the kind of person who loses their keys a lot, a wallet chain for your keys can work really well as long as you remember to attach it. Also, check the freezer.

SeriousSam asks: "How many hats do you have?"

The answer to this question depends on what you consider a hat. Is a toque a hat? Why yes, it is! Is a visor a hat? No, it isn't. A well dressed man recognizes that there are chapeaus for each type of occasion, but at last count I had 26. It's important to remember that baseball caps aren't appropriate at Oktoberfest, and that fedoras aren't going to go well at the beach!

Hot Lady 23 wonders: "How do you beat the summer heat?"

With a heavy club. But seriously, for a heavily bearded lumberjack of sorts it can be quite trying. Freezing a pair of jeans can help, plenty of shade, a good hat, and a cold brew are the trademarks of a hot man, but also turning thyself from a lumberjack into more of a slumberjack with a mid-day siesta is a great way to beat the heat.

Well that knocks down the stack of letters somewhat, but if you ever need the Chad to answer a question, you know what to do. I promise I won't wait so long next time to answer your questions. Keep up with your schoolin' folks.

Until Next Time,
Stay Sexy.
Love Chad

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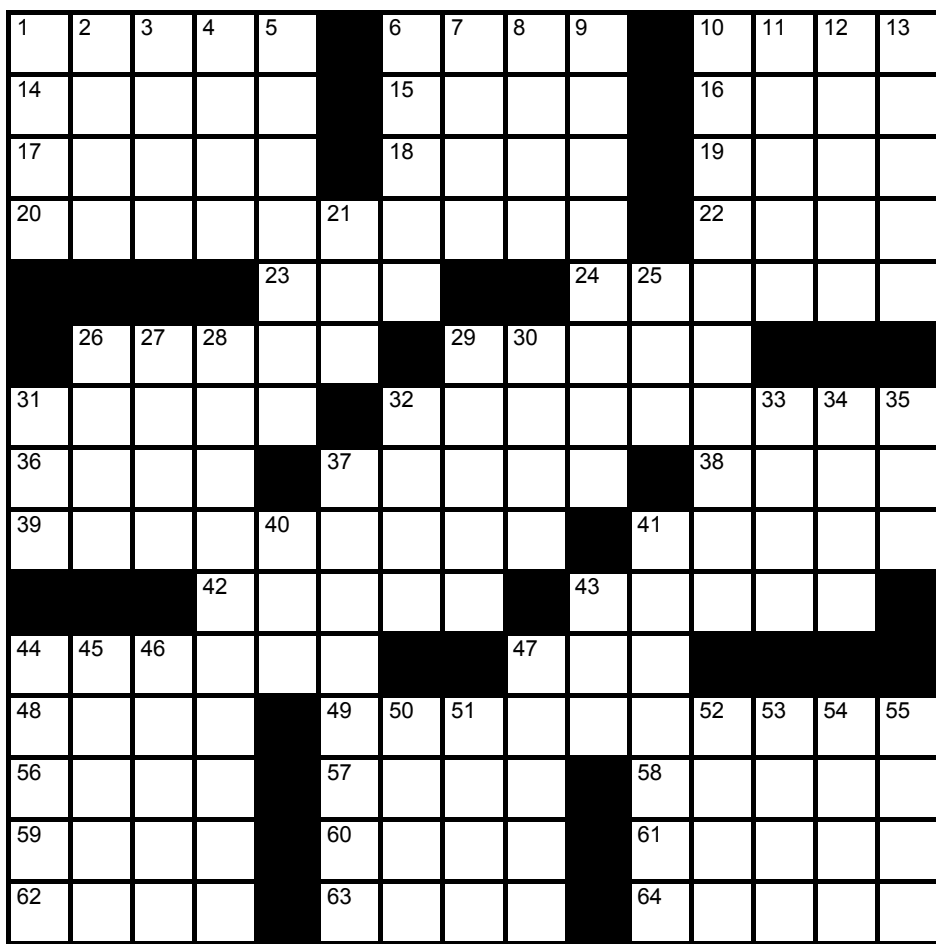
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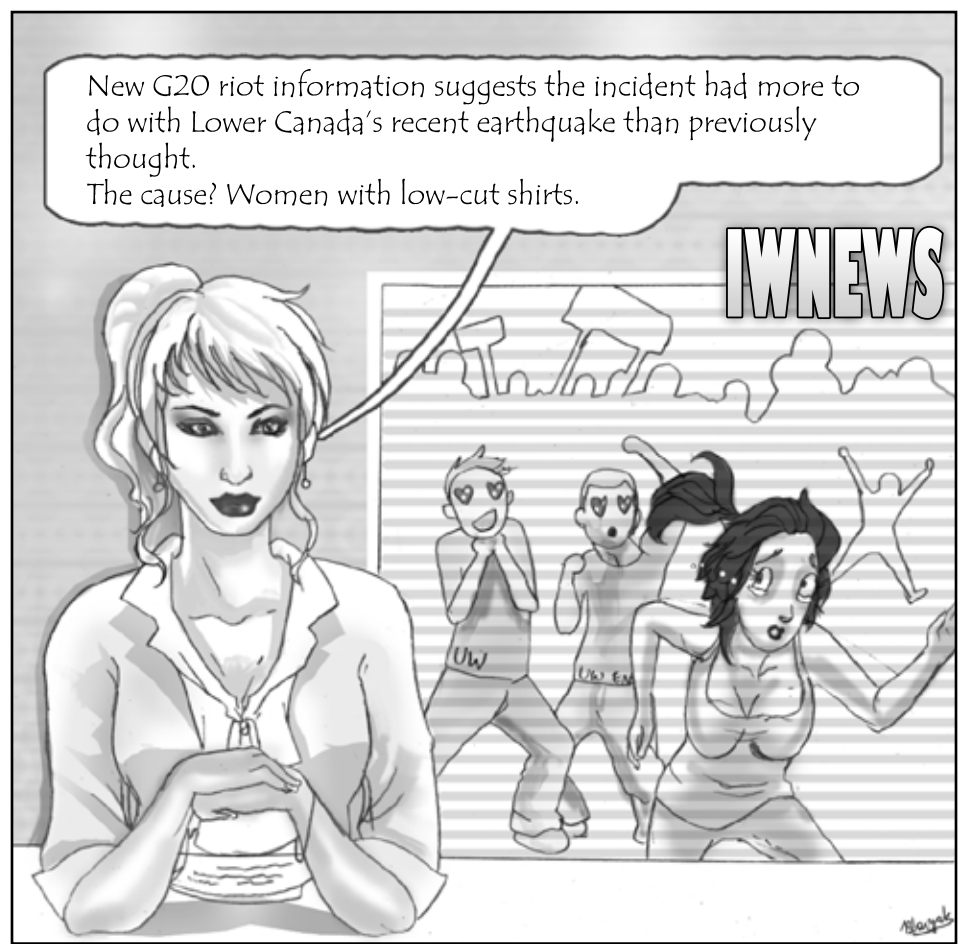
The Iron Crossword

LISA LIU
3A ENVIRONMENTAL



Remember that Earthquake?

BHAVYA KASHYAP
STAFF WRITER



Check our page 15 for The Iron Sudoku

Congratulations to 2012 Electrical, and 2012 System Design for being the first to complete the crossword and sudoku respectively!

ACROSS

1. Cake topper
6. Level, in London
10. ___ 'n puff
14. Chest material
15. Popular Goo Goo Dolls song
16. "Cast Away" setting
17. Swelling
18. Nonsensical input = nonsensical out put
19. ___ moss
20. Cinderella after midnight
22. 100%
23. "i" lid
24. Fled for love
26. Lively
29. Got along
31. Coffee order
32. Being older and in charge
36. Carbon compound suffix

37. Bit of high jinks
38. Woodwind instrument
39. Dark, murky, shut off from the light
41. Premonitions, warnings
42. Strikes out
43. Head honcho
44. Dry creek bed that fills up in flash rain
47. Taxi
48. Pedal pushers
49. Strange
56. Change
57. Curb, with "in"
58. Island nation east of Fiji
59. Egg
60. "Cogito ___ sum"
61. Buzzing
62. Alluring
63. Gift on "The Bachelor"
64. Freetown currency unit

DOWN

1. Decorated, as a cake
2. 1 down rearranged
3. Bad day for Caesar
4. To christen
5. Phillip J. Fry is his own ___
6. Two wrongs don't make one ___
7. "Mi chiamano Mimi," e.g.
8. Communicate silently
9. Abstruse
10. Arena for equestrians
11. Deplete
12. Danger signal
13. Celebrated with festival
21. Coquettish
25. "Seinfeld" uncle
26. Area
27. Clickable image
28. Venesection
29. Before you're a baby
30. Cuckoos
31. Big Apple attraction, with "the"
32. High-hatter
33. Surefooted goat
34. Theater award
35. "Absolutely!"
37. Dresser of the military
40. 'Atta ___!
41. Planetary pathway
43. "Polythene ___" (Beatles song)
44. Big dos
45. "The Canterbury Tales" pilgrim
46. Brought back; restored
47. Birchbark
50. "I, Claudius" role
51. Small purple fruits
52. Ditch
53. "What's gotten ___ you?"
54. Not "fer"
55. Pink, as a steak

THE IRON INQUISITION

Cailin Hillier, 3A Geological

"What is your favourite thing about Canada?"



Rob Pintwala
3A Systems
"Beaver tails."



Kef van Deursen
3A Systems
"G20"



Devin Cass
4A Electrical
"Good, cheap pot"



Taylor Hansen
2B Mechanical
"The Beer is Stronger"



Kristen Leal
2B Earth Science
"Sidney Crosby!"