

the IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

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<http://iwarrior.uwaterloo.ca/>



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Waterloo Mourns The Death of Renown Philanthropist

Christine McCullough
2N Chemical

On Sunday October 26th, while driving to church, Lyle Hallman collided head-on with an oncoming pick-up truck. After being rushed to St. Mary's Hospital he succumbed to his injuries and passed away. The 81-year-old Hallman was considered to be one of Kitchener-Waterloo's greatest citizens. This summer Hallman donated \$4 million to fund a \$4.25 million addition to the Lyle S. Hallman Institute for Health Promotion. Only four years ago Hallman funded the launch of the building that bears his name. His is a name that is both well known and well regarded within the University of Waterloo community.

As you travel through Kitchener-Waterloo, you can see evidence of Hallman's legacy. Fisher-Hallman Road, the MRI suite at Grand River Hospital, the Lyle S. Hallman Chair in Child and Family Welfare, the first of its kind in Canada and even the public pool on Ottawa Street in Kitchener that bears his name. Chances are you or someone you know has lived in a Hallman building; there are 3000 rental units in 63 buildings locally. Despite the success he has experienced in his life, he came from humble beginnings. His father was also a builder, but hit by the depression, his business wasn't as great a triumph. However, Hallman attributes his success in life to his father. Not only did he follow in his father's footsteps by becoming a builder himself, he kept with

him the humility and generosity instilled in him while growing up. In one of his last television interviews he recalled the basis of his philosophy on giving, "As a child, every week my father would give me one quarter, two dimes and one nickel for spending and he told me to always put one dime in the Sunday School basket". This was a lesson that stayed with him throughout his life.

Hallman started his business renovating stores before moving into home construction. He was a savvy businessman and had the millions to show for it. In addition to his success in business, he has been awarded the Order of Canada and an honorary doctorate of Laws from the University of Waterloo. Although he could have easily lived in a sprawling estate anywhere he wanted, for the last 20 years he and his wife lived modestly in a unit at one of his Waterloo apartment buildings. This is yet another example of how he chose to put his community ahead of himself. Regional Chairman Ken Stirling, who knew Hallman, maybe put it best, "He was a pretty ordinary guy who did extraordinary things." Hallman is an example to all of how anybody can have a positive influence on many lives and he will be sadly missed.

The community also lost Beatrice Holst, 70, in the tragic accident. Holst was also on her way to church when her pick-up truck was involved in the collision. She was a long-time school bus driver, a volunteer for many community programs and will be sadly missed by all that knew her.



Lyle S. Hallman speaking at the June 10, 2003 ground-breaking ceremony of a \$4.5-million extension to the centre that already bears his name.

Hallowe'en And MOT Celebrated In POETS

Cindy Bao
2B Electrical

This fall, as Halloween fell on a Friday, the middle of term pub (MOT) was scheduled for that very evening as a Halloween costume party. The event was a definite success.

The weather was warm for an end of October evening, and so the patio was open. The growing attendance filled the space in no time. However, a scattered shower forced those who were enjoying the fresh air indoors.

The costumes worn by the attendees were both creative and versatile. People were dressed as Waldo, Lara Croft, a genie and a drag queen, just to mention a few. The costume contest was the highlight of the evening; contestants won



Jill Goll of the 2A Chem class chums it up with a group of snappily-dressed engineers and artsies at the October 31st Middle of Term pub night.

Continued on page 4. See "Tool! Tool! 60" Wrench!"

Sex, Drugs and Incest

W.A.S.P.S.

What Adults Say Prior to Sex?
All of the sting with no honey?
White Anglo-Saxon Protestants?

This year's Engineering Society drama production is all of these things and more. Wasps focuses on the outrageous journey of Val (Julia Kossowski); a stereotypical tweed-skirt and glasses wearing librarian trying to break with the expectations of society. She does so by doing something very different and adventurous with her life: she gets married. Not to just any man however, but to Cyril (Marcus Riskallah), a mathe-

Continued on page 14. See "Sally Clark's 'W.A.S.P.S.'..."

I never think of the future. It comes soon enough. - Albert Einstein

Letter from the Editor

Joseph Fung

3N Computer

Editor-in-Chief



As we put the stamp of approval on this issue I had two thoughts running through my head: "four down and one to go," and "wow my staff is amazing!" The position of Iron Warrior Editor in Chief has the potential to become the life-sucking be-all, end-all of a student's term; whether it does or not very much depends on the dedication of the Editor's staff. This term I've been blessed by having outstandingly committed staff members. Because of their great work, I've been able to dedicate more effort into the writing of this letter – a letter in which I want to express my satisfaction in a change I've noticed in the halls of UW Engineering.

Over the last few weeks I've been asking people whether they'll be on stream come next summer – I'll be doing eight months of school back to back, and I'm interested to know which of my friends and associates will be returning. What I've been surprised to learn, is that many, many of the people I know are considering international work and study experiences. This thrills me to no end.

In January of 2002 I had the chance to leave for China to teach English for two months, and in August of the same year I returned to China for another seven-month stint. During the nine months I spent in China all together, I learned a few things about life and about myself and yes – I'm going to abuse my power as Iron Warrior Editor in Chief and share them with you.

Learning can actually be enjoyable.

This was the first and most surprising of the lessons I learned. Like many people here in UW Engineering, I came into this program for less than ideal reasons. Some people pursue a degree in engineering because they don't know what they really want to do in life, some earned good marks and were told engineering needed high marks, and others simply followed the advice of their guidance counselors. I signed up for this four-and-two-thirds-year-long degree because I knew it would help me open the doors I need opened to do the things I want to do in life – not the most noble of reasons I admit, but a reasonable one. As a computer engineering graduate, I believed, I would be able to pull in a decent salary and eventually travel and run my own businesses. Because of this, I became very disillusioned with the

material being taught and with the way in which it was being taught. I'm sure I'm not the only one here to admit that fact.

This is why I was so surprised to be reminded that learning can actually be enjoyable. While I was in China I was studying Mandarin with a tutor for ten hours each week in addition to my own fourteen hours of review and study. Despite the heavy commitment, the material remained fascinating and I was continuously thrilled with my progress – a feeling I haven't had in school for a long, long time.

We're fortunate because of our opportunities.

Another eye-opener was how many more opportunities students have in Canada. I don't mean opportunities for employment, or opportunities for financial aid – I'm talking about lifestyle opportunities. Here at UW I've have the chance to participate in everything from CTRL-A and the UW Tae-kwon do Club to Orientation Week and the Iron Warrior to EngSoc and the Juggling Club. All of these interests and opportunities have contributed to my perspectives in life and what I understand to be a normal life. It was shocking to learn how few similar opportunities were available to the students I was teaching overseas. For example, here in Waterloo Engineering, a large effort is made to ensure we can stay in the program and complete the degree, we have the chance to pursue extra-curricular activities that involve community involvement and philanthropic intent and we have the chance to initiate and start clubs and teams that don't yet exist – it wasn't the same there. Although there's a chance I was only exposed to those students who couldn't think of equivalents to these opportunities, it's unlikely. We really are quite fortunate to have so many ways to tailor our lives to our interests.

We can find employment satisfaction in the least likely of places.

Over the course of my high school career I had several chances to fill out career and vocational interest surveys – surveys intended to help me pinpoint what kind of career may be of interest or suited to me. In every test I took, there were two common themes – my career would *definitely* involve computers in some form or fashion, and I would *never* pursue a career in teaching. It would almost be worthwhile to track down my guidance counselors just to show them how wrong the tests can be – I was surprised and excited to find out just how much I enjoyed teaching. Originally I took the job because I wanted to work in China, and I concluded

that I could endure the twenty-five hours of teaching each week it would take to justify the trip overseas. To my amazement and chagrin the teaching was challenging, rewarding, entertaining and most of all full of opportunity to improve and develop. We're here in Waterloo Engineering in part because we value the co-op system and how it affords us the opportunity to try working in our fields of study. I'd like to underline the value of taking a work term (or two) to try out employment opportunities you would normally overlook and/or dismiss – you may be surprised.

A lot of information is available.

For each student, the reason for going on an international work term or an exchange program is personal. Some want to travel and some want to learn a language, some want to experience other cultures and some just want to get out of Waterloo. Whichever your reason is, it's important to make sure you select an experience that will meet your expectations. When I made plans to go to China I knew I wanted to go to experience the culture and to throw myself into studying the language – and so I took an extended break from school and took a job that involved just a twenty-five to thirty hour per week commitment. Something I found to be an invaluable resource in making these evaluations was Dave's Café (<http://www.davescafe.com>). Advertised as "The Internet's Meeting Place for ESL/EFL Students and Teachers from Around the World!", Dave's Café offered a wealth of information on lifestyles, environment and employment opportunities. Another great resource was Professor Roe in the Engineering Undergrad Office (CPH 1325). My meeting with him to review which schools offered exchange programs with the University of Waterloo and how to pursue the International Studies in Engineering Option was illuminating.

A large number of students seem to be considering international experiences, and as someone who believes that having a high level of cultural awareness is important, I hope this number will continue to increase over the next few years. So here's my bit of propaganda: take some time off school and leave the country; you'll be surprised at what you'll learn.

Questions? Comments?

We welcome letters and feedback from all our readers. Please email us at:

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the IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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the iron warrior magazine

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If you want to contribute ANYTHING AT ALL,
drop by our office (opposite the Orifice) or e-mail us at iwarrior@engmail

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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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Poor Quality

To the Editor,

Pardon me if I offend; however, these past few years, I have been noticing a distinct shift in the types of material presented in the Iron Warrior. What used to be a paper with a few opinion-based pieces to round out a number of research-based or factual pieces has now turned into a paper spread throughout with opinions and rant-derivative whining, with a few news-worthy articles (of extreme length) thrown in for good measure.

Its a paper filled with filler. Even worse, to make up for the decided lack of content, it appeared that those who put effort into research decided to attenuate and prolong their facts to the point of exhaustion. Was it really necessary to have not one, but three articles debating over which gender prefers gadgets more so than the other? Do you really consider this to be news-worthy? Was a two page municipal election spread actually worth the effort? Could not one of those pages have been filled with some other relevant and news-worthy content?

If you really are that pressed for content, have you considered turning the Iron Warrior into a magazine style flyer? How about an online weblog? In the end, it would involve a lot less filtering through the crap for me, and a lot less work prolonging the facts and filling the gaps for you.

Sincerely,

An Opinionated Individual Seeking Actual News Content

I recognize your frustration with the apparent lack of value in specific articles, I ask you though to understand that the purpose of the Iron Warrior is not simply to act as a medium for announcing events and reporting on happenings. The Iron Warrior has several mandated responsibilities - one of which is to act as a forum for discussion on matters affecting engineering students, hence the thorough coverage and analysis of the local elections.

Another responsibility is to provide an opportunity for students to practice communication skills in a constructive environment. As an editor my responsibility to the readers must also be balanced by my responsibility to the contributors to give them that opportunity.

Finally, we are mandated to include articles of leisure and entertainment as demand warrants. Based on your feedback it seems that we are over-estimating that demand. Thank you for bringing that to our attention.

Joseph Fung, Editor in Chief

Response To Broadening Horizons

I'd like to compliment Christine McCullough on her article on broadening horizons in the October 31 Iron Warrior.

However, I'd recommend that a few more English courses be added to the list of complementary studies courses in hopes that more engineers would come to appreciate the difference between complement and compliment.

Ed Jernigan, an engineer with a passion for English, and an appreciation of Shakespeare as well as science fiction.

Reader Response to Letter to the Editor

I am a first year engineering student here at the University of Waterloo. I was relaxing today at lunch and felt like taking a look at the new issue of Iron Warrior that I enjoy reading regularly. I feel the editors and the writing team do a great job of keeping the engineering body informed.

However, I do have one problem with the [last] issue you have released. The response titled "Response To: 'Are same-sex marriages acceptable?'" really bothered me. I think having point/counterpoint on this issue was a great idea. It gave two people the ability to express their views on a controversial topic, but the issue of same-sex marriages is not what I have a problem with. Mike Goldsmith blatantly bashed Christianity in all its forms, and the people who follow it. This upset me and if you are wondering what I'm talking about, maybe you could inform me to what a "bible thumper" actually is. Think

about what this implies.

Also to quote Mr. Goldsmith, "Remember all that 'love thy neighbour' crap?". So now part of my Faith is crap. I thought Canada was about accepting everyone's religious beliefs, not publicly destroying and spitting on them in a school paper. This could be considered a borderline Hate crime, since it discriminates against another person's religion in the sense that their beliefs are "stupid and ill-founded". Wow, but wait, there's more. He also says, "As far as I'm concerned you can take your 'Good Book' and shove it." This statement requires no justification as to why it is offensive.

I can acknowledge Mike's views on same-sex marriages and I can acknowledge his views on religion. What I cannot accept is the Iron Warrior newspaper publishing a view that cuts up a religion. Freedom of speech is an integral part of this country, making fun of religion is not. Mr. Goldsmith and myself have sim-

ilar views on the respective articles we read but I think he said it best as, "I have to say reading that piece of drivel made me (however briefly) ashamed to be associated with UW Engineers."

Mike McNiven, 1A Environmental

Thank you for your positive remarks and for your submitted comment. Although I am sorry that you were offended by Mr. Goldsmith's letter, it is his opinion and not that of the Iron Warrior; Mr. Goldsmith is not an Iron Warrior staff member. We try to foster a forum for discussion, and it was Mr. Goldsmith's belief that his point needed to be expressed in the wording he chose. It would have been inappropriate for us to edit his letter so as to change that.

Joseph Fung, Editor in Chief

Reader Response to Same-Sex Marriages

To Whom it may Concern,

I am writing in response to the article from the October 10th issue of the Iron Warrior entitled "Are Same-Sex Marriages Acceptable?" There are a number of questionable issues raised in the article, especially for the side arguing against same-sex marriages. Saying this does not necessarily mean that I agree with the reasons presented for same-sex marriages. On the contrary, I'm writing to express my annoyance at the half-hearted approach taken by the anonymous author who penned the negatory side.

Correct me if I'm wrong, but I thought the reason for an article such as this one, where two sides of one argument are presented, was to give a thorough and proper run through of all logically plausible reasons for each particular side. After reading the negative side, I was definitely not convinced. None of the points were those that would make me consider the unacceptability of same-sex marriages. It was almost as if the person writing the article did not bother to fully investigate all the nuances of the side he or she was advocating. Furthermore, this person seemed fearful of the side that he or she was presenting and therefore was not passionate enough in his or her approach. The points presented were the obvious ones that are often fixated upon by the media and presented by stereotypical bible-thumpers. In high contrast, the reasons presented on behalf of same-sex marriages were eloquently delivered and remarkably convincing.

When an argument in such an article is not fully developed and is then contrasted against a very well researched and developed counter argument, it adds a very fine thread of bias to the newspaper. In this case, if I were to generalize on the political and moral leanings of those in charge of the paper, I would say that they favour a more liberal point of view. This is a bad thing. Most people and publications have their opinions. However, other papers don't attempt to pawn off a very subtly-biased two-sided article as an "unbiased presentation of opposing viewpoints".

Now, I have read the editor's note affixed to the end of the article, and I do realize that the opinions presented do not necessarily reflect those of the Iron Warrior, or the editors or the staff.

However, even if you are not intending to do so, a bias reflecting upon the overall quality of the paper is present through the publication of an underdeveloped and possibly unresearched article.

I hope, in the future, that those in-charge of the Iron Warrior will exercise more editorial control over the content published.

Tarun Mahdis

The issue of same-sex marriages is one where people usually have very strong beliefs. As you recognized, very often, the

author of a PCP article is presenting a side they do not actually support, and in this case, the subject matter made this exceptionally difficult. Although the EIC reserves the right pull articles that aren't adequately prepared, I published the article in question as I feel it was sufficient to bring the subject forward for discussion and thought, which is the purpose of PCP.

You seem to have a strong sense of what would be a better series of arguments, and so I invite you to prepare such an article for our next issue. Please feel welcome to email your submission to iwarrrior@gmail.uwaterloo.ca

Joseph Fung, Editor in Chief.



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In Engineering

Waterloo through My Eyes: In Search Of Clean

Christine McCullough
2N Chemical

The air is turning colder, the leaves are almost all gone, scarves and hats are starting to make appearances here and there. Your thought is "ah, it's fall"; my thought is "ah, it's flu season". All right, I'll admit it; I'm a little obsessed with germs. Hey, you would be too if you took Intro Microbiology. Great course, but you learn to be afraid of doorknobs. So, I am preparing myself to buckle down and fight the bug.

How, you may ask, do I prepare myself to fight the flu? Valid question, after all there is no cure. Well, number one, I get the shot ASAP. But it is common knowledge that it doesn't protect against all the different strains. Already there is a new, very virulent flu making the rounds of Winnipeg. Approximately 25% of elementary school children got it. Nasty, nasty, nasty. So what can you do? Cross your fingers and hope it doesn't hit you? Well, yes but there are very simple things that you probably aren't doing that could significantly decrease your risk of contracting all the bugs that are going around. Follow me on my obsessive little germ-killing spree...

I shouldn't have to tell you this, but you need to wash your hands. Yep, now. And you need to wash them again in a very short period of time. You are not washing them nearly enough, statistically speaking. This should go without saying, but you need to wash your hands every time you use the bathroom. Hey, I'm not trying to offend you or anything, but

frankly, you aren't doing a good enough job. Think of it like this, when you brush your teeth, you use a toothbrush to scrub the plaque off your teeth; the toothpaste is an aid to improve your oral health. Soap serves the exact same purpose, it is an aid. The most important part of washing your hands is the physical action. When you wash your hands you need to get into it. Really rub your hands, get the back of your hands, your fingernails, in between your fingers, EVERYWHERE! A good job takes about the same time as it takes to sing "Happy Birthday" to yourself twice. Any excuse to sing, right? So that quick little rinse of water is not doing anything for you. Want to get rid of the bugs? Sing "Happy Birthday" twice and rub hard (get your mind out of the gutter! I'm talking about your hands). Also, give them a good scrub before you touch any food and anytime you touch anything that might be contaminated i.e. garbage, raw meat, your dirty laundry, etc. When in doubt, it is always better to wash than to not wash.

Okay, so you know to wash your hands and to do it frequently. Good, you are one step closer to not getting sick. Now, would you mind if I had a sip of your pop? Don't say no! Of course you mind! You see, some people have the fabulous ability to carry certain germs without being symptomatic and some illnesses are contagious even before a person feels sick. So, yes, you do mind me taking a sip of your pop. As a matter of fact, you don't want me or anyone else sharing your Chapstick, toothbrush or any food. This is a no-brainer people, horrible, even deadly viruses are spread this way; think meningitis.

Now, you are keeping yourself clean,

but what about your surroundings? Please tell me you have washed your sheets at least once since Frosh week. No? All right, dirty sheet won't kill you, but they aren't helping your mission to keep out the germs. By washing your sheets more frequently (the recommendation is once a week and pillowcases twice a week, but that's a lot if you are paying for laundry) you are keeping allergen levels down, which is important if you have allergies. Also, dirty sheets can contribute to break-outs - not a deadly illness, but who wants zits, right? So try to wash your sheets more than once a term, or in the very least, your pillowcases. Now what about your desk, eating area, and all the other places you hang out? You may not be able to control the cleanliness of all of these places, but for the spots you can, it's good to give them a good clean every once in a while. Old food and any damp towels or clothes can grow mould spores, which can make you sick and dust aggravates allergies. And yes, there are some bacteria that

can live on different surfaces other than your skin, so there maybe illness causing germs living on your keyboard too. All the more reason to keep your area clean, if not tidy.

Okay, I adhere to the sheets once a week, pillowcases twice a week rule and I probably have the cleanest room of anybody on campus. I admit I am a little obsessed with clean. And you don't need to go to the nth degree the way I do, but little things that you do through your day can go a long way to preventing illness. Get your flu shot, wash your hands well and frequently, don't pass your food around for everyone to sample and keep your area clean and you are on your way to controlling some of those germs. Of course, there are no guarantees...as clean as I am, I am writing this with a humidifier sitting beside me, a cup of Neo Citran within reach and a bad case of the flu creeping through my body. Maybe you had better wash your hands after you read this article...

Tool! Tool! 60" Wrench!

...continued from Page 1.

rounds of applause from the audience. The winners of the contest were a group of guys from Mechrophiliacs who were dressed as The Village People. They not only impressed the crowd by their costumes, but also with their singing and dancing performance.

As a term pub regular, the Tool made its appearance. In keeping with the Halloween theme, instead of their normal masks, the tool-bearers wore those of apes and clowns.

Another high point of the evening was when the P**5 directors released the midterm class standings. La Resistance (2B Electrical) placed first with 16020 points, closely followed by

Mechrophiliacs (3B Mechanical, 14345), SYaniDE (2B Systems Design, 13435) and Mechs on the Beach (4A Mech, 12350). The top three classes as of the end of the term will be awarded cash prizes.

Similar to BOT, lack of security personnel was a concern. Several party attendees volunteered to put on the red T-shirt to ensure sufficient staffing. Fortunately, everyone enjoyed themselves without anything untoward happening.

With end of the term pub in just two weeks time, those who would like to be a security may contact the POETS Managers by email: Garret Smith at g6smith@engmail.uwaterloo.ca or Niki Czerniak at neczerni@engmail.uwaterloo.ca. Volunteering will help your class to win P**5 points!



John Olaveson of the Iron Warrior and Erin Young of WEEF get comfortable at the engineers' Hallowe'en bash on the holiday of the same name.

Frosh Leaders Reunite!

Cindy Bao
2B Electrical

As part of the "Homecoming Weekend", the University invited past frosh leaders, both alumni and current students, for a reunion on Saturday, November 1st. Prior to the campus-wide leader social at the Bomber, previous engineering leaders gathered among themselves at POETS for the first time.

Many arrived at the scheduled time and the numbers grew as the hours progressed. A few off-stream leaders showed up; some even traveled from out of town to meet with their former colleagues. The attendees dated as far back as the class of 2001, and included FOCs from previous years as well as FOC candidates for

the upcoming frosh week.

Leader shirts were the outfit of choice among Bigs and Huges, while all Edcoms dressed casually, not knowing whether they had decided to not intimidate or found it hard to reproduce the same hairdos as frosh week. Some leaders dressed in accordance to their frosh week theme. The pirate gears of a Navy Huge would not have looked out of place at the Halloween MOT party also held in POETS the night before.

The fair weather allowed the leaders to enjoy barbeques on the patio, washed down with drinks provided by UW bar services. Foosball tournaments added sparks of excitement to the casual atmosphere. As the night wore on, many stayed beyond 8 pm, while a few moved on to have fun at the Bomber.



Bar services kept these three former leaders busy at the counter in POETS.



The collected leaders from the 2003 reunion.



Sandford Fleming Foundation
E2 3322, ext 4008, sff@engmail
www.eng.uwaterloo.ca/~sff

Student Travel Grants: Available to students participating in technical conferences. Please check our web site for further information.

Emergency Loan Funds: SFF has made available funds for short-term emergency loans, interest free for 90 days. These loans are available to engineering undergraduates, on either an academic or work term. Contact the Student Awards office for further information.

The John Fisher Award for Leadership

The John Fisher Award for Leadership is made from time to time to a graduating student whose activities throughout his/her academic career have made significant contributions to Co-operative Engineering Education. Nominations for the Award can originate from student groups, faculty members and the Foundation. Nominations should document the nominee's contributions and other support for the nomination. Contributions are to have a professional orientation and can involve student activities, the Sandford Fleming Foundation work or other appropriate functions. Letters from colleagues, faculty members, and others knowledgeable of the nominee's efforts will be given consideration.

The Award at Convocation consists of a Citation and an Honorarium of \$1,000. For more information, contact the Sandford Fleming Foundation. The deadline for nominations is April 1, 2004.

24 Hour Tim Horton's in SLC: Coming Next September



The FEDS Students' Council, after four hours of presentations, questions, and debate, decided by a 2-1 margin in favour of the Tim Horton's proposal over the Symposium proposal for the Ground Zero (GZ) space. According to the motion, the executive has been empowered to negotiate a deal with the administration within the spirit of the presentation made to council, and to have that deal approved at the board level.

The approximately \$400,000 renovation cost of the GZ space will be covered completely by UW Food Services (UWFS) with the Federation receiving either the net profit of the location, as determined by an independent third party, or revenue based on a sliding scale. Review will occur every three years and the franchise is renewable on a five year basis.

Watcard will be accepted allowing all students to buy Tim Horton's products at no tax and at a five percent discount, with students on meal plans getting the same fifty percent discount as they would at any full service UWFS location. UWFS estimated that this would result in \$1.235-million in discounts to students over the next ten years. \$630,000 is the anticipated direct return to the Federation.

Students will be involved in the layout and decor decisions and as they are flexible, comfortable furniture in a relaxing environment is possible. GZ staff will be offered their choice of Tim Horton's or one of the 220 other UWFS part-time jobs, and

potentially full-time and supervisor-level positions.

At the beginning of the debate, opinion was decidedly split, as the board was almost evenly divided between the two proposals. Councillors followed in turn, with many indicating that, over the course of the afternoon, their opinion had been changed numerous times.

The primary contention was both over potentially losing control over the space and over whether it was the business of the Federation to be in the food service industry, especially given the experience of GZ.

The Symposium proposal was supported in principle by numerous candidates as a viable one that would be a good service to the student body and a contribution to student life on campus. However, the risk of the venture, which would have involved approximately a \$400,000 renovation cost

to the Federation, was framed in their minds as too much.

At the close of the discussion, more than a few councillors indicated that they would venture down to the Uptown Waterloo location of Symposium as they

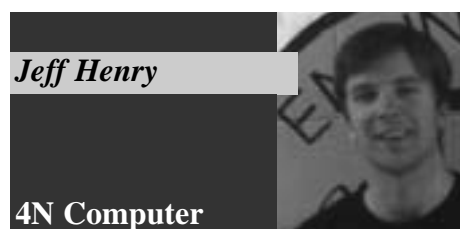
were intrigued. Bill Argiropoulos, who presented the Symposium proposal to the council, indicated that the exposure received was still worthwhile to them and they welcome students to make their way uptown.



This Tim Horton's, found in DC, will soon be supported by a second full-service restaurant in the SLC in the old Ground-Zero location.

"UW Food Services estimated that this would result in \$1.235-million in discounts to students over the next ten years."

Municipal Candidates Funded By FEDS



The 16 councillors who remained at the Sunday, November 9th FEDS student council meeting after the Ground Zero decision moved onto, among other things, the decision on whether or not to fund student-friendly candidates known to be of good character.

FEDS President Chris Edey sought council's consent on the decision to fund candidates in the total amount of \$1000 out of his special project fund. The poten-

tial benefit to students in the furtherance of student issues for this amount of money was well worth it, in Edey's opinion.

Mike Kerrigan and Stephen S. Skrzydlo were initially the only municipal candidates to potentially receive \$500 worth of funding, but a motion was quickly put on the table to add David Wellhauser and Ben Brown to the list as they also are student-friendly candidates. Deeming Mr. Brown not a strong candidate, his name was not added to the list of potential recipients.

With an approximate spending level of \$3000 for the municipal candidates proposed to be funded and the amount of special project funding available, the amount was lowered to \$350 per candidate. For

consistency with FEDS election policy, and to ensure that only serious and viable candidates are funded by the Federation, a minimum of seven percent of the vote in the municipal election was added onto the motion as a prerequisite to receiving FEDS funds.

Concerns from constituents about FEDS only funding former members of FEDS was not viewed by council to be the case; after all, with only viable candidates being funded on student-friendly issues, the feeling was that the interests of students were sufficiently furthered to spend that \$1050.

With only Kerrigan and Wellhauser receiving more than seven percent of the vote on Monday, only \$700 ended up being spent

Engineering Society Executive Reports

Expansions In Engineering: Fees and Friends

Josh Levitz

President



Hey Engineers. So we're slowly winding down the term, and pretty soon we'll all be in the middle of finals and you won't have to read my wonderful articles anymore. If you would like me to send you personalized articles over exam time I'd be happy to.... Maybe. We'll talk. Here's what's been happening in EngSoc.

For those who were at the last general meeting, you will know about the proposed Sanford Fleming Foundation fee increase from \$4 to \$6. The foundation gives out numerous awards such as work

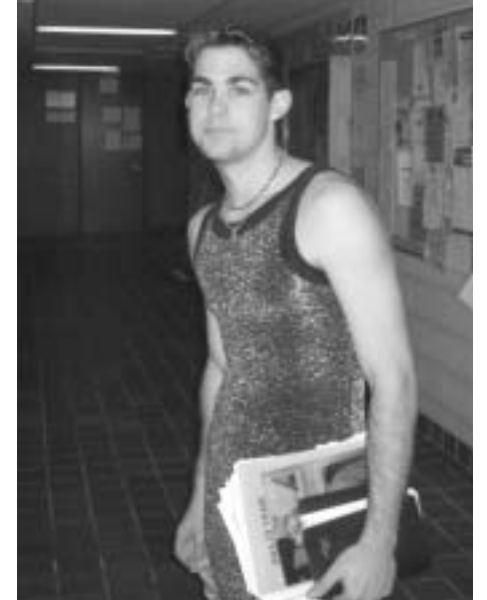
report and teaching excellence awards, as well as running a variety of student based events such as the SFF debates which have been happening over the last couple weeks. In order to sustain and hopefully increase the amount of money given out for awards, prizes, and winners of these events, this fee increase is a necessity. The SFF board is looking to approve this increase before the end of this term, at which point it will have to go to Board of Governor's in April for final approval. If it is passed, you will see the increase for the first time in fall 2004. This is an extremely worthwhile increase which students will most definitely see the benefits of.

We're getting new furniture in POETS for the upstairs area for those who like to study (or just sit and relax) up there. The FEDS student life endowment fund has paid for four separate desks and 12 new

chairs so look out for that in the near future.

Also, here's something I've been looking at doing. I'd like to start an engineering co-op student locations list on the EngSoc website (and probably a hard copy in the orifice). Essentially I just want to compile a list of names and emails about who is working where on the co-op term, just so students can get in touch with others in their area. It will be a completely voluntary sign up (and what information you want posted is up to you) so you will be able to individually contact anyone in your area, at your convenience. You will be hearing more about this very soon.

And that's all folks. Let me know anything at all at bsoc_prez@engmail.uwaterloo.ca, and good luck in the last couple weeks of the term (I can't believe I'm saying that already!)



Josh struts his stuff through the halls of Engineering due to an EngSoc mandate.

EngSoc Budget Surplus

Grant Holohan

Vice President,
Finance



Here's what's been going on with EngSoc finances: student fees collection, B**5, new furniture, student fee increase mechanism, SSF fees, and new novelties.

More student fees were collected than were budgeted for, so EngSoc has a little more money than expected (which is good since the budget had a \$3500 deficit).

The Big Bad B-Soc Bowling Bonanza (B**5) was held on Sunday, November 9th and was a great success. EngSoc partially subsidized the intense night of alley action with some of the surplus.

Also, make sure you check out the new furniture that will be kicking around the engineering buildings soon. In RCH, you'll soon notice some new benches on the third floor. These are courtesy of the 2003 graduating class. Also, the POETS balcony overlooking the CPH foyer will be getting some new study desks and chairs by the end of the month - just in

time for finals: Yay finals! The desks and chairs are paid for from the Feds' SLEF (Student Life Endowment Fund).

The Joint Council meeting on Nov 9 saw the tabling of a constitutional amendment that proposed to change the fee raising mechanism for the EngSoc student fee. Read the minutes of the Joint Council meeting online on the EngSoc website to find out the results of the vote.

The Sanford Fleming Foundation Board has approved increase the SFF student fees from \$4 per term to \$6 per term. See Josh's spiel for more information.

Check out the Engineering Novelties Shop for brand new gear! The Novelties Shop is right beside POETS and is open during lunch hours. You can buy all sorts of sweet engineering stuff to show off your UW Engineering pride. If it's closed, you can buy stuff in the Orifice, but hurry, the new stuff won't last long.

Good luck to everyone grinding themselves down on projects before finals. Only a month and a half till work term again. I leave you with an inspirational quote to help you out these last few weeks.

"There are two kinds of people, those who do the work and those who take the credit. Try to be in the first group; there is less competition there." --- Indira Gandhi

Movie Nights With Artsies

Jeff Alfonsi

Vice President,
External



Hola! This is your fortnightly update on Hsoap opera affairs...I mean external affairs. There are still a few more exciting events planned before those fantabulous exams grace us with their presence.

First off, the Bridging the Gap series is now over, and it went out with a bang.

George Roter, the co-founder and co-CEO, of Engineers Without Borders (EWB) gave a very stimulating talk last week. I encourage you all to consider joining the Waterloo chapter of

EWB; the organization is a real eye-opener. Special thanks to Emilie Lam for organizing the series.

Inter-faculty relations continue to develop thanks to Roy Powell. Joint movie nights with arts will be held every Thursday night in the Arts Lecture Hall. This is a great way to chillax and mingle

with those fun and exciting art students. It's also a way to get out of the engineering bubble!

Engsoc has managed to put another float into the Santa Claus parade, which takes place on Saturday, November 15. The Mini-Baja team, formula SAE car, snowmobile team, elves from arts, and jolly old Saint Nick will be there, so that pretty much means that you will have to be there too. If you don't, you're a tool. Speaking of tools, it'll probably be there too. Help is needed to decorate the float and give out candy canes. Please ask me or the directors (check the engsoc website) for details.

Calling all female frosh, please call me at 725...wait, sorry, wrong article. Let's try this again: Calling all frosh, the First Year

Integration Conference (FYIC) is being hosted January 16-18. This is an awesome chance for first-year engineering students to learn about other engineering societies, student groups, the profession of engineering, and most importantly, conference drinking games. Stay tuned for online applications.

Ciao.

"...you will have to be there too. If you don't, you're a tool."

More Co-op: We Love Co-op!

Emma Bardon

Vice President,
Education



Once again we come to the time of term where midterms are for most just an unpleasant memory and finals are still far enough away that it isn't yet time to panic.

There's a lot of stuff going on with respect to co-op these days. First, there was another forum on the new CECS.Online system on Tuesday, November 4th. See the article on the opposite page for details on that. At the same time, there was a presentation given to a small group of students on a new mandatory program being developed by

the faculty of Engineering to develop "soft skills". Again, for details see the article across the page.

Sessions on creating HTML resumes have begun, and there will be more occurring in the next week. While sessions are being tailored for particular classes, there is some space for other students in the sessions. Instructions for those who don't wish to attend a seminar will be available online, sometime before mid-January. Another session will be happening at the beginning of May when we're back on campus, as the system will be implemented that term. If your class is not currently registered for a session but you're interested in attending one, please email me and I'll let you know specific dates and times.

Course critiques are coming up shortly. For those who don't know, course critiques are a survey done for each course

each term with questions on both the course in general and the professor teaching it. The input from these surveys is used to help determine a professor's salary and can affect whether or not a professor teaches a particular class again (for example, if a class hated their 1A Physics prof, they probably won't get him/her for 1B Physics). So please, fill these out and make comments but don't be obscene - anything inappropriate will be censored and your comments will be lost. The results from past surveys are available in the Orifice.

If you are interested in helping to get the results of course critiques online (including for CSEs and courses offered by other faculties), please let me know. This is still very much in the planning stages, and all help would be appreciated. My email address is bsoc_vpedu@engmail.uwaterloo.ca

ENGINEERING
SOCIETY



Did you know you can earn valuable P**5 points for volunteering time at the C&D? Email Mary Bland at mbland@engmail.uwaterloo.ca to schedule your shift.

EngSoc Events and P**5



Matt Strickland
Vice President,
Internal

University of Toronto territory. MudBowl, another generally popular event, also did NOT go down this term. There's no point congratulating all the players since there were NO participants this fall, but for the sake of tradition: good job to everyone who put their bodies on the line for ultimate glory.

With the term coming to a close in little over two weeks, expect these last moments to be chock-full of excitement. Things to look forward to include the EngPlay, our very own drama production (Nov. 20-22); Arts Week, a week packed with entertaining right-brained activities; a wheelchair basketball tournament; and the ever-popular engineering talent show fittingly named TalEng. Posters advertising all these events will be all over the halls these coming weeks so keep your eyes peeled and plan on getting involved.

Finally, congratulations to classes who submitted their P**5 points for the Middle of Term Pub. When the dust settled, La Resistance (2B Electrical) came out on top, blowing away other power classes such as Mechrophiliacs, Syanide, and Mechs on the Beach. Final Paul and Paula Plummer Participation Points are due on November 21st. Alright, no better closing than the timeless words of those two crazy, street-proofing rabbits, Bert and Gert. "Stay alert...stay safe!"

Well, there's been a ton of activities going down courtesy of the Engineering Society so let's jump right in. One of the best events of the term, B**5 (Big Bad B-Soc Bowling Bonanza) was held last Sunday at Brunswick Bowl. The evening, organized as a round robin tournament to determine the best alley cats in engineering, saw lots of participants. With many players scoring over seventy points in a single game, Waterloo's reputation for attracting not only bright, but talented students was reaffirmed. If you were around CPH this week, it would have been hard to miss the fact that it was EngWeek. To help fight off that November it-only-ever-rains-in-Waterloo depression, different games—from karaoke to an egg drop—were organized every noon hour of the week. On an unfortunate note, this term's Brunny Trip was cancelled due to a lack of interest. The trip usually sees a bus full of UW engineering students descend on Ye Olde Brunswick House, a pub located in prime

New Development Courses To Take On Work Term



Emma Bardon
Vice President,
Education

including (but not limited to):

- Team work
- Health & Safety
- Intellectual Property
- Ethics
- Professionalism
- Management techniques
- Dealing with uncertainty
- Accountability

The faculty of engineering is currently developing a set of courses to be taken on work terms by all Engineering students. The project is still very much in the planning stage, and a presentation aimed at getting student input on the project was given on Tuesday November 4th.

The courses are intended to supplement and improve the overall experience gained through co-operative education. This is a part of the constant innovation undertaken by administration at the school to help keep our program progressive.

The courses, currently labeled as PDENG 1-5, will cover soft skills and knowledge in a variety of areas consistently noted by graduating students and employers as being beneficial to develop further. There are four primary "themes" that will be covered – responsibility, leadership and teamwork, critical analysis, and communication. Within these themes there will be several specific areas covered

It is intended to be an application of academic theory to practical experience, and to improve communication skills of students. The subject areas listed above would be integrated into each course. For example, there would be a small component relating to Health and Safety in each course, but there would be a larger emphasis on it in one specific course. Work assignments in this area may include questions along the lines of "how does your work impact the health and safety of yourself and others in your workplace". The recurrence of the themes throughout the five courses would provide reinforcement of the ideas, making the material easier to

Continued on page 9. See "Prepare for Extra Courses."

Professional Development Courses: Question and Answer



Emma Bardon
Vice President,
Education

not working specifically on the program.

How will the course be administered?

The course will be entirely online, from reading materials to work submissions.

What if I don't have internet access?

Alternate arrangements will be made for the few students not having internet access either at work or at home.

How much work will it be?

The workload will be approximately one half the workload of a regular engineering course. So if you typically spend 12 hours per week on each course on a school term, it's expected that you'd put approximately 6 hours per week into the professionalism course. Since the faculty is well aware that students experience busy times and slow times at work, deadlines will likely be somewhat flexible.

What material will it cover?

Material for the course has not fully been decided upon, but will most likely cover primarily soft skills and knowledge on topics such as ethics, intellectual property, health and safety, and management techniques.

How will it be marked? How will it show up on my transcript?

Individual submissions will be marked

and feedback given. The overall course though will be a half-weight credit (like most courses here), and graded on a CR/NCR basis (like co-op terms are now). It will appear on transcripts alongside the current lines for work term credits.

What if I fail it?

Failures of the PDENG courses will not count towards your cumulative failure count for promotional purposes, but will prevent you from taking subsequent PDENG courses (i.e. you must complete PDENG 2 before starting PDENG 3). Since there are 6 work terms available but only 5 PDENG courses, it will be possible to make up the course. It is also expected that if failure is only due to one or two missed submissions, once the work is submitted the course mark can be rectified.

Why is this being developed?

People involved with the co-op program at the University of Waterloo are well aware of the benefits gained by students enrolled in the program. Co-op not only allows students to gain knowledge of industry, but allows them also to develop a wide variety of professional skills. Currently, these benefits cannot be proven to licensing bodies such as the PEO (Professional Engineers of Ontario). While most students do gain these skills on work terms, the university cannot guarantee that all graduating students possess

these skills. This course will prove to licensing bodies that all students graduating from Engineering at Waterloo have these skills. It is also a way to get students to examine how engineering soft skills are applied in their work experiences.

Can I replace one of my CSEs by taking several of these courses?

No – these courses will be required in addition to the regular load of CSEs.

I have more questions about the program – who should I ask?

I think this is a really bad idea – who should I complain to?

I have some ideas for the course – who should I tell?

First of all, the committee wants your feedback! Your thoughts will help to shape how the course is developed. This is a collaborative venture between the faculty and its students. For now, please address all questions/comments/concerns/ideas to me. I will be keeping in contact with the committee developing the courses fairly regularly. If you'd like your comments to remain anonymous, please let me know – your confidentiality is important. All input is valuable at this stage, so please do let me know what you think about this initiative. I can best be reached by email at bsoc_vp@eng-mail.uwaterloo.ca, so drop me a line and tell me what you think!

I'm a current student – will I be able to take the courses?

The short answer is maybe. Availability of this course to current students will be based on resource availability. Consider that even to just implement the courses for the students beginning in the Fall 2004 term, will be an implementation for an initial class of approximately 500 students. The committee would like to offer the courses in some form to current students, but are as of yet unsure as to what form that will take. Any implementation for current students would be completely optional.

Is this going to make fees increase again?

No, absolutely not. This will be a fee-less course, and will not be offered unless full funding is available.

Will this increase the workload for professors?

This course will be administered by a new department within Engineering, and will not require extra work of professors

Upcoming Events from EngSoc

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
16	17 Artsweek	18 Artsweek	19 Artsweek	20 Artsweek	21 Artsweek	22	The potluck dinner will also include the presentation of the President's Awards. Potluck mean bring food!
Wheelchair Basketball			TalEng (8 pm)	WEEF Council EngSoc Play	EngSoc Play	EngSoc Play	
23	24	25	26 EngSoc Potluck Meeting	27	28	29 EOT	

POINT VS. COUNTERPOINT

Is Human Organ Donation An Appropriate Action In Our Society?



Kiran Dhaliwal

2B Electrical

When I recently had to renew my health card I was faced with a tough decision, and no, it wasn't whether to wear my hair up or down, or whether to use my cute and innocent smile versus the sexy come-hither one. It was whether to fill in my organ donation form or not. Thankfully the health card office was as quiet as a University of Waterloo party on a school night, and I was able to ask the staff there all my questions about why I should donate my organs after I die.

Many of us have heard about the urban legend of the guy who becomes excessively

drunk at a party and wakes up the next morning in a bathtub full of ice with a kidney missing. Considering that I don't even like it when my best friend borrows my earrings without asking, I'd be a little freaked out if a doctor decided to have a free-for-all with my spare parts during an emergency trip to the hospital. Thankfully, I was assured that by agreeing to be an organ donor you aren't treated any differently than a non-donating patient during a life-or-death operation. By signing a donor card you agree to only have the organs you specify to be donated after your death, and doctors won't put any less effort into saving your life.

Another issue I was worried about was how organ donation would interfere with my funeral arrangements. I figure it's going to be hard enough to get rid of the dark under-eye circles I carry as battle wounds from UW Engineering, let alone try to cover up the fact that half of my internal organs have been extracted. On this point however, I have learned that

"...I found out that 1600 people in Ontario alone are waiting for organs that can save their lives..."

organs are delicately and skillfully removed so that nobody can tell that you have donated them - unless you plan to advertise it with a big neon sign outside the funeral home, as I plan to do. After all, why not take credit for doing something great?

On that note, one of the noblest things you can do in death is to donate your organs to someone waiting for a chance at an improved life. By checking out the website, www.giftoflife.on.ca, I found out that 1600 people in Ontario alone are waiting for organs that can save their lives, while many more are waiting for life-enhancing tissue transplants. The success

rate of transplants is continually improving and already gives many people suffering from serious health problems a second chance at life. Some people believe that they face religious obstacles preventing them from donating organs after death, but most religions also sup-

port taking action to save the life of another, so talk to a religious leader to get clarification about this.

To finish off my argument of why you should donate your organs after you die, think about the many lives you could save or improve without any effort or financial contribution on your part whatsoever. If I were to use an analogy to relate to my readers, I'd say that not becoming an organ donor is like not lending out that spare scientific calculator sitting in your backpack to a classmate who doesn't have one during an exam. It's not like you're going to need it. Just put yourself in the shoes of that poor person needing a calculator... I mean, tissue transplant.

Editor's Note: Point vs. Counterpoint is intended as a forum for objective and thought provoking debate on various issues. The views and opinions expressed here do not necessarily reflect those of the author(s), the Iron Warrior, or the Engineering Society.



Michael Simoes

1A Chemical

Organ donation might seem like a noble and caring idea initially, but a closer inspection shows that we are disturbing both the natural selection, as proposed by evolutionists, and the theological selection that religion teaches.

First, what is death? Death is defined as no longer living. Death defined by those who perform organ donations is when the brain dies, or stops functioning. There seems to be quite a contrast between these two definitions of death. If a person's brain is dead, but their heart still pumps blood, does that constitute death? The heart is what sustains life, without that blood pumping there would be no life within.

How is it that scientists can take out a perfectly working heart when only the brain is dead? It seems like mutilation and mutilation is wrong by all standards.

Next, natural selection is a theory that Darwin proposed after scientific observation of life. What it states is that individuals with more favorable characteristics are more likely to survive and pass on their traits, and this is not a random event. Even with the maximum entropy, or disorder within the world, evolution still takes place. When we begin to revive people, and make them "whole" again by giving them organs from the so-called "dead," we disturb this evolution. Who are we as fallible human beings to do such harm to the environment and harm to the grand scheme of life?

Also, religion tells its people it's okay for us to donate our organs when we are "dead", because it is giving an opportunity to people who "need" it. It is sharing

and caring, and giving of ourselves - literally. However, religion also tells us that we should not fear death because there is a better life beyond the grave. Why then must we disturb God's plan for us? There is no need for reviving a person by giving them someone's organs, because we are moving on to better place. The bodies that we have on this world belong to God and he is calling us back to Himself. Humankind has no right to disturb God's plan for us.

Another problem with organ donation is that it is playing God. Many use this argument when debating about cloning, or genetically modifying foods. Many state that cloning could be used for the saving of a person's life. The United States government considers cloning so wrong that it must be banned. Organ donation is similar to cloning in that it is the preservation of life through unnatural means, but it is neither banned nor illegal. This is a huge example of hypocrisy that the world foolishly ignores.

Furthermore, the problem of deciding who is deserving of an organ is an issue. Many think that it should be a first come - first serve basis, and that is usually the case. But what if two people are both in need of the same organ

at the same time? Who gets the organ? Should they flip a coin or roll dice to decide? Moreover, people in jail require organs all the time, yet they seem to be on the end of the list to get them. Many people think that this is right just because they broke the law, that they don't have the same right to life as law-abiding citizens do.

In all aspects, organ donation seems like a good idea, but if you look underneath at some of the smaller and finer details, it's wrong on all levels. It disturbs both natural selection and God's plan for humans, on top of being unfair and hypocritical. As a result organ donation is wrong, and so it should be stopped.

"...we should not fear death because there is a better life beyond the grave. Why then must we disturb God's plan for us?"

Ramadan: Refraining From Food, Drink, and Falsehood



Dan Arnott

1A Enviro

What month is it? November? Okay, partial credit. If you didn't realize that it's also the month of Ramadan, that's all right, this article is for you. Going through high school, I had several Muslim friends and from conversation I knew that this time of year was special for them, but I never really asked them much more than that. However, being aware of no culture but your own is a shame for a Kitchener native like myself in the wonderfully diverse environment of UW engineering - so I did some research, which will hopefully provide others like myself with an overview of this important time in the Islamic year.

Technically, Ramadan is the ninth month of the Islamic calendar, which is determined in some regions by lunar sightings and in others by astral calculations. The exact dates of Ramadan therefore may vary from place to place. The Islamic Society of North America is the authority on this in Canada, and this year, Ramadan started on October 27 and will end on November 25. Also, the Islamic calendar is about 11 days shorter than the Gregorian calendar commonly used in North America, so the dates of Ramadan change from year to year.

The month of Ramadan is characterized by the ritual fasting, or sawm, (siyam plural), literally "to refrain." Those of the Muslim faith will refrain from food, drink, and sexual activities during daylight hours, in order to grow in Taqwa, consciousness and connection with Allah. While fasting from food and drink is an important part of Ramadan, and may help bring one closer to Allah, it is also important to abstain

from immoral behaviours. Mohammed, the Prophet of Allah, puts it nicely into perspective by saying "If one does not abandon falsehood in words and deeds, Allah has no need for his abandoning of his food and drink" (Al-Bukhari).

As with many religions that require fasting, special provisions are made for people who may not be able to fast. For example, children who have not yet reached adolescence, the mentally ill, the elderly or chronically ill, pregnant women, and travelers are all exempted from sawm. In the case of pregnant women, the seriously but temporarily ill, and travelers, they may make up the fast days by fasting later in the year. The elderly and chronically ill are sometimes requested to provide one meal for one poor person for each day they miss fasting. In this way, people can reflect on the blessings they have while providing for the less fortunate, a deeply spiritual experience to many.

The last 10 days of Ramadan are espe-

cially holy; during these times, Muslims often pray and reflect deeply on their connection with Allah. The 27th night of Ramadan is called Lailat ul-Qadr, the "Night of Power" or "Night of Decree." It is said that on this night, Allah revealed to the Prophet Mohammed the first few verses of the Quran. Many Muslims spend the entire night in prayer, and with good reason - the Quran says this night is "better than a thousand months."

During Ramadan, families will often visit with their friends for the evening meal, strengthening community ties and family friendships. Many Muslims see this month as a time for reflection and devotion, for charity and good works, for appreciating the blessings they have, for tuning up their spiritual lives and getting closer to Allah, and for practicing self-discipline. For every Muslim believer, this month of Ramadan means something different, something personal, communal, and spiritual.

Remembrance Day In Engineering: We Mourn For Life

John Olaveson

2A Civil



A small dignified ceremony took place in the CPH foyer on November 11. A slide show exhibited the sacrifices that Canadian citizens made during both world wars and during the Korean War. Hundreds of thousands of Canadians participated in those conflicts. More than 110,000 of those people died fighting.

With ten minutes to the hour, several

engineering students approached the podium to share respects for those who gave their lives for ours. Our national anthem began the ceremony, presented by Laura Wallace of Laurier University and joined by the gathered staff and students.

Grant Holohan reminded all of us the cost of freedom, a price that we may be asked to pay again. Adam Kaufman discussed briefly the life of Lt. Col. John McCrae as he fought at Ypres. A recitation of Flander's Fields followed.

The musical trio of Lori Habermehl, Laura Wallace, and Nathan Thorpe sang for us Amazing Grace. Geoff Quinsey explained the significance to Canada and to World War I of the Battle of Vimy

Ridge. The battle marked a turning point in the war, spearheaded by Canadian soldiers. Every year, there is a memorial service held at Vimy Ridge. The year 2002 marked the first time that no veterans of the battle were in attendance. Laura Mooney followed with a beautiful tale about a man who must leave his love to go to war.

The hour approached 11:11. Daren Toppin played The Last Post from the CHP balcony, followed by two minutes of silence. The ceremony was concluded with Reveille. Thanks to Rahul Bhardwaj for organizing a beautiful event.

Over one hundred staff and students attended the event. We remember.



Laura Wallace sing O'Canada to commence the Remembrance Day ceremony.

Prepare For Extra Courses To Take During Work Terms

...continued from Page 7.

remember over the course of a student's career at the university. Submissions will be primarily based on reflective overview of students' experience, rather than just current situations. Work assignments would likely include case studies (both real and fabricated), assessments of responsibility, journals, and peer review of work submissions. The work will likely require some reading and application of theory to real-life situations (your work terms). The readings will be designed to be easy to understand. Submissions will likely be 1-2 pages each, maybe 6 submissions per term, with probably around 20 pages total deliverable per term. The courses are intended to supplement the material learned in each discipline's 1A professionalism course.

Course delivery will be online, from reading material to work submissions. It would be worth one half credit (same as most courses here), in addition to the credit currently received for satisfactorily completing a work term. As with the current co-op credit, it will be seen on the transcript, will be graded on a CR/NCR

basis, and successful completion of five of the courses will be required to graduate. Any failures would not count towards the cumulative fail count for promotional purposes, but must be made up before taking the next course. It is expected that most failures would be for non-submission of work, and that it should be easy to rectify upon receipt of the missed work. It is understood that students will experience busy times and slow times on any given work term, so deadlines would be designed to accommodate varying workloads at work, without making it too easy to procrastinate (work term reports any-one?).

The program is being developed, delivered, and evaluated by a new department within the faculty of Engineering. It is expected that employees of the center would be specialists in various areas covered by the courses.

One rationale behind developing the course is that beyond the one year of pre-graduation work experience eligible to be counted for licensing, the PEO cannot currently give credit for the professional skills gained by students in a co-op program. This is because it cannot be proven

that all students have gained these skills through the course of their work terms. Since this would be a mandatory program for students in Engineering at UW (beginning with students starting 1A in Fall 2004), it could be shown that all graduating students possess these skills. The University of Waterloo spearheaded the pre-graduation experience usable towards licensing. Other schools have copied our program, and it is expected that once the higher aspects of professionalism developed by this course are realized, other schools are again going to mimic our initiative. A high level of professionalism reflects well upon the school and upon its students.

Several perspectives were examined in the development of the course: public interest (and legal responsibilities), professional interest (licensing requirements, skills of graduates), student interest (meaningful jobs and workload required), employer interests (their expectations of graduates and co-op students), and institutional interests (leadership and recruiting, quality of graduates, and interaction with regulatory bodies).

As of yet, employers have not been

consulted regarding the program. They will be soon as part of a regular process of communications between the university and co-op employers. The PEO will also be consulted for input on the program.

One feature that is defined as critical to the future of these courses is that it must not come at any extra cost to the students – that is, that full funding must be available from other sources. Co-op fees will not be raised to cover the cost of the program, nor will tuition.

It is critical to note that none of these details is final (except the no cost criteria). The presentation last Tuesday was designed to get feedback from students on the program, as is this article. While the new program will not affect any of the current students, the student perspective is still very important, and will help in shaping the program. If you have any thoughts/questions/comments/hate mail regarding this program, please let me know. I'd be more than happy to address your concerns – to you directly if I know the answers, or to ensure that the committee for the program is aware of your concerns (confidentiality is assured, if you don't want your name mentioned).

So There Was An Election?

Jeff Henry

4N Computer



Unofficial results from the November 10th municipal election are in and student apathy, though less than in 2000, is still high. With the student population of the two universities in Waterloo spread over all five wards, no former-student candidate was close to getting elected.

Stephen "Snuggles" Skrzydlo, running in the ward immediately east of the university, secured 151 votes or 5.22% while Mike Kerrigan, running in northwest ward that also includes student residences, garnered 382 votes or 8.66%. David Wellhauser, running in the uptown riding, managed to convincingly take second place with 1279 votes or 28.47%.

In the race for Mayor, Herb Epp, former Mayor and M.P.P., decimated the rest of the field with 49.23% of the vote. The incumbent, Lynne Woolstencroft, narrowly beat out Ward 4 councillor and local wing-maker, Morty Taylor, for second place by only seven votes.

At the regional level, incumbent Regional Chair, Ken Seiling, walked away

with the race at 76.96%.

Waterloo Council should be formed by: Herb Epp (Mayor), Jan d'Ailly, Jim Bolger, Gary Kieswetter, Mark Whaley, and Ian McLean. Based on their platforms, students should expect to have the mayor involve them in discussions. On the minimum distance separation by-law (the 75m by-law), it will likely be maintained with strong support from at least Whaley and d'Ailly. However, Bolger has acknowledged the deterioration in university-community relations and believes students should be able to live within walking distance to the university, and so there should be some debate on possible mechanisms to alleviate the current situation. Enforcement of current by-laws was also a staple of the campaigns of the winners.

Ken Seiling intends to, at the regional level, improve transportation and transit systems by increasing road capacity, improving the links to the 401, establishing a GO Transit link with Toronto, and beginning work on a light rail transit system.

Given the updating rate of the candidates' and the region's websites, platforms should still be electronically available when this issue is printed. Candidates websites can be found either in the last issue of the Iron Warrior or off of <http://mywaterlooregion.com/Website/2003Elections/MunicipalCandidates/index.html>

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Your Campus

Bridging The Gap Lecture: Engineers Without Borders

John Olaveson

2A Civil



On Tuesday November 4, Mr. George Roter, the co-CEO of Engineers Without Borders, spoke to a large group of enthusiastic Waterloo Engineers. Mr. Roter holds a Bachelor's of Engineering from the University of Waterloo. He's just 26 years of age.

Humble Beginnings

Engineers Without Borders began its life in a coffee shop. George Roter and his friend Parker Mitchell had both returned from recent cross-continental bicycle tours and found themselves in a small café. The two began chatting about the strife many of the world's people are facing and how so few engineers have become involved in aiding those in need. Of all the organizations that send foreign aid, like Doctors Without Borders and the Red Cross, no group represents engineers and the knowledge engineers can contribute to helping bring stability to underdeveloped regions of the world.

After the visit to the coffee shop, Engineers Without Borders was founded. The CEOs of the new organization, George and Parker, both recent engineering graduates who had spend time biking across parts of the world, were living in the basement of George's parent's house. The EWB office was a ten by ten cubicle with no windows.

For whatever reasons, EWB quickly grew into an internationally renowned organization. Corporate sponsors eagerly signed on to provide financial and entrepreneurial assistance to the EWB. The group came to the attention of the media, a new group dedicated to helping those people of the world who still lived with dirty, disease-filled water or ate rotting food because nothing else was available. The media brought fame and drew in even more support from Canadian society.

Three years later, in the present day, Engineers Without Borders has over 6000 members, including many university chapters of EWB. There have been over thirty projects completed in twenty countries. There are 60 overseas volunteers awaiting an opportunity to travel to the aid of others. Eight such volunteers are on assignment right now. The EWB headquarters has moved to a larger office and has hired five full-time staff members. Parker moved out of the basement; George is still there.

International Partners

So now there's an internationally recognized and respected organization. What makes EWB stand out as a power of good in the world? What exactly does EWB do with all of their ideals?

Engineers Without Borders does not import Canadian technology to other countries. The overseas volunteers do not go into a situation and design a new piece of hardware to help the lives of the locals. In fact, EWB does not even look at entire countries. EWB looks at the community level, looks for people in the world who are struggling and are not being helped to survive.

George stated that one of the tricks EWB has is selecting projects. EWB avoids projects that treat a symptom of a

larger problem. Treating the symptoms will not provide long-term benefits to the community. Instead EWB focuses its resources on solving the root problems in a select community. When the root cause is gone, the symptoms will disappear as well, and the community will be much better off.

There are three keys areas that EWB considers when selecting projects to undertake; food security; water and sanitation; information technology. There's much more to EWB than merely sending in a volunteer to a community and letting that volunteer fix the problem. That's not the role the overseas volunteers play. Once a project is chosen, EWB staff and members carefully analyse the situation and design a development strategy. A great deal of work goes into a project before a volunteer is ever dispatched.

Once a volunteer lands, he or she serves many more purposes than merely helping a community to implement a cellular network, install sewer systems, or introduce food preservation techniques. In fact, most times the technological skills of the engineer are secondary. The real goal of overseas volunteers is to teach the community about the technology, help them work out their own problems. The volunteer engineer has to deal with the local government and the local people. He or she becomes a leader who helps things get accomplished.

George offered a list of primary skills that overseas volunteers will most likely need to possess to be able to contribute to the local community. Patience, humbleness, and the ability to hear what the people have to say. This last point means much more than merely knowing the local language. The volunteer needs to be able to hear what the people want, what they think about the project. The volunteer needs to work with the desires and goals of the people, not merely implement his or her own solution. The engineer needs to be humble enough to let the people take an active role in their own betterment. The engineer needs to let the local people feel that they are valuable and skilled so that they will be able to proceed when the volunteer returns home.

The approximate cost to send a volunteer overseas for a six-month project totals to \$6000. The services of two local engineers for one year would cost the same. EWB overseas volunteers need to be able to contribute to the community they work in. The volunteers need to make a positive effect. The volunteers need to work for the local people and governments. The volunteers cannot operate solely of their own accord and follow their own ideas on how to solve a problem. EWB helps the locals learn to fix their problems. EWB does not enforce a solution.

George compared the process any good EWB project follows to that old proverb about teaching a man to fish instead of giving him fish. EWB goes beyond that. EWB shows

the people of a struggling community how to design and build a fishing rod using local materials, teaches the people how to use and maintain that rod, teaches the people how to teach others, so that once the engineer returns to Canada, the people will not lose the benefits of what EWB has done.

The EWB contributes ideas and technology to a project. Following the idealism of using local materials and people, EWB helps the people of the community to design and implement a new system to improve a problem in the area. Past examples have included providing fresh water, constructing sanitary toilets, and building small-scale processing equipment.

Case Study: Burkina Faso

George presented a tale of the tasks the EWB executed on a project in Burkina Faso. Previous to this project, hundreds of local women would conduct labour-intensive work to grind Shea nuts and process the products into Shea nut butter. The costs in time and energy would make many Canadians shudder in sympathy.

EWB contacted a local entrepreneur who wished to see changes in the way the Shea nut butter was produced. The entrepreneur had the idea to introduce a level of automation into the process, but he did not have the resources to do this alone. EWB sent in their volunteer and from that a plan formed.

The entrepreneur came up with the idea to build a hand-crank-powered nut grinder to boost the speed at which the nuts were ground. His design was good but had several flaws, which the volunteer engineer was able to help fix. The machine was constructed and introduced to the community. In the end, the grinder saved hundreds of hours of labour a day.

The project did not end there. Drawing on the amended fish proverb, EWB helped the entrepreneur spread his idea to other communities so that many more people would be benefited by the work of EWB and also by the efforts of the entrepreneur to implement a time-saving strategy to his local community.

“What makes EWB stand out as a power of good in the world? What exactly does EWB do with all of their ideals?”



EWB overseas volunteer Ian Randall draws the first water from a new well in Bapa, Cameroon.



Case Study: Cameroon

George detailed the efforts of the EWB to improve the health and sanitary conditions of a region of Cameroon. This project had several goals: improve the quality of water in the region, improve the sanitary system and introduce a hygiene education program to the people. The last goal is one that always raises an eyebrow. The first two goals are obvious ways to improve the sanitation and general health of people. The last helps the first two work. What is the point of having clean water and proper sanitation systems if the people do not wash their hands or brush their teeth? The first two goals will have very little affect to the people if the people do not know how to keep themselves clean.

The Roadblocks

A large concern appears in several overseas projects. In locations where no market economy exists, a difficulty arises concerning maintenance of newly installed services. In North America, our public services are maintained mostly through tax dollars. In locations where government are unable to generate tax revenues (like in areas that follow the barter trade system), who will pay for the maintenance of the services the engineer and locals spent so long designing and building? What happens in regions ruled by corrupt governments? Even if these corrupt governments have money, they will not necessarily use those funds to maintain services to the people. The solutions to these problems have no formula that will spit out the answer.

Another concern the EWB needs to mind is the affect the project will have to the local community, in areas of society and economy. To return to the example of the Shea nut grinder, introducing such a rapid increase in Shea nut butter may serve to unsettle the local economy. For a region used to a certain amount of butter being produced, what will be the effects of a 100 times larger output? In Cameroon, how will the heritage of the people be altered by a new cleaning paradigm? In a general case, how will Canadian ethics and morals be received by underdeveloped peoples? How will their lifestyles change? Will the effect be a positive or negative one? Again, there is no formula to calculate these results.

Unity

There are many other organizations in different countries that call themselves Engineers Without Borders. Sometimes these groups get confused. Which EWB completed which projects? How will the reputation of one EWB affect the way people react to another? There is talk of trying to unify the disperse groups called Engineers Without Borders. However, this idea is still in its early stages. The Canadian EWB is still young and is still building its own reputation. If unity did occur between EWB, what would happen to the policies of our EWB? Would we still

Continued on page 11. See “EWB Unity?”

Bioengineering In Waterloo

Naoreen Hasan



First Year

Have you always had an interest in biomedical research, biomedical engineering or have intentions to apply for medical school some point during your undergraduate degree or after graduation? Finally during the summer of 2003, two 3A Chemical Engineering students on Engineering Society "A" initiated the formation of CUBE, the Club for Undergraduate Biomedical Engineers, for the sole purpose of promoting bioengineering at the undergraduate level.

Although UW offers several graduate programs in biotechnology and biomedical engineering as areas of research, there is very little information available at the undergraduate level regarding possibilities within this exciting career path. Therefore the establishment of CUBE will help those students who show an interest in bioengineering biomedical research. The objectives of CUBE are:

1. To be informative and provide valuable resources for UW students about the different aspects of bioengineering on the profession.

2. To offer educational and cultural activities pertaining to bioengineering

3. To provide social functions with the purpose of adding to the variety of university life.

Additionally, CUBE will function as a liaison between professors and graduate students researching aspects of bioengineering as well as co-operative education personnel for industrial contacts and career resources. There will be plenty of events to raise awareness about bioengineering including professor talks, industry talks, worksite visits and the ultimate biotech symposium in 2005.

CUBE had their first successful professor talk three weeks ago; Professor Stashuk from the Department of Systems Design presented "Quantitative Electromyography: Characterizing muscles using biological signal detection and processing."

Due to the high level of interest in biotechnology, the UW Engineering faculty has finally established an option in biomechanics for all engineering students. CUBE recently had an information session

on the new option. Information about the new biomechanics option is available at <http://www.civil.uwaterloo.ca/brodland/bioengineering/OptionInBiomechanics.htm>

So how can this option help you? Here are some of the engineering disciplines in which biotechnology can be found:

Chemical

- Pharmaceuticals
- Genetic engineering
- Tissue engineering

Mechanical

- Prosthetics
- Equipment for testing prosthetics/biomaterials

Computer

- Biological testing statistics
- Programming equipment

Electrical

- Medical imaging (MRI)

Environmental

- Genetically modified food
- Water treatment (sewage)

Envirocivil/Geological

- Metallurgical biomaterials

Systems Design

- Health-care system management
- Ethical issues related to genetic testing

Here are some useful facts about the biotechnology:

- Biotech is the fastest growing industry right now
- Pfizer is the 3rd biggest company in the world based-research based pharmaceutical company
- Canadian biotech companies have quadrupled their revenues over the past 4 years
- There are over 252 Canadian biotechnology companies including AstraZeneca, Bayer and Aventis MDS Nordion
- There are over 9660 biotechnology products or processes on the market

Here is a list of UW Research in the field of biotech

- Civil and Environmental
 - Prof Peter M. Huck - Microbiological organisms used for water treatment
- Chemical :
 - Biochemical Engineering and Industrial Biotechnology department
 - Prof Moo- Young - biochemical
 - E. Jervis - stem cell research

- Computer, Electrical and Software:
 - MIAMI (Medical Image Analysis and Machine Analysis)
 - Prof. Magdy Salama - extend 3-D ultrasound prostate imaging system

- Systems Design:
 - Major Research Department focuses on biomedical engineering :
 - Prof Stashuk - Quantitative clinical diagnosis - studying muscle contractions
 - Prof Kubica - Biomechanical Control systems for assistive technologies

If you are interested in becoming part of CUBE and want to be updated on events, email cube_uw@yahoo.ca. Remember, at the professor talks you can make contacts that may help you with co-op terms, graduate schools and Undergraduate Research Assistants.

CECS Online: May 2004?

Jeff Henry



4N Computer

There was a dream that was CECS.online, beginning modestly back in 1997 and promised many times since then. No more bins, no more photocopies of your résumé package, no more wars. Well, maybe it wasn't going to eliminate wars, but it was going to make your cooperative life much less of a headache.

Of course, it's probable that anyone reading this hasn't seen that dream realized yet. In the words of Bruce Lumsden, Director of CECS, there have been "lots of bumps and potholes along the way."

The original company contracted to do the work in the previous millennium abruptly cancelled the project almost exactly four years ago. Since then, IST picked up the ball and, with the help of over thirty coop students, a new system has been painstakingly put together using the Peoplesoft tools and support is available thanks to Access and Quest.

But now, after years of problems and delays, CECS is confident they are on the final approach with CECS.online. However, instead of arriving this past summer, a trial took place with the students in the teaching option. The bugs that surfaced over those four months are mostly fixed, and the system could arrive for everyone this January, except CECS is being cautious. For the 11,000 coop students and the 3,000 employers, of course, the system must not fail.

A full load trial run will take place again this coming winter and, barring any major catastrophes, expect to see a new online system touchdown in May, potentially with a one-month preview so the thousands of us learning how to use it won't all be doing it at the same time.

No more bins and no more photocopies of your résumé are the only major changes to the process you should expect in the summer, according to CECS. While there had been talks about a continuous continuous-phase or multiple rank-match phases, the application and interview process is not changing, at least not right away. There are only, really, a few changes that you should know about.

First of all, and quite obviously, you will now have to put together an html résumé. There will be templates and tutorials available from CECS and although the system only has storage room for three, when you submit applications you can cut, paste, and edit anything you want so there really is no limit to the variation you can make.

Second of all, not only do you have more flexibility in rankings - you will be able to rank multiple jobs the same or even leave gaps between ranks to better imprint your wishes into rank-match - but you will also be able to un-apply for jobs, up until the closing of the posting, to effectively eliminate the electronic version of putting an application in the wrong bin.

Third of all, and the only real surprise from my point of view, the optimization algorithm is being removed. No longer, when confronted with a tie between jobs, will there be an algorithm to maximize the number of students getting jobs. Now the job you get in a tie situation will be chosen at random. The old algorithm had not been having the success it used to before you had the knowledge of whether or not your rank was an offer; the mathematics behind the algorithm relied on the ranking number of students and employers being completely blind to each other. Since the algorithm was seen as more trouble to explain than it was worth, it will not be a feature of CECS.online.

The last thing is that you will have access to, is what is known as your term card. It contains your evaluation and whether it had been submitted or not, whether you were returning, and even your one-to-ten level of satisfaction with the job. With that information being readily visible to you, CECS believes that better statistics collection will be possible, potentially meaning students will more easily be able to get a sense of how good former coops felt a particular position was.

So for all of you going through the paper-full system for probably the last time, look fondly to the future and know that your off-stream counterparts still have to deal with bins and countless résumé packages one last time. And for all of those skeptics out there who have long stopped holding their breath for the dream to arrive, I'll leave you with this thought: even if it does come online this May, it won't be in time for me either.

Introducing the 2004 Engineering FOC!

Joanne Olaveson



555-7289

The official engineering representatives for the 2004 Orientation Week Faculty Orientation Committee were selected last Tuesday. After a long process of applications, interviews, background checks, and cavity searches, the six applicants were pitted against horde of hungry dragons. The last four alive were sent to the emergency ward, and then became the new FOC. What surprises and joys will these four crazy characters bring to the next Engineering Orientation Week? How many disasters will they create? The answers to these and all your other

FOCing questions will be revealed in September of 2004.

The four lucky winners of this year's cosmic battle, presented in order of most to least injured, are Rahul Bhardwaj representing the Electrical engineers, Jason Nery battling on behalf of Computer engineers, Sarah Sirega for the Civils, and Larissa Klypycz for engineering's favourite minority group, the Geos.

For those less experience engineering students (yes, I'm talking to you first-years), these four FOC members make up the SuperHuges and HeadComs of your Orientation Week. Keep your eyes open for posters and emails over the next two terms advertising applications for EdCom, Huge and Big positions. 4-stream students are selected in the summer term and 8-stream students are selected in the winter.

When you apply, remember these solemn words; EdCom Always Wins!

EWB Unity?

...continued from Page 10.

teach people how to build their own fishing rods, or would the new EWB policy be merely to import a crate of fish once or twice and let the locals decide how best to distribute them? This will be a problem the EWB must face in the future.

Engineers Without Borders, as you likely know, has a chapter at the University of Waterloo. And the local chapter is always eager to recruit. To join the mailing list for information on general meetings and local events, send an email to waterloo@ewb.ca. To become a full member of EWB, which includes voting privileges and workshop discounts, pick up and return the application to the Orifice. The cost is a mere \$20. Be sure to check out the Engineers Without Borders website at ewb.ca.

Opinions

Does The Canadian Brain Drain Still Exist?

Sung Hon Wu

2B Computer



Think back about three or four years ago. The tech boom still existed; Nortel was still \$120/share. A big headline story was about the “brain drain”, the idea that all the talent in Canada was being drained by the U.S. as companies there needed brains as part of the internet revolution. A local component of this story was that those who supported the idea pointed to this university as evidence of the brain drain. Back then, there was a perception that many American multinationals were coming to Waterloo hiring many of the best co-ops and graduates, especially among those focusing in the tech sector such as ECE and Systems Design. In fact a big part of the allure of these programs was the idea that you could end up working for companies such as Qualcomm, Microsoft, and Nvidia. I even wrote an article about this issue for the Iron Warrior back when I was a frosh.

Now skip forward to today. The boom turned into bust; Nortel at one point was a penny stock. Gone along with the boom was all the hysteria about the “brain drain”. People no longer create documentaries featuring 4th year electrical engineers to demonstrate that Canada was being sucked of its best and brightest. In fact, people now associate the tech field with mass layoffs, difficulties finding a job, and a career path to avoid. This may be a reason why recruiting for this year’s ECE class was so difficult that they had to lower the admission average. Any sane high school student would rather go into a safe traditional field such as law or medicine than risk not finding a job once they graduate. For those students who were looking for employment, it was no longer about which American company to work for, but whether you got a job.

Over the last couple of school terms, there is anecdotal evidence that perhaps the brain drain is starting to come back. First, some companies never stopped hiring dur-

ing the worst of the recession, such as Microsoft. Now, those companies that have survived are all starting to hire again; for example, Amazon. Finally a more convincing argument that the U.S companies are back in force is that new companies, such as Google, are now hiring co-ops. Second, in my circle of friends, some of them will be working for American companies next term. At first, one of them got a job at Microsoft, but in the coming term, there are people I know who will be working at Qualcomm, Amazon, and Sun Microsystems. Also, these companies are not just hiring one or two students, they are hiring a lot. For example, to my utter surprise, Microsoft recently interviewed a full one-quarter of the 3B computer engineering class for co-op positions at their company.

The conditions for a revival of the brain drain idea are all present. The tech industry is slowly but visibly recovering from the recession. Co-op students are still fixed on the allure of working for an American com-

pany, despite the fact that America has lost much of its appeal in the last couple of year with Sept 11, President Bush, and the controversial war in Iraq. In fact, I know one person going to work in the U.S who never gives up the chance to mock Bush and Americans as southern rednecks. All that is needed for a revival is for things to keep improving as they are right now. The ironic aspect is that the revival may be killed in its tracks by the American government despite all the efforts the Canadian government has done to stop it. Their recent decision to sharply curtail students from working in the States by restricting the use of the J-1 visa will make it hard for future students to work in the States.

Of course this article is subjective. Maybe all my friends are getting jobs in the U.S because we are getting to be senior students on our last couple of work terms. It may be this economic recovery will stall and students will still have a hard time looking for jobs. But maybe this is for real and it is only time before the brain drain comes back with a vengeance. It would not surprise me at all if in a couple of years a frosh will write an article about the brain drain and what must be done to stop it.

“Any sane student would rather go into a safe traditional field... than risk not finding a job when they graduate.”

Purchasing Digital Music: Review Of Puretracks.com

Jay Liu

3B Computer



Finally on an October day, Canada caught up with our American counterparts in online retailing. Puretracks, operated by a Moontaxi Media, is the first digital music retailer that serves the Canadian market. With the success of Apple iTunes, and high hopes for the revamped Napster, Puretracks gives Canadian audio-technophiles an opportunity to put the hyped technology to the test. It certainly serves me well, since KaZaA, WinMX, and eDonkey are all faithfully rejected by the firewall at my service provider. Buying music from HMV puts deficits in bank accounts, and Futuroshop in Waterloo is oddly CD-shy.

The interface at Puretracks.com is well laid-out and the site loads at decent speed. The first important fact is that Puretracks only sells DRM-enabled WMA files. DRM, for those less technically inclined, stands for Digital Rights Management, one of several proprietary “Rights Management” technologies by Microsoft. WMA is a standard Windows Media Player file. A download link to WMP version 9 is prominently displayed on the homepage. Apple and Linux fans have to keep waiting.

The collection is impressive. Officially, there are currently 175,000 tracks, with the goal of expanding to 300,000 by year-end. I have no interest in verifying that number. I certainly found what I was looking for. You can add single tracks, or entire albums, to the shopping cart. Elvis Presley’s “2nd To None” is three dollars cheaper than Amazon.ca. Also, keep in mind that there is no shipping when downloading digital tracks. Single tracks range from 99 cents to 1.39 dollars. The price seems to depend on popularity and date of release.

After shopping is done, a simple inter-

face asks for billing information, and with two clicks, you can choose to download your recent purchase. The download speed is top-notch. I was also giving a freebie when I checked out, so effectively I paid 99 cents plus tax for two singles. This is much more reasonable than the 50 dollars I would’ve needed to purchase the albums from the store.

Additionally, you can download songs as many times as you want. Like good DRM files, when you open them with Media Player, it would attempt to acquire a license. That’s where I first ran into trouble, and the server was returning junk data. That’s when I realised that Puretracks had no technical support. The help page was organized decently, but only with limited information. For technical problems, it refers customers to the Microsoft Media Player support website, which quickly leads into a disorienting maze. E-mails to customer billing service were not returned.

Once the service is back up and the license acquired, the songs played just like any other song, although you are restricted to using Windows Media Player as your default music jukebox. The real disappointment is that the song is only 128 kbps, which, though sufficient, isn’t technically good enough. You are allowed to burn the song three times onto an optical medium, and to download it to a secure media portable music player three times. Effectively, you can burn the song onto an audio CD, and use your favourite CD ripping software to recover your purchase as a non-protected audio file; which makes it much easier to transfer the music to your media devices and for use by other, better, media playing software, or to legally share it among your Canadian friends.

Overall, Puretracks is a step in the right direction. I would still rather pony up a few extra bucks to get a real CD (not the copyright-protected ones, of course). The effort to make these media secure is just a minor inconvenience for the end user. However, burning a copyrighted song onto a CD just to rip it back into a digital form in order to fully use it seems like an awful waste of time and money.

A New Kind Of Epidemic: Health Series Part 2

Christine McCullough
2N Chemical

Mental illness is an epidemic that is sweeping across our nation. 20% of all adults will have a diagnosable mental illness in any given year. According to the World Health Organization, depression is the number one cause of “loss of years of healthy life”. You would think that with the prevalence of these disorders society would be more educated and understanding. Unfortunately, it’s quite the opposite. A content analysis of American television found that 72% of fictional characters with mental illnesses are portrayed as violent. Estimates show that 4% of violence in America can be attributed to mental illness, meaning that 96% of violent acts are committed by people who are perfectly sane. But you know as well as I do, that this is not the perception.

People who struggle with mental illnesses face many challenges. It can be difficult to properly diagnosed and even if that happens, there is no magic pill to cure the illness. So the person now faces what could be dozens of medication trials and there is no guarantee that an effective treatment will be found. It is a very difficult journey. Now add the shame that many people carry who have these disorders - they are afraid to tell their family, friends or employers for fear they will be shunned. Many who do tell those close to them soon find themselves with far fewer friends, isolated from their family and sometimes demoted or fired from their job. Is that fair? Would you react that way if someone told you they had diabetes, cancer or AIDS? Probably not.

Our society has come far in learning to recognize and embrace each other’s differences. Toronto is one of the most culturally diverse cities in the world and, for the most part, people of the different religions and different ethnicities are able to coexist amicably. Toronto, and for that matter Canada, is an example to the world, showing how a nation can be a patchwork quilt and not a melting pot. But in this accept-

ing and culturally advanced nation, stigma does exist and is even accepted. A major psychiatric hospital in Toronto has a sign on its lawn that reads, “Dogs must be kept on a leash”. Someone came along and decided to change this sign, “Nuts must be kept on a leash”. There on the well-manicured grounds of this well regarded medical institution was a poignant example of the stigma that persists in our society. What is even more disturbing about this case is that the sign wasn’t fixed for over eight months. Staff, patients and even doctors walked by this sign daily, yet it remained there unchanged. Now imagine that this sign was on the grounds of a synagogue and a similar offensive change was made to it. It would be a hate crime, there would be a public outcry, and it would be fixed immediately. So why was it all right for the sign to sit there on the front of the hospital grounds, unchanged for so long?

The fact is mental illness is truly the last taboo in our society. Not only do we consider it all right to marginalize the mentally ill, professionals, families and even the people affected have come to accept the stigma. We no longer refer to people of colour as “niggers”, we don’t call our Chinese classmates “chink”, we don’t use the word “fag” to describe gay men and we don’t call people with Downs Syndrome “retard”. As a matter of fact, I probably offended a number of you just by writing these words. Well consider this, how do you refer to people who are depressed, schizophrenic or bi-polar? Crazy? Nutcase? Do you consider them capable, worthy members of our society? The numbers tell me you probably don’t. People who suffer from these illnesses remain second-class citizens due to our ignorance. This results in people not seeking treatment when they truly need it, not being able to talk to friends and family when they need their support and often end up becoming more and more ill. Those affected don’t just face stigma, they face discrimination.

Continued on page 15. See “Mental Health”

WAT's Wrong With My CARD?

Bill Hates
Special To Iron Warrior

In this day and age where your address, personal details and partying habits are digitally logged every time you go out to a bar, Big Brother records and controls our lives more than ever. One engineering frosh learned this lesson under brutal circumstances when our very own Watcard system threatened to leave him homeless and hungry over the last holiday weekend.

It all started about a week before Thanksgiving when this freshman (let's call him Winston Smith) paid for a cab fare using his Watcard. Six days later, he noticed that his flexible-dollars account was close to zero, but as Thanksgiving weekend was coming up and all he needed was food, he planned to put more money on his card the following week.

Thursday afternoon, Winston was rather shocked to discover he could no longer access his residence floor using his Watcard (ironically, he had lost his keys only a few days before). Convinced it was some sort of technical error, he successfully implemented his contingency plan of knocking really, really loudly.

Later that night, after a few hours of hard studying, Winston headed out for a quick dinner break only to discover (with more than mild embarrassment) that his Watcard was also unusable at the cafeteria. Although his food account balance was listed as over 300 dollars, a "CARD BLOCKED" window opened up and prevented the cashier from charging his meal.

The biggest shock came the following day at the Watcard office. Forced to miss a mid-term exam review in order to make it during their office hours, Winston was shocked to discover that his Watcard had been completely deactivated because his cab-fare, which had taken a week to process, had taken his flexdollars account into the red. Because of a debt of less than five dollars, he had lost access to everything from his residence and gym to the hundreds of dollars in his food services account! Had he not arrived at the office in time, he might have been without such services for the entire weekend. The Watcard office further claimed that taxi bills are processed sporadically, meaning that you could be charged up to a month after the ride, yet the staff were quick to mention that it is your responsibility to keep track of your spending (it's just like a bank).

Winston's reply: "WRONG! A bank doesn't lock me out of my house and force me to starve over Thanksgiving weekend because of five dollars!"

Personally, I found it interesting how these harsh consequences were not mentioned anywhere on the Watcard website. Also, if a macro on the engineering computing server can send me an email for every 8 cents I spend printing pages in the WEEF lab, why can't an office with five staff do the same after they electronically castrate an unfortunate student?

A week later (and after he had calmed down) Winston later related to me the two lessons he had learned from the incident. The first: always carry cash. The second: never give the Watcard office the benefit of a doubt. To them, you are just a number.

(Help change these heavy-handed procedures: send an email to the Watcard manager John Cunningham at jjcunning@uwaterloo.ca)

Gravy On Everything Please: Caf Food

Edward Tan

2A Computer



As the term nears its end, most people have already grown accustomed to the cafeteria food. While some people have developed an iron stomach from the Village food, others have sought out other eateries. However, for those of us with a meal plan, we are often restricted to eating at places that offer us the meal plan discount. So where are the best campus cafeterias?

Let's start off by taking a look at the Village cafeterias. Here, you judge the food not when you are eating it, but a few hours after your meal. Constipation one day and diarrhea the next does not cancel out and make everything okay. You order you food by pointing at it and describing its colour. This is due to the fact that in many cases you don't know what you are ordering, which is a good thing. The rice

is constantly undercooked while the vegetables are overcooked. This doesn't matter much since you probably cover everything in gravy. It's wise to stay away from anything that needs to be fresh, such as fruits and sushi. Let's not forget about the desserts that come with your meal. They would be fine if it wasn't for the fact that someone keeps stamping them in sugar. Is there anything that is good at the Village cafeteria? All subs and sandwiches are good at both cafeterias while anything deep fried is good at V1. The desserts that do not come with your meal are excellent. I even dare say that they are the best on campus.

Then there are the various coffee shops and ML's in the ML building. None of the food is bad, although there isn't anything special either. However, I do think that the bubble tea needs more work, but that's because I'm really into bubble tea.

Moving on, we now take a look at

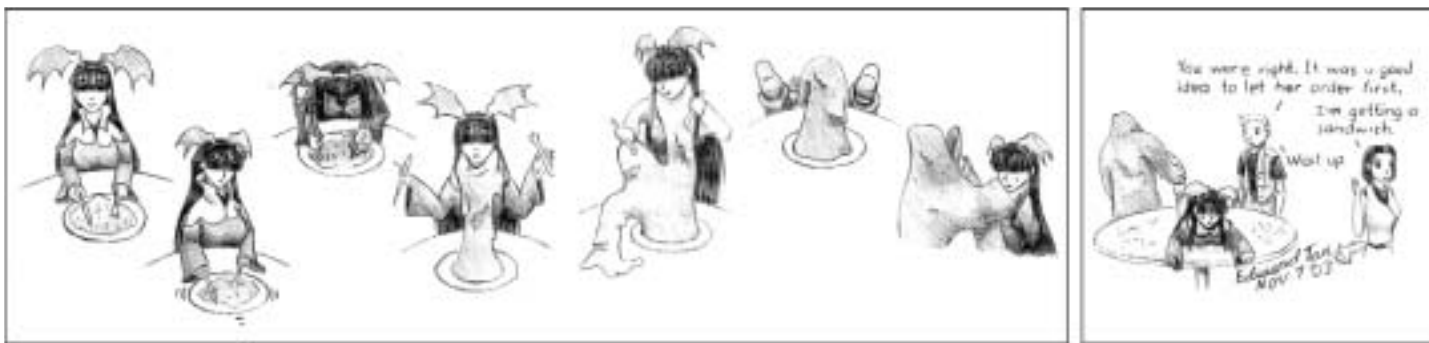
Festival Fare on the second floor of South Campus Hall. You really can't go wrong ordering food here so it's a shame they only open during lunch. I would recommend the omelettes and the roast beef. However, their selection is limited. For variety, one would have to alternate between omelettes, pasta, and roast beef with various amounts of A1 sauce.

Then there is my all-time favourite place to eat, Brubakers in the SLC. I have never had a bad experience eating here. I would definitely recommend

"Constipation one day and diarrhea the next does not cancel out and make everything okay."

the waffles, which have to be eaten promptly so they don't become soggy. The honey garlic chicken is my all-time favourite dish. What can I say, it is really delicious. However, the food here tends to be very pricey, even after your meal plan discount.

As a final note, I would like to say that if it's campus day, the food is good no matter where you go. So feel free to experiment on these days.



There's Something Different This Friday

Dan Arnott

1A Enviro



Friday, October 31. My night started right after dinner, and like most Friday nights I was sitting in my room at St. Jerome's in front of a computer. But the Internet was down! I swore a solemn oath that I'd break the knees of whoever was at fault if I ever found out who he was, and then pulled out the CHE 102 assignment, nothing new there. But wait! Mark is outside my door, but he's not Mark, he's Brother Mark, the Wandering Pilgrim! Also there's Brendan, but he's Al Capone! My roomie is looking more like a mad scientist than usual. There's something different about this Friday night...

Oh yeah, now I remember. Preston Manning is coming to St. Jerome's to give a lecture on the link between spirituality and politics. I threw on a Belushi-esque pirate outfit and headed over to the lecture with Al Capone, Brother Mark, and Snezy the Dwarf, who was my six foot four don. We were all fairly interested about the topic of the lecture, but we mostly wanted to see if he sounded like the Air Farce skits where they make fun of him (he does). We had to leave early, though, because around eight o'clock the Halloween festivities started at St. Jerome's. That's why this Friday night was different! We all got in costumes and trick-or-treated from door to door on the floors. In doing so, I made use of my extensive pirate vocabulary ("Trick-or-treat, say I", "Have ye a noggin of grog or a bottle of rum?", "Here be booty!"). But there was

still something missing...

I heard from a flamenco dancer (civil engineer any other night) in my residence that there was a kegger on Erb Street that night. Hey, maybe that was why this night was special! "Wait here," I said, "I'll be right with you." But when I got back from shedding my pirate garb, my companions had already left. "Oh well, better late than never," I thought, and set out after them.

I arrived at the party a half hour later. They were checking ID at the door. "Oh no," I thought, "I'm 18, and they're not going to let me in, even if I say I won't drink!" Who comes to a kegger not to drink? "They won't believe that for an instant." I turned around and started the half-hour walk back to UW. Maybe I'd just go to bed...

"Oh no! I'm 18, and they're not going to let me in even if I say I won't drink!"

Wait! Wasn't Friday night MOT? The Middle-Of-Term pub at P.O.E.T.S.? Of course it was! That's what was different all along! All the guys and girls from Enviro/Geo/Civ 1A would be there! At the door, I showed my ID and said I wouldn't drink. The guy didn't have a marker to X my hands, so he grabbed a ballpoint pen. "This might hurt a little," he said, as he gouged the sharp tip into my flesh. Soon they found a marker, and as a parting shot, he said "Have fun, kid."

I wanted to turn around and say to him "Kid? You think I like not being able to

drink? You think I like being 18 around here? Do you have any idea how much we are ostracized? We made the grades, we got into university just like the rest of you, and now we're treated like shit! I've been all over this bloody town looking for a good time that doesn't require you to be 19, and you call me 'kid' and gouge me with a pen? (Obscenity)!" But I was in, might as well not whine. Well, I knew two people there, one of them left as soon as I arrived, the other shortly thereafter. Being a lone sober 18 year old in a room full of drunk upper-years is not my idea of a good time.

And so I found myself in the basement of SJU. Mark and Brendan were watching Some Like It Hot. "Where were you?" they said.

"Well, I went to Erb Street..." I started, but before I could begin to explain why, Brother Mark began to preach to me on the evils of underage drinking and promiscuity and having a good time... oh wait, he wasn't Brother Mark anymore, just Mark. But wait! There were James and Chuck! They were underage and they got into the kegger! They marked their hands so they wouldn't drink. I didn't know they did that! And even the people that stayed in St. Jerome's that night watched a good movie and ordered one of those 25 inch pizzas. I had totally lost.

I went back to my room and sat down in front of my computer. I guess this Friday night wasn't that different after all. I tried to go out and have a good time with some friends, but because I was 18 and an idiot (one does not necessarily equal the other), I ended up wasting my time. Next week I'm doing CHE 102 first and foremost, I'll save myself a lot of time. Because, of course, the Internet was still down.

Arts and Entertainment

Sally Clark's "W.A.S.P.S." by Engineering Society Drama

...continued from Page 1.

matics professor at U of T. Things initially go well for the newlywed couple, that is, until the night of their marriage. As Cyril carries his newly wed wife across the doorway to their bedroom, he rather suddenly experiences an incredible loss of sex drive and decides he would rather work on math problems than sleep with his new bride.

What Val simply tries to pass off as 'quirks' soon reveal themselves as a much more deeply routed problem. This problem

arrives one day in the form of Cyril's sister Sam, an eccentric woman with a hobby of

"This is the most shocking play that EngSoc has ever put on stage."

shaving everything in sight to discover 'purity of line', and her friend Andrew, a

'delinquent borrower' with a fetish for librarians. Val soon finds herself working in a van with an insensitive, self-proclaimed, celibate lesbian, all the while sleeping alone as Cyril and his sister cuddle on the couch.

Wasps is a play about the elements of our constructed tribal identities: incest, fashion, fetishism, populist art, amateur psychobabble, and a fearful, murderous fascination with 'the other'. It is an edgy and modern play that explores the dark humor of the unspoken by being offensive, sexual, and extremely outrageous throughout.

This is the most shocking play that EngSoc has ever put on stage.

Directed by Matthew Woolsey (3B Civil) and Lisa Rehak (4A SYDE), Wasps has an exceptionally talented cast that pull off a difficult work with professional ability. Attending a play for a night may not be your typical entertainment, but it is guaranteed that an evening at Wasps will be a memorable night indeed.

Wasps runs from Thursday, November 20 through Saturday, November 22 in the Green Room of the Architecture Building (ES Building). Tickets are \$6 for everyone with performances beginning at 8:00 pm and 2:00 pm for the Saturday Matinee. Tickets can be purchased at the EngSoc Orifice or in the lobby of CPH and the SLC from 11:00 am- 2:00 pm during the week.



Marc Rizkallah and Julia Kossowski in their roles as Cyril and Val.



From left to right: Melanie Roskell (Sam), Neil Cavan (Andrew), Marc Rizkallah and Julia Kossowski discuss Cyril's sister and her boyfriend's living arrangements.

This Week UW Drama Presents "As You Like It"

In the past two years we have produced A Midsummer Night's Dream (2002) and Twelfth Night (2001). AS YOU LIKE IT completes this cycle of Shakespeare's greatest comedies.

The play juxtaposes a courtly world, wherein power is a life-and-death struggle, with a rural setting (the Forest of Arden) where in love and humanity flourish. This production focuses on the four couples -- Rosalind/Orlando, Silvius/Phebe, Celia/Oliver, Audrey/Touchstone -- and how love takes root deep enough in the heart to survive the machinations of schemers and naysayers. The ensemble of 14 actors will double and triple a variety of roles as their quest for love leads them deeper and deeper into the Forest of Arden.

"I cannot remember enjoying a produc-

tion so much. Even when I was depressed, after a few scenes the depression would lift." - JOHN BOWES, (Orlando in the 1980 RSC production of As You Like It)

The production is directed by Joel Greenberg Celeste Dickson, designed by Bill Chesney (set), Jocelyne Sobeski (costumes), Lesley Wilkinson (lighting) and Fraser Smith (sound).

AS YOU LIKE IT runs from Wednesday, November 12 through Saturday, November 15 in the Theatre of the Arts, Modern Languages Building. Tickets are: \$10 (students and seniors) and \$12 (general public). Performances begin at 8:00 p.m.

Tickets can be purchased in advance at the Humanities Theatre Box Office, 888-4567 x-4908, or at the door.



Dave Zoltok (Corin), Jeff de Schiffert (Silvius), John E. Robertson (Jaques), Greg Carere (Oliver) and Kara Harun (Phebe).



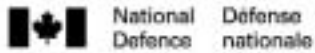
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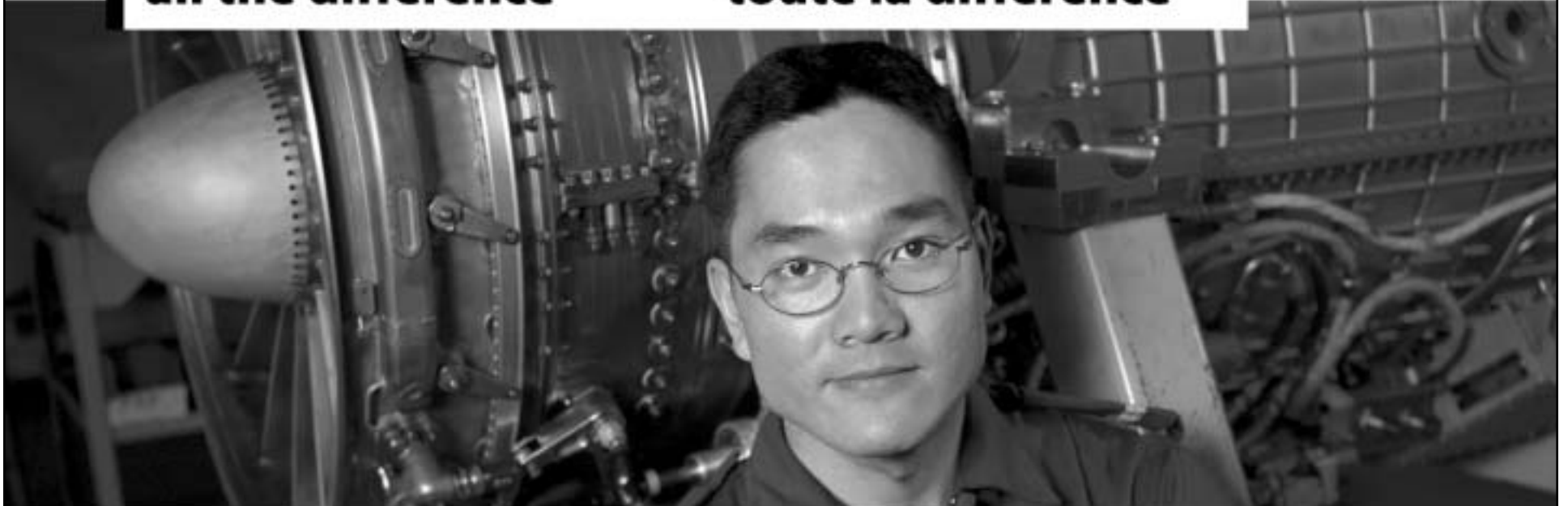
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<http://www.adm.uwaterloo.ca/infotrac>



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Keanu Didn't Say "Whoa", But I Did: Matrix Revolutions

Cindy Bao



2B Electrical

Four and half years ago, the sci-fi /action flick genre was redefined by "The Matrix", with its mind-blowing visual effects, breath-taking Kung Fu choreography and eternal philosophical question of "what is real?" For many fans, the transformation of Neo from a pale-skinned hacker into the designer-shaded, monochromatic One represented the ultimate "coolness of the geekdom".

Unfortunately, despite world-wide anticipation, the second installment of the trilogy suffered unfavourable reviews from critics and fans alike. Nonetheless, I was eager to be plugged into "The Matrix Revolutions" for the simple reason of

knowing how it all ends.

For those who found "The Matrix Reloaded" a disappointment, which is almost everyone but the studio (as it grossed nearly \$300 million domestically), I assure you that "Revolutions" was the opposite. Unlike its immediate predecessor, whose first half was irrelevant, pointless fighting and second half quasi-philosophical babble, the third film talked first and fought later, which pleasantly surprised me.

It began with Neo in a coma, trapped between the Matrix and the real world. To bring him back, Morpheus and Trinity went to negotiate with Merovingian in his night club. I had a strange feeling of déjà vu watching them fighting their way through the door. Was it a glitch in the Matrix because they failed to change anything? Once inside it was unappetizing to watch Merovingian chewing olives while rambling on. How very uncivilized for a refined Frenchman! Persephone, who had a poster of her own during promotion, was

only given a few minutes of screen time. It was, of course, enough to show off Monica Bellucci's cleavage.

After about an hour of cryptic riddles, the pace began to pick up. Back in the real world (or rather, a CGI-world), Niobe, Morpheus et al raced against hundreds of sentinels to fly back to Zion, which was under the attack of thousands more of the squid-like robots. The resistance fighters shot as many down as they could while piloting large robots that were operated through what resembled a joystick, further proving my geek theory.

Compared to the original movie, the visual effect production was of a much grander scale, thanks to the studio, which quintupled the budget. The result was certainly stunning. The battle scenes were quite engaging as countless sentinels poured into the last human city. My breath surely had stopped for a few seconds. The mechanical details of the machine's city were impressive as well. However, the visual effects team ended it all in a less

spectacular note of a Matrix filled with Agent Smith and his "many me"s.

The climax was Neo fighting Agent Smith in the pouring rain. For someone as inexperienced with martial art as me, it was hard to tell how the choreography was any different from the original. As Neo repeatedly stood up after being smashed into the ground, it seemed reasonable to wish the movie concluded right there, right then.

Finally concluded, it was left somewhat open ended. One couldn't help but wonder if the producers were interested in more sequels of the franchise (a.k.a. more money). What would they do though, I asked myself. Despite the limited storytelling in the first installment, there was somehow less in the last two. Additionally, the minimal character development was unsatisfying. So it is my hope that the open-ended nature of "Revolutions" is misleading - another two hours of eye candy alone would be disappointing. Nonetheless, walking out of the theatre, I admitted I had my share of fun.

Mental Health: Educate Yourself About Mental Illness

...continued from Page 12.

As has been the case with all types of discrimination that have been fought against in the past, the number one way to eliminate the false perceptions is education. Educate yourself, your family, and your peers. As I mentioned earlier, 20% of us have been mentally ill or will be mentally ill in our lifetime. So by aiming to learn more about the various disorders, we will be more capable of helping those

around us who suffer from these diseases and if, worst-case scenario, you are afflicted with a mental disorder, you will know how to better deal with your illness. And most importantly, you will know not to be ashamed.

If I could leave you with one thought, it would be this: mental disorders are diseases, illnesses that have nothing to do with the character or capability of those affected. There is medical evidence for many of these disorders which proves that

they have biological and/or genetic causes, and cannot be prevented. You would not blame a person who developed cancer for their illness, don't blame the mentally ill for their disease. Once again, I encourage you to find out more about these disorders; the signs and symptoms, the treatments. It is very likely that you will somehow experience these symptoms, either in your own life or in the life of someone close to you. With education, you will know how to recognize the disorder and better cope with it.

You know not to have unsafe sex, you know the risks for heart disease and the signs of a heart attack, and you probably know how to perform the Heimlich maneuver. Be sure that you also know about the mental diseases that are now affecting so many people in our society. One day you may rely on this information to help someone you care about, or you may rely on it to help yourself. Either way you will make the struggle of those affected a little easier.

Arts and Entertainment

Gomez's "In Our Gun"



In Our Gun is the newly released third album from the band Gomez. The band itself is not mainstream in Canada and the United States, but they are very well known in the United Kingdom.

When I first heard their song, "Machismo", I was amazed at how they are able to meld together various sounds from multiple genres of music. They use guitar, piano, mixer and synthesizer to create very rich sounding music. The individual songs are very good, but to listen to the full album at once is what makes it special. The first time I listened to the album, I was uplifted with the sound of jazz and rock. The jazz foundations of many of their songs create two different types of songs that are contained on the album.

The first style I speak of are their



melancholy songs. For example, "Even Song" is what I consider to be very melancholy. The song is derived from a blues rift, but the synthesizers and new technologies put into it, give the song a new age "funk". The band, being one of the few that actually use a double upright bass, make the songs so much better, and so much more enjoyable to listen to.

The band's second style is an uplifting non-traditional jazz sound. The song "Detroit Swing 66" is, as its name tells, a derivative of swing music. Although you cannot swing dance to this song, it has that uplifting flavour to it, which makes it so loveable. Not only does the song have a great beat, but also a unique background sound.

Since they are not very well known, their website is very hard to find so rather than searching go straight to it at <http://www.gomez.co.uk>. The site is amazing, with great Java and Flash, and captures the band's style perfectly. I urge you to find, download or buy a song or a CD of Gomez's just to experience a very "alternative" style of music.

TALENG

Date: Wednesday November 19
Time: 8:00 p.m. - Midnight
Location: Loose Change Louie's (On University Ave. between Phillip & Lester)
Cost: FREE
Who: Anyone (ALL AGES)

Have you ever wondered if engineers have any talent? Well, come find out for yourself at TalEng! This term, TalEng will be advertised to ALL faculties within UofW, so it's going to be packed! We'll be showcasing our engineering talent to the entire university.

There are already many great performers lined up to entertain you! Some of the feature performers

include great bands like Velocet, Skyline Drive and the Luke Andrews Band. There will also be performances from Chris Lau & Drew Morris (Awesome Violin/Guitar Duo), and Raja Doake. If you're into hip hop, there will be a performance from the UW hip hop crew and an underground hip hop artist known as Zeus. And if you're still not convinced, James Rowe will be doing a stand-up comedy routine that'll make you laugh so hard that you'll fall off your chair. There are also many, many more performers signed up

solely for the purpose of entertaining YOU! Start spreading the word to ALL of your friends. The engineering talent show has been elevated to a new level, so don't miss out on this amazing night! TalEng will be HYPE!

If you have any questions about TalEng, e-mail Karim Lallani klallani@uwaterloo.ca



Daren Toppin shows off to a crowd of happy students.

Photo Contest!

So you think you've got what it takes to be an Iron Warrior photographer? Let's see what you can do!

Submit photos to Betty at the EngSoc office, or digitally to iwarrior@uwaterloo.ca by November 21st. Don't forget to include your name, email and class. Results will be announced in the November 28th issue of the Iron Warrior.



the Iron Inquisition

Ryan Consell, 3N Mechanical

How do you commemorate Remembrance Day?



"21-gun salute from atop MC"
Matt Colautti-1A Mechatronics



"Write stupid articles about it"
Andrew Teeple-1A Mechatronics



"Plant a poppy"
Michael Ng-1A Mechatronics



"Assembly at school"
John Arnold-1A Mechatronics



"I'm American"
Toni Carlisle-1A Mechatronics



"When's Remembrance Day?"
Vicky Louder- First Year



"Respect a moment of silence"
Aingara Paramakuru-1A Mechatronics



"Try to remember to stay silent at 11"
Ryan Bayne-Alumnus