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THE IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

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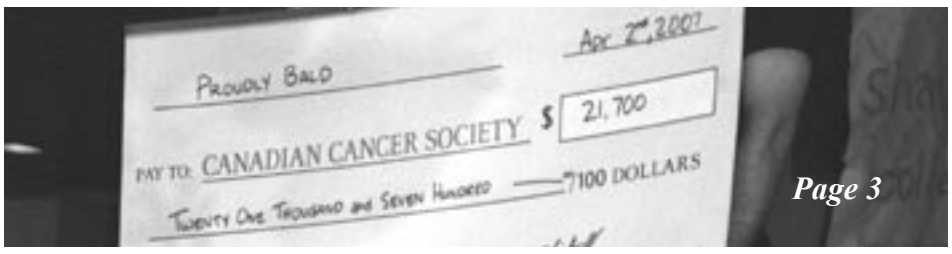

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Mechanical Students Design Medieval Siege Weaponry

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http://iwarrior.uwaterloo.ca

FSAE Competition Fraught with Challenges

THE IRON WARRIOR
NEWS BUREAU

The 2007 Waterloo Formula SAE car takes a test lap in parking lot C

The University of Waterloo Formula SAE team competed in the annual international Formula SAE competition held by the Society of Automotive Engineers at Ford Michigan Proving Grounds from Wednesday, May 16th to Sunday, May 20th in Romeo, Michigan. UW was one of 130 teams from around the world to participate in the event, with teams coming as far away as Australia. Each of the teams had spent the past year working to design and fabricate a formula-style autocross racecar to compete at the event.

Over a series of three days, competitions were held ranging from marketing, cost, and design to dynamic performance in a variety of different areas. The design competition was held on Thursday judged by a panel from the automotive and motorsports industry. Before the dynamic events, there were a series of technical tests to ensure teams met the qualification rules.

The dynamic events began with an acceleration event on Friday, in which each team got four tries with two drivers to achieve the shortest time to reach 75 metres. Following this was a skid-pad event, which measured cars' cornering abilities. The final event on Friday was an autocross event, where two drivers were responsible for driving two laps on the course in a time trial, testing all facets of the car's performance including acceleration and braking. Waterloo placed in the top 40 for acceleration, top 20 for skid-pad, and top 15 for autocross.

After the first leg of the autocross event, Waterloo had noticed a few cracks in the differential casing of their car, but chose to complete the race anyway. After the event, disassembly of the differential revealed that three of the four bolts retaining the drive sprocket to it had sheared off, and three dowel pin holes showed signs of cracking. The team solved the problem by swapping the differential with its 2006 counterpart after making some new parts overnight in the machine shop. The car was ready in time for the final dynamic event of the competition: an endurance event on Saturday.

The endurance event required two drivers to drive 11 1-km laps each, with the car being inspected after the 11th lap for leaks, cracks, and component failures. Waterloo was forced to retire from the event about halfway through the first set of laps after their car's fuel pump electrical connector came loose. In the end, 70 teams retired before the event was over, with two having very bad luck – the University of Oklahoma, whose car ran out of fuel on their last lap, and the University of Michigan, whose car blew its engine about 100 yards from the finish line.

The competition was won overall by the University of Wisconsin-Madison. Waterloo placed 44th overall, fifth among Canadian Universities. Full results can be found online at http://students.sae.org.

Formula SAE Team Unveils 2007 Car, Page 7

John Wall (driver) and teammates at the unveiling on Monday

JobMine Expected to Retire in 2009-10

ALI KAMALIPOUR
3A GEOLOGICAL

Integration of practical work-experience into the traditional engineering curriculum in the form of co-op work terms was a fundamental part of Waterloo's approach that changed engineering education in Canada some fifty years ago. And today, as the Waterloo community is celebrating the University's half-century of innovation and research, another Waterloo-born innovation is taking shape. Though still in its infancy, JobMine's future replacement has some promising new developments to look forward to.

In the pre-JobMine era, Waterloo co-op students had limited computer tools to use as part of the employment process. This changed with JobMine in 2004. JobMine was supposed to be a one-stop shop for students and employers alike. It promised to streamline and facilitate the workings of the co-op employment process. While better than the old paper method, it received a cold welcome from students in part due to its lacking in ease of use, frequent service interruptions, and the less-than-ideal matching algorithm it used to rank job-seekers and prospective employers. The entire system is about to change.

And this time, instead of purchasing solutions from corporations or using a vendor-supplied toolkit with limited functionality, the University is looking inward for home-grown talent to make life a whole lot easier for thousands of students and employers. In 2006, the Department of Management Sciences assisted CECS in reviewing the employment process and one of the recommendations identified the need for a different type of IT system for the process. As a result, the University is building a whole new, yet unnamed, system that is custom-made to address the unique needs of the CECS process, the UW students, and the employers who participate in UW co-op.

Leading the development is Dr. Kenneth McKay, Director of Special Projects and a faculty member in the MSci. Department. A Waterloo graduate himself (Math and Engineering) he is no stranger to taking on challenges for the sake of the school he loves. In the 1970s, he was a Math co-op student and had all but one of his work terms in the basement of the Math & Computer building working for UW. As a co-op student, he worked on a number of software projects including backup systems and interactive math tools used for teaching and research. The backup system he built as a co-op student was still being used at Waterloo in 2001. He has been seconded to IST from MSci. to lead the JobMine replacement project.

I sat down with Dr. McKay on May 10th to learn more about the latest developments in this new project, and various challenges and opportunities it will offer to Waterloo students wanting to take part in the innovation process.

See JOBMINE on Page 10

Letter from the Editor

On Academics, Extracurricular Activities, and My Goals as Editor

BAHMAN HADJI
EDITOR-IN-CHIEF

Well, the Spring term is here once again. This is my second academic term during the summer, the previous one coming when I was in 2B two years ago. And, while it was hard to adjust to it at first, I think the Spring term is probably the most enjoyable one to be on campus. The atmosphere is more relaxed, the weather is nice, and campus is less crowded. But it's hard to focus on academics at times when you look out the window and feel the urge to go outside and play catch. However, you can strike a fine balance between your academic life and extracurricular activities. In fact, I believe it is important to do so – that being involved with other activities actually helps you be more successful with your courses.

Before I explain why, I'm going to go on a little bit of a tangent. See, a rather funny thing happened to me towards the end of second year and throughout third year, something that came about so gradually that I'm not really sure when I first noticed it. I began to actually enjoy Electrical and Computer Engineering and ponder graduate studies. It's not an uncommon feeling, either – I've spoken to several friends in fourth year from my class and from other classes who also feel the same way. I certainly did not have any intention of doing more than an undergraduate degree when I started my studies here back in 2003. In fact, one of the appeals of going into Engineering is that unlike most other contemporary undergraduate programs, graduating with a Bachelor of Applied Science degree practically guarantees that you can find a decent form of employment in your technical field without having to pursue further education.

But going on to do a Master's requires you to have fairly good marks, in order to qualify for the various scholarships available to help fund your graduate studies. This is something that suddenly dawned on me in third year. My marks had always been good, but I was never near the top of my class (university really is different from high school, as tired a cliché as that is). So, I pushed myself to work harder to attain better marks and do well on exams.

There was something else on my mind at the same time though. I felt incomplete in a way – mainly because the time that I didn't spend on school went towards a few hobbies like playing guitar, watching TV, and intramural sports like softball and hockey. And then I began thinking about getting more involved with extracurricular activities within the school. I had joined the UW ASIC Design Team in second year, which felt good because I was spending time outside class learning material that I would've had to wait until third and fourth year to see in my coursework. By 3B, I became very active within the Engineering Society and took on a few Directorships and started writing for The Iron Warrior. I did this at the same time as now being a senior member of the ASIC group and giving tutorials on analog circuits to the junior members, and being a teaching assistant for GenE 119, the tutorial offered to first-year students by the First Year Engineering office.

The results were great. Because my extracurricular activities kept me busy, the other free time I had went towards school. Having so much to do made me budget my time well, become organized, and actually plan ahead. These were things I had wanted to do for the longest time, but my mentality, being the same as most people, was often to procrastinate – but I couldn't afford to do that anymore. Even though 3B was a hard term with several labs and projects, I got through it with one of my best term averages.

At the end of the Fall term, when I was asked by the Editor-in-Chief at the time, Jaclyn Sharpe, to be the person in charge of running this newspaper, I had to think. I had already been selected as one of the 2008 Graduation Committee Chairs, which is a fair amount of work on its own, and intended to focus heavily on my courses to make sure I did well enough in fourth year to be accepted into graduate school. And while I knew that being Editor-in-Chief would probably be the single most time-consuming extracurricular activity I could take on, I decided to do it – though now that I have one issue under my belt, I can now honestly say that even with all the work I was expecting, I still underestimated the sheer amount of time that goes into recruiting, organizing, acquiring content and advertising, and laying out the paper. Even though it was a hard decision to make at the time, I do not regret it for a single second. As Jaclyn (who graciously stayed on as my Assistant Editor, and without whom the production of this issue would not have been possible) and I finish working on the first issue on Monday morning after having spent an entire holiday weekend in a small office in CPH that probably used to be a janitor's closet at some point in the past, I feel more proud of this achievement than anything I've ever done before.

In the end, it is all about balance. I encourage everyone reading this to think about that. Think about what you do when you're not spending your time studying or working on assignments. Getting a sense of accomplishment from the activities on which you spend your time away from academics is important – it is something that regular hobbies don't quite fulfill. If you want to learn more about your discipline and get hands on work, you should join and contribute to a UW student team like the Alternate Fuels Team, Formula SAE Team, ASIC Design Team – the list goes on, and no matter which discipline you are in, there will be a student team researching and working on projects related to your field. If you want to get away from academics outside class but still accomplish something worthwhile, you can join The Iron Warrior. We are always looking for more help (e-mail iwarrior@engmail if you are interested), be it more writers, photographers, Photoshop gurus, or whatever else – all it takes is an enthusiastic person willing to lend a hand. Alternatively, you can join the Engineering Society as a Director (there are still several unfilled Directorships this term, which you can find on the Engineering Society website at engsoc.uwaterloo.ca) or a volunteer for the Task Team who chips in wherever more help is required. Ultimately, any of the aforementioned activities will leave you with a satisfying feeling that you can't get by spending your spare time watching TV, playing video games, or surfing the Internet, and you will get to make new friends, learn new things, and achieve something special. A little bit of initiative and enthusiasm is all it takes.

With this being my first issue, I'd like to talk about my goals for the term for The Iron Warrior, and changes that have been or soon will be made to the newspaper and the way that it is run. You may notice as you turn through the 16 pages of this first issue that we have a substantial amount of news stories and a prominent interview feature – which I plan to have for every issue – mixed with the usual opinion pieces and the few satirical columns. These are some of the things I had hoped to accomplish when I decided to take the position, and we have gotten off to a great start with this issue. I want to thank my staff writers and other contributors for coming through with their stories, and everyone including the EngSoc Exec for sending their submissions by Friday night. This first issue is a good indicator of the quality I expect to publish, so you can look forward this term to the newspaper of the Engineering Society being an informative publication.

There have been a few subtle changes to the look of the paper since last Fall. The most noticeable one is the fact that the banner has been redesigned, courtesy of former editor and Mech 07 grad David Yip, and is being used for the first time on A-Soc (it was also used in the Winter term by B-Soc while most of us were on co-op). It was the first time in seven years that the banner was changed, and is the tenth one used since the inception of the newspaper in 1980. We also standardized the look and the feel of the paper with a new style for byline photos and conventions for headlines, among other stylistic changes. These changes were mostly initiated by Jeffrey Lipnicky, whose knowledge of InDesign is invaluable.

I also felt it was important to set up a structure for bylines so that we didn't have students from different graduating classes who are on co-op submitting the same class byline. Looking back at through the IW archives, there didn't use to be any off-stream submissions to The Iron Warrior in its early days (in fact, the A-Soc and B-Soc editions of The Iron Warrior were at one point separate entities). But by the late 90s, as more people started to use e-mail, submissions began popping up with the byline "Off-stream Computer," for example. Then, gradually, that was replaced by that now ever-present "N" that we now know signifies the co-op term. But the problem with this is that there is bound to be confusion because, to use an example, in the Spring term, there is always a class that has just finished 2A (4-stream), and a class that has just finished 1B (8-stream). The former class is one year ahead of the latter, but chances are, if you receive submissions from them, they will both say "2N" because people like increasing the number on the left as early as possible. So, instead of this arbitrary convention of using an N whenever a student is off-stream, N will now denote that the student is on their first work term after the "A" term of that academic year, while a T will denote that it is their second work term after the "A" term of that academic year. And, most importantly, the number on the left (the academic year) can only be changed with the start of an academic term (so completing 2B does not mean that you are in 3N the following co-op term). This system allows every off-stream class to be uniquely identified and matched to a graduating year.

By the end of the term, myself, Jaclyn, and Harout Manougian, the Editor-in-Chief this past Winter term (he is on campus because 4-stream ECE fourth-years switch Societies by doing 3B and 4A back-to-back) plan on completing a "Transition Guide" to be used by future editors. We have a unique opportunity this term because I have these two former editors (and not just any two, but the editors of the previous two terms) on my staff, so we can use our collective experience to write a comprehensive document on policies, technical notes, acquiring advertising, staff meetings, and other issues. This document will be kept alongside our Policy Manual and help ease the transition for future editors who may not be as fortunate as I am this term to have such a richly experienced staff.

We will also be making revisions to the aforementioned Policy Manual, which hasn't been updated in four years, and plan to ratify the new version at the Engineering Society joint council meeting in July. Among the additions will be a suggestion that actually came from Dean Sedra last Fall, which has worked out well for us so far. The suggestion was to set up a Review Panel to give feedback to the Editor-in-Chief on submissions that may be controversial so that the editor can gauge the reaction of the student body and make an informed decision as to what to do with the article. This Review Panel consists of the members of our current Advisory Board, the Assistant Editor(s), and the IW Review Panel Class Representatives (maximum of one per class). While I'm on the topic, only the 3A Mechanical, 3A Mechatronics, 1B Chemical, and 4A Computer (4-stream) classes currently have Class Reps, so if you are not in one of these classes and would like to represent your class, please send me an e-mail at iwarrior@engmail with your name, term, and program.

Finally, our website, iwarrior.uwaterloo.ca, has gotten a facelift, once again through the efforts of Dave Yip. If you haven't visited the online version of The Iron Warrior in the last three months, give it a look – you will be pleasantly surprised at how different it is from the old layout. Stories are more accessible, there is a lot more content on the front page, and the new layout gives the website the look and feel of an online newspaper.

And with that, I am going to end my first Letter from the Editor. It's long, so if you've gotten this far, kudos to you. I hope you enjoy reading your student newspaper.

THE IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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

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

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

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Proudly Bald in Support of Cancer Research

Campus-wide Fundraiser Results in More than $24,000 in Donations

JASON SHIRTLIFF
4A COMPUTER

In March 2007 a head shave fundraiser was run at the University of Waterloo with the proceeds going to the Canadian Cancer Society, earmarked for cancer research. Katherine Olsen and I organized the fundraiser with the help of the Engineering Society Charities Directors and several other students from outside of Engineering.

In November 2006, Janet Yip passed away suddenly due to acute leukemia during her final work term. She was a fourth-year Electrical Engineering student, and was also heavily involved in the Engineering Society and across the University campus. We decided to run the event in Janet's memory.

Two head shave fundraisers have been run within Engineering in recent memory. This time we decided we wanted to involve as many people as possible across the whole campus to have maximum exposure and effect. We wanted to provide a way for people to show support for those that they care about who are battling cancer, or to remember those that they have lost to the disease. Cancer is so widespread and affects so many people that we wanted to include the whole University community in our effort to make a difference.

A poster campaign with hard-hitting facts was used to advertise the event. Did you know that 44% of men and 38% of women will develop cancer in their lifetimes, according to projections released by the Canadian Cancer Society last year? One in four Canadians will die from the disease, according to the projections, which are based on recent diagnosis and treatment rates. Those are huge, scary numbers. We wanted to make a difference in finding effective treatments.

Proudly Bald in Support of Cancer Research kicked off in high gear on Monday, March 19th, with booths set up during lunch in the MC, Biology 1, and the CPH Foyer. Lasting two weeks, the event saw dozens of people shave their heads. Over ten people also donated 10 inches or more of their hair to be sent away to make wigs for underprivileged children who have lost their hair due to chemotherapy and radiation treatments. The participation was amazing at all of the booths, with the Engineering booth in CPH bringing in the most donations in terms of both cash and hair.

Several headliners bravely offered to sell their hair if we could reach magnanimous totals. Renjie Butalid, VP Admin & Finance for Feds at the time, set the price of his beloved hair at $35,000. Michelle Zakrison, then-Feds President, offered to donate 10" of hair if we raised over $50,000. Douglas Harder and Ramadan El-Shatshat, both lecturers in the Department of Electrical and Computer Engineering, planned to have their heads shaved if we could raise $35,000. Harder also said that he would run for one hour continuously for every thousand dollars over $30,000 that we raised. The guys of the B-Soc Exec shaved their heads, as did A-Soc's WEEF Director Brandon DeHart (who also brought in money by collecting pledges to keep his beard). The Engineering Orientation Week FOC also shaved their heads. Other headliners included two professors from the Faculty of Science and 2007 Graduation Committee Co-Chairs Rishi Lukka and Ryan Harris.

See FUNDRAISER on Page 12

Katherine Olsen loses her locks to help raise funds for cancer research

Organizer Jason Shirtliff does the honours for ECE Lecturer and Computer Engineering Academic Advisor Ramadan El-Shatshat

Undergraduate Students Vote for Bus Pass

Non-refundable Bus Pass to Take Effect Fall 2007

JOSEPH COLLINS
1N SOFTWARE

Undergraduate students at the University of Waterloo have voted in favour of a Universal Bus Pass, or U-Pass, that would allow unlimited travel on Grand River Transit buses for between $40 and $50 per term (depending on the administration fee, which has not yet been finalized). The referendum, held on March 28 and 29, had a relatively good voter turnout. The majority (57%) of the approximately 7000 voters voted in favour of the non-refundable pass.

This means that, by Fall 2007, full-time undergraduate students should be able to use the U-Pass upon boarding any GRT or iXpress route in the tri-cities, although at this time it is unclear whether that will be a student's WatCard or a separate GRT pass. Either way, the pass will add up to considerable savings for students who use the bus on a regular basis, and even occasional users will notice a savings.

As well, according to a report from Imprint, GRT is preparing improvements to many of the routes used regularly by UW students, including Routes 8, 13, and the iXpress. They have committed over 27,000 hours of additional service, meaning more frequent stops at the university during peak hours.

Many students, however, are not satisfied with the idea of the bus pass. While service will be improved around the university, many students live outside of areas serviced by GRT buses (such as in the north end of the city). At this time, there are currently no plans to improve or extend service to these areas, leaving many students to find alternate transportation.

As the contract between the Federation of Students and GRT is still being negotiated, many of the details about the pass and its implementation are still unclear. Updates on the discussions and other U-Pass developments will be reported in The Iron Warrior as they become available throughout this term.

A referendum on the same issue was also held by the Graduate Student Association, where 52% of the approximately 1400 voters disagreed with the bus pass idea and voted it down. The Undergraduate U-Pass Program can be valid for up to three years, after which time it will be re-evaluated.

Construction Strikes CPH

Multimedia Lab Closed for Spring Term

ERIC MIGICOVSKY
3A SYSTEMS DESIGN

Construction has hit Carl Pollock Hall once again. Just when you thought you were finally clear of the asbestos-clearing, fire-damage-cleaning workpersons in your place of learning, renovations have struck again. This time around, it's the Multimedia Lab (CPH 1346) right next to the Engineering Society office. Remember first year? Then you may or may not remember the lab.

The lab has been closed down as of late to get ready for a new project. It turns out that the Multimedia Lab itself was designed with the option of adding a second story. That time has finally come; with the number of programs in the Faculty of Engineering expanding at an increasing rate, more office space and conference rooms are desperately needed. The new office space will be used mostly by faculty members of the new programs' departments, along with a smattering of graduate students and other administrators. It will be accessible from the third floor of CPH.

Tenders for construction have closed, and the actual ground-breaking (or roof-breaking in this case) should commence any day now, with the goal of having the Multimedia Lab fully operational for the incoming first-year classes in September. The Office of the Dean will be closely overseeing the operation. No changes to the actual Lab will be effected.

Questions regarding the construction can be directed to the Office of the Dean.

Submission of Grades Optional at Discretion of Employers

JOSEPH COLLINS
1N SOFTWARE

For the past two terms, Co-operative Education and Career Services has made the decision to have students' marks submitted with job applications. Starting this term, however, employers will make that decision.

Employers now have the option to make grade submissions optional when posting their positions on JobMine. When employers select this option, students may, if they wish, decide not to have their marks released to the employer. Deciding to opt out will give the employer a page stating that they will not be receiving the student's grades, a move made to prevent false mark submissions, which prompted the original change to make submission mandatory.

Many employers will want to use student grades as part of their decision process. If they decide to do so, the marks of all of their applicants will be attached to the end of their resume packages by default. But students should keep in mind that employers are looking for well-rounded individuals. Therefore, they should keep their resumes and cover letters up to date and take advantage of the many workshops that CECS offers, as well as the resume critique sessions run by the Engineering Society.

ESQ Giveth, ESQ Taketh Away

Engineering Science Quest Summer Camp to Return this Term

JACLYN SHARPE
3A MECHANICAL

The return of the Spring term means that there will soon be children roaming the Engineering buildings around campus. This is due to the annual Engineering Science Quest summer camp (better known as ESQ), which will be starting shortly.

ESQ is a program run jointly by the Faculty of Engineering and the Faculty of Science, with the goal of attracting children to the respective fields. Over 2000 campers from Grades 1 to 10 participate in ESQ at Waterloo each year. Another objective of the camps is to encourage the kids to think about post-secondary education, which is why they are held in active university buildings.

It is the intent of the organizers to hold the camps in authentic lecture halls, while causing a minimal disturbance to university students. For this reason the camps are held in the basement of RCH and smaller, tutorial-sized rooms. The camps will likely take over five rooms in RCH and two rooms in E2, as well as several other rooms in Biology and Physics. These rooms will be used as headquarters for the camps and decorated to reflect the session themes.

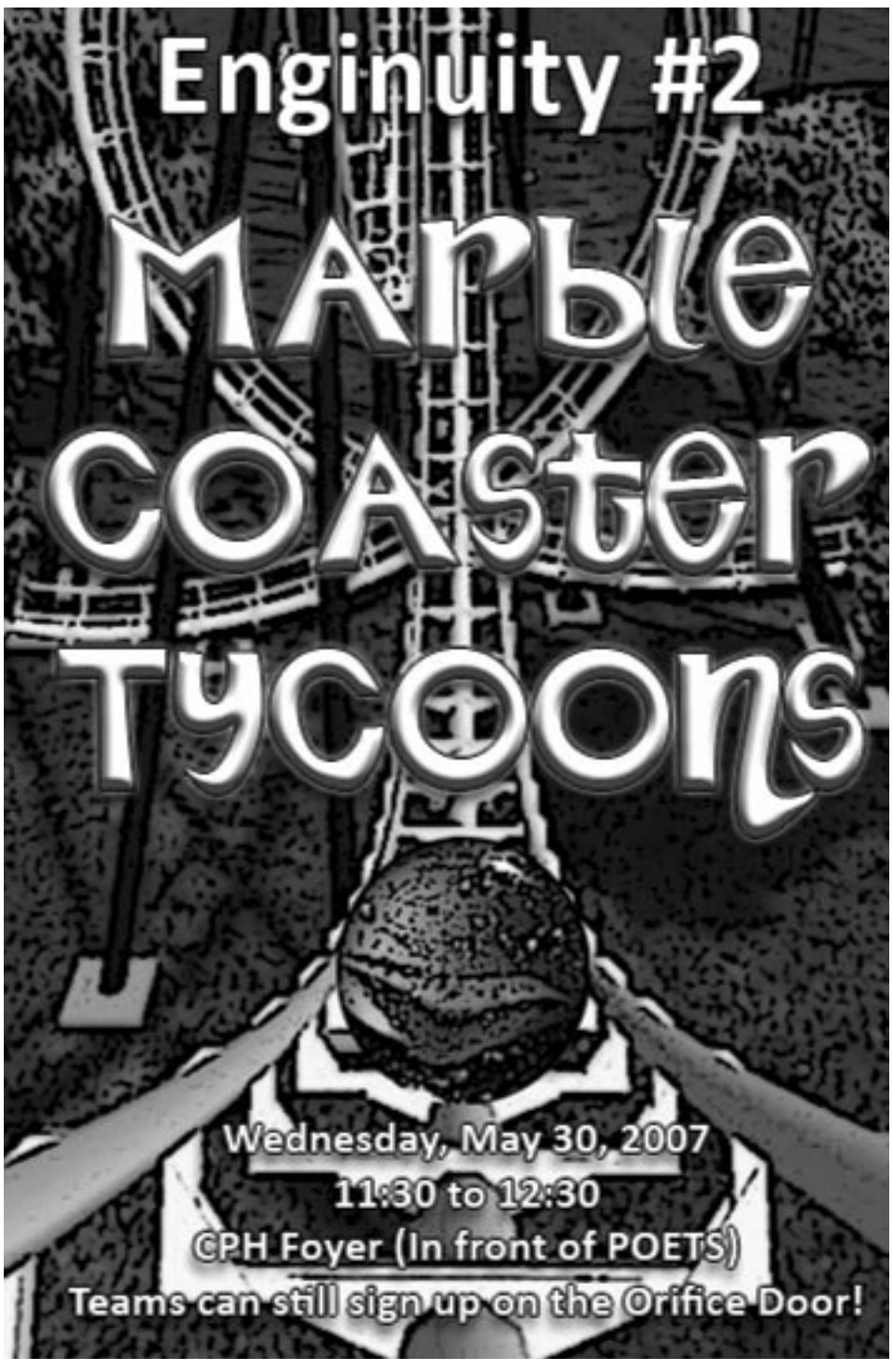
There will also be two ExXtreme [sic] camps, focusing on computers and technology. These will be held in the Lever Lab (E2-1302) and the EIT computer lab (EIT-1020). Because the labs will be decorated and may be used to store supplies and campers' belongings, they will be unavailable for use by Waterloo students. The Lever Lab will be in use from May 22 to the end of the term, while the EIT lab will be available until early June.

The Wheel Lab (E2-1308) will be in use from 8:30am to 5pm for three weeks in July for both SHAD Valley and a high school exchange group from France that ESQ will be hosting.

University students may feel shortchanged by having labs and classrooms be inaccessible while they're in use by kids, but this is in fact a reciprocal relationship. ESQ gives back to the University through funding for labs, co-op positions, and outreach programs like Explorations and Go Eng Girl.

In order to provide a high-tech experience for the campers, ESQ often upgrades the labs that they use. Past upgrades have included larger hard drives, new keyboards and mice, and CD-ROM burners. The two labs most often used by ESQ in E2 have benefited especially from the camp program's generosity. Last year, ESQ installed over a dozen firewire cards and ten DVD-burners in Wheel and Lever; two years ago, these same two labs received a total of 20 brand new computers financed by ESQ.

And conveniently for students, the camp is only run in the summer, which means that the benefits of the upgrades are enjoyed without interruption during the Fall and Winter terms.



How to Get a Job

Resume Tips for the Masses

ANGUS MCQUARRIE
4A COMPUTER

This is probably some advice that's too little too late, but I'm going to throw it out anyway. There are thousands of students in Engineering at this school, and many of them are now competing with you for co-op jobs, or potentially full-time jobs, in the near future. I'm not a career counsellor, and I'm not a consultant, but I've been through co-op a few times, and I've been reasonably successful with it. As this will be my last co-op term coming up, I thought I'd share some of the things I've learned over the past four years with all of you (since you're not *my* competition anymore), and hopefully you'll find some of it useful.

For this issue, I'd like to focus on resumes. Both the Co-op department (CECS) and EngSoc offer resume critiques. These services are extremely valuable, since even someone who's made a lot of resumes can make errors or not understand how it will read. These services are meant to make your resume from something bad into something which doesn't stand out as being bad. Many employers get several hundred resumes for a given co-op job posting. Many of them simply throw out the top half, and only sort through a subset. If your resume contains nothing more than a list of tools you know how to use, your past work history, and a list of courses you've taken, it's pretty bland and doesn't make you stand out at all. Even worse if you're using one of the standard templates CECS provides and that 90% of the co-op students use because they don't know how to write HTML. When you're writing your resume, the important thing is to differentiate yourself (and not by being the person with the worst spelling and grammar).

Tip 1: Despite the fact that everyone tells you to use "Action Verbs" like Designed and Facilitated on your resume, these words can get bloated and obscure the real essence of what you're trying to communicate. Use them when appropriate, but don't fill your resume with big words just to sound smart. You're not impressing anybody.

Tip 2: Do something that almost nobody else does, and make that a major entry on your resume. An employer is more likely to remember someone who's done something really different than someone who wrote down what classes they took (hint: everyone else in your class took the same courses).

Tip 3: Make your resume look interesting! Find a better template for making HTML resumes online. Personally, I use a tool which is entirely online and lets you build an awesome resume without knowing any HTML at all. The tool will also create your resume in TXT, PDF, DOC, HTML, RTF, or just about any other format you'd like to have it in, and they'll host it online for free (Googling my name will give you a good sample of the kind of thing you can make with it). The tool is called Emurse, and is available at http://www.emurse.com. I suggest you all give it a look.

If you have any interesting suggestions or comments, please send them on to me at ahmmcqua@engmail.uwaterloo.ca. If you have any criticisms, please send them to Ruth-Anne Vanderwater at asoc_prez@engmail.uwaterloo.ca. Cheers.

Nexus Printing Now Available from Laptops

HAROUT MANOUGIAN
4A ELECTRICAL

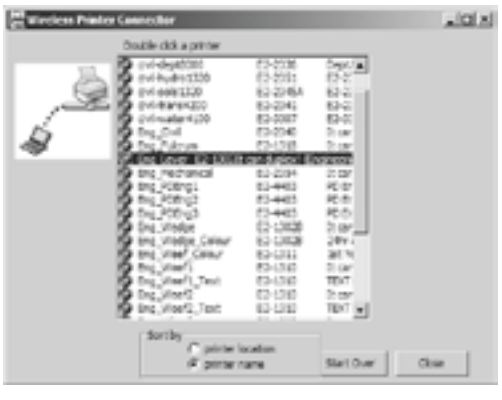
You don't need that USB key anymore, nor will you have to upload files to mywaterloo.ca just to print them on campus. Network Printing is now available to all Windows laptops that connect to the campus-wide wireless network (a Mac alternative is not currently available). It's easy to do; just follow these steps:

1. Cut a hole in a box.
2. Connect to the "uw-wireless" network from your laptop.
3. Authenticate by opening any web page. You will be asked to log in using your Nexus userid and password.
4. Run the minuwet.exe verification file that makes sure your computer has installed recent updates and has a current virus definition file. Do this by clicking "Yes, Please" after you have authenticated.
5. Click on the Network Printing menu item on the left of your screen to download the printing manager.
6. Run the ippconfig.exe file. It will ask you to look for a printer by faculty or by building. It is easiest to sort by building if you already have one in mind. All you need to do is double-click on the printer you want and you're set to go.

You will likely be asked several times whether you trust the University of Waterloo before running the .exe files, a standard check for any executable. While the possibility that IST is running a conspiracy and hopes to infect all undergrads' computers with a dormant virus which will one day make all our laptop batteries explode simultaneously exists (much like the possibility that the African elephant population has tripled in the last six months exists), they gave me my first co-op job, so I trust them.

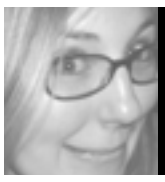
Also, remember that you are still charged for every page you print and need to have money on your printing account just as if you were printing from a lab computer. If you run out, you can swipe your WatCard at the terminal on the first floor of E2 near the WEEF lab, which will transfer $5 from your WatCard to your printing account.

Happy printing!



Instruments of Medieval Torture

The 3B Mechanical Design Project of Fall 2006: The Trebuchet Story

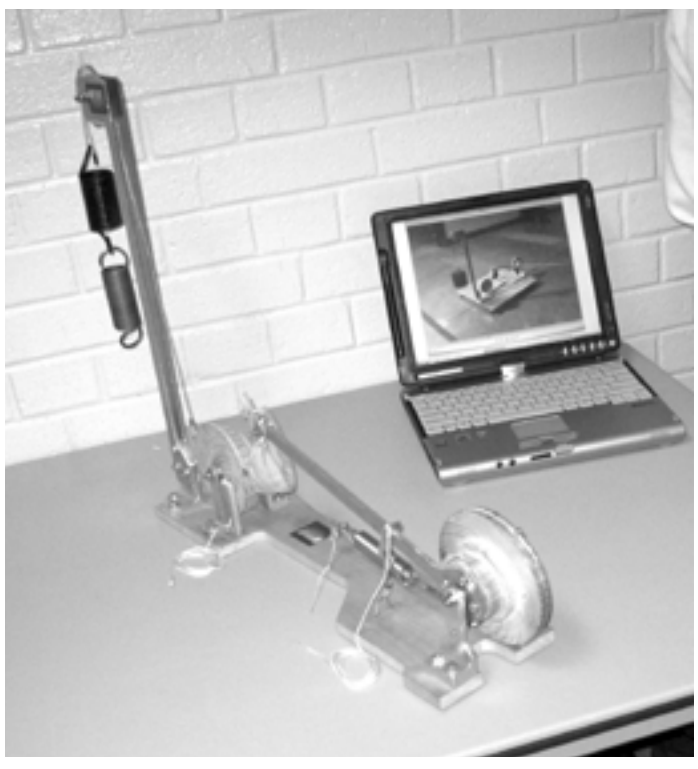


JILL REDMAN
4A MECHANICAL

We had been warned about 3B. It was supposed to be a difficult term, mostly due to the design project. In the past this design project had always been a heat sink, but for our class they decided to give us something "special" and have us build a trebuchet. The prospect of building a medieval weapon that fired projectiles seemed far more exciting than constructing a piece of metal that absorbed heat. But we were young and innocent back then, unaware of the misery that was to come.

The prospect of building a medieval weapon that fired projectiles seemed far more exciting than constructing a piece of metal that absorbed heat.

Once groups were formed, different types of espionage and counter-espionage began in earnest. Parties were used as a means to try to squeeze information out of incapacitated and opposing classmates, but the fear of repercussions from their own teammates often kept them quiet. Some teams were planning on building in secret, assuming that their design was so ingenious that once other teams saw it, they would change their designs entirely.



The second place trebuchet, built by Brian Langelier, Brock Watson, Peter Christensen, and Jill Redman

Even after the preliminary reports were handed in, some excitement remained. One team's secret weapon turned out to be the use of carbon fibre, which did "ooh and ahh" a few people, even though it blew their entire $75 budget.

What really destroyed everyone's morale was ADAMS/View. There are not enough swear words in all the languages of the world to accurately describe this software (which I can only assume is the spawn of Satan). It was supposed to accurately simulate our trebuchets and then optimize different parameters, such as arm length and release angle. The program often seemed to break the laws of physics when it ran simulations. The ball would float upwards and downwards at will, but we were assured that this was nothing to be concerned about; the simulation was an accurate representation of reality. Optimization was hellish. Often it would result in a distance fired of significantly less than the initial set up; it was almost as if ADAMS/View was doing it on purpose, laughing at us from behind the screen. ADAMS/View still haunts anyone who ever used it by popping up a text box when logging into any school computer, just as a friendly reminder of the torture and suffering it caused.

With optimization complete, the student machine shop in E3 instantly became overrun with students. Not only did our social lives suffer, but our health as well. I can only imagine how many years were taken off our lives by the massive amounts of Mikey's and Campus Pizza that were consumed. Building was taking an incredible amount of time and it didn't help matters that halfway through the build process, the limited shop capacity resulted in some people having to build in the hallway. But the real fear didn't set in until teams started testing their fully assembled trebuchets.

Now the competition (comprising 30% of our final mark in the course) was to consist of two different events, allowing the full capacity of the trebuchet to be tested. The distance competition was to test the power of the trebuchet and would be scored by distance divided by mass. The accuracy competition was to test how close the trebuchet could fire at a target 12 meters away. This seemed reasonable based on the numbers that were produced from the "completely realistic" simulation done in ADAMS/View. When the first teams started testing, it became evident that firing more than 10 meters was considered an incredible feat. The professor had assured us at the beginning of the course that he had made a trebuchet and 12 meters was a reasonable target for accuracy. However, upon further questioning it was discovered that by "built" he actually meant "modelled in ADAMS/View".

As the trebuchets slowly reached completion, testing and optimization of the designs began in earnest. With only one hallway and two counter weights to test our very dangerous medieval weapons, time became of the essence. The situation became even more dismal when one of the counterweights mysteriously went missing for a few days before the competition. Testing had to be supervised, and if it were not for our TA Arash, who showed up at 8am everyday, and even on weekends, many teams would not have had an operational trebuchet. For most teams, the only option was to do testing during class time, which soon resulted in our other professors giving us lectures about time management, but with 30% of our final mark riding on competition day there was little other choice. Eventually the professor for the project heard the excessive grumbling of the class and our other professors, and the cost of not having an operational trebuchet was dropped from 30% to 20%. This was too late for many teams, as they had already committed to neglecting every other course that term, which eventually resulted in mass panic come exam time.

The first place trebuchet, constructed by Nick Aitken, Mike McCracken, and Chris Ferket, was the favourite with the judges

The accuracy competition was to test how close the trebuchet could fire at a target 12 meters away . . . When the first teams started testing, it became evident that firing more than 10 meters was considered an incredible feat.

Finally, the big day arrived. There were three competition days in total. To ensure the safety of our professor from the 90-gram balls that were being used as ammo, a net of indisputable protection was duct taped to the wall and the ceiling. Perhaps he was also fearing the wrath of an angry class. The distance competition was won by the two-man group of Jason Fice and Adrian Milford, who had used the aforementioned carbon fibre to construct their trebuchet. The maximum distance of a little over 14 meters was fired by a spring-loaded trebuchet. The accuracy competition was won by Paul Lucente, Marco Pacifico, Ryan George, and Rob Peternel, who were within 6 centimeters of the target. Judging, done by a panel of professors, was won by Nick Aitken, Mike McCracken, and Chris Ferket.

Overall, first place went to Nick Aitken, Mike McCracken, and Chris Ferket. Second place went to Brian Langelier, Brock Watson, Peter Christensen, and Jill Redman. Third place went to Paul Lucente, Marco Pacifico, Ryan George, and Rob Peternel. There were monetary prizes awarded to the top two groups in the form of American Express gift cards supplied by ADAMS/View. But in classic ADAMS/View form, we were screwed yet again, as the certificates can only be used in the US. Additionally, although we were told to submit our receipts in order to receive up to $75 compensation for purchase of materials, no one I spoke with who submitted receipts has seen any of the money.

Although nobody expects the third year design course to be easy, in order to avoid the nightmare our class had, the trebuchet project was abandoned after one term and will need serious reworking if it is ever to be implemented again.

Paul Lucente, Marco Pacifico, Ryan George, and Rob Peternel's third place trebuchet also won the accuracy competition

ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report

Birthdays, Events, and Your Privacy

RUTH-ANNE VANDERWATER
PRESIDENT

Well, it's the beginning of another term and EngSoc has picked up quickly. We have something going on almost every week! So keep your eyes and ears open and get involved over the summer. There are a number of particularly exciting events over the term such as the 40th birthday of the TOOL, skydiving, whitewater rafting and EngSoc elections.

As many of you may know, this year is not only the 50th anniversary of the university, but it's also the 40th birthday of the TOOL. We're planning on celebrating this occasion all term. Some of the exciting things you can watch out for include IW articles about the TOOL, an MOT birthday party for the TOOL and perhaps a new TOOL video that will debut at MOT. If you're interested in helping out with any of these things please let me know. Also, if you're interested in having the TOOL show up to any of your events, please send me an e-mail in advance (i.e. not two days before the event) and I'll see what I can do to get it there.

Secondly, this term we'll be having EngSoc Executive elections. The election date is July 19th. Nomination and campaigning periods will be going on before then. Eric Migicovsky is the Chief Returning Officer (CRO) and Todd Radigan is the Assistant CRO. They will have more information about this in the upcoming month.

Also, Feds is running a Waterloo at Wonderland trip on June 8th. The bus will be leaving at 9am from the Davis Centre and will leave Wonderland at 8pm. The price is $37 for UW students and $45 for non-UW students. The tickets include park admission, return transportation, a collector T-shirt, and survival kit. EngSoc is selling tickets for this event in the Orifice (CPH 1327). At this week's EngSoc meeting, we'll also be discussing the possibility of EngSoc donating some money to this event.

Lastly, I want to make sure everyone is aware of the Freedom of Information and Protection of Privacy Act (FIPPA). The part of the act that pertains to us as students is how our privacy and identities will be protected. What our school is doing can be summed up as follows:

1. The Registrar's Office and the Graduate Studies Office are responsible for releasing final grades to undergraduate and graduate students respectively through secure web access. Provided the identity of the individual students is protected, an instructor may post grades in a public area such as an office door, bulletin board, or course website.

2. Student exams and assignments are personal information and should be returned only to the student who wrote the paper and not to other individuals, unless written permission has been given from the author. Any material that contributes to a student's grade should not be left in a public place for pick up.

For more information about FIPPA you can go to http://www.uwaterloo.ca/privacy/index.html. If you have any questions you can send an e-mail to fippa@uwaterloo.ca or contact Karen Jack at ext. 33183.

As I mentioned earlier, keep your eyes open for all of the awesome EngSoc events happening this term. The Exec is committed to making this an excellent term. If you have any questions, comments, concerns or would like to just drop us a line feel free to e-mail us.

VPEd Report

Review of Academic Services Underway

TYLER GALE
VP EDUCATION

Welcome back to campus everyone - hope you're all as excited to be back hitting the books as I am! This is going to be a very busy term on the educational side of EngSoc.

First, there is a lot of PDEng talk anticipated this term. I will be seeking a lot of input from PDEng student reps. If your class does not have a designated representative to participate in the PDEng student council, then you will be hearing from them shortly.

A review of the academic services operated by EngSoc continues. An interim presentation on the progress to date and major tasks that remain will go public in time for the Society meeting happening May 23rd. I will also discuss this in detail in the next issue of The IW.

One of the remaining items in the services review is the implementation of a new directorship. The proposed director would have the title of "Academic Services Coordinator" and be responsible for the maintenance and quality monitoring of the exam bank and work term report centre. Pending discussion at the May 23rd EngSoc meeting, a trial run of this directorship will be happening this term and I will be looking for someone to take on the duties.

Some changes have been made to the status of submitting marks to employers over JobMine. Employers now have the liberty of selecting if marks must be submitted. For further information regarding this change, please refer to the article by Joseph Collins on page 3 of this issue of The Iron Warrior.

That's the sneak preview for the term to come. Resume critiques happened last week and a big thanks goes out to Jay, May, and Michael for running the show! In the meantime, if you have any academic concerns I would love to know about them. Contact me at asoc_vpedu@engmail.uwaterloo.ca.

VPF Report

Three Easy Steps

TODD RADIGAN
VP FINANCE

Step 1: Obligatory Welcome Back

Welcome back to another A-Soc term. It's going to be a great summer. There's already been lots of fun things happening so far, and there's lots more to come.

Step 2: Fluff and Filler (a.k.a. Policy)

Budget proposals were due Tuesday the 22nd. Since everyone did those and got them in on time - ahem - I have completed a budget for the summer. It will be presented at the EngSoc meeting today (the 23rd), and voted on at the next meeting. Being the summer term, we have less money to work with, but knowing this in advance, we are prepared for this, as always. So, hopefully there's enough money to give everyone what they need.

More policy stuff! Remember the last EngSoc meeting? A policy document was presented. It will be voted on at the meeting tonight too. Also, we came up with a very lovely policy document for donations. Like the other policy document, it puts into an official document what is essentially the status quo. Now it is clear for everyone to read and understand how donations work. Exciting, I know.

Step 3: What you all came here for...

Now down to the real business: pies. As you all know, there are many kinds of pies in the world. Some people prefer cherry pie, others prefer apple, or the elusive muffin pie. There are lots of people who don't like pies at all too. When you consider all the wonderful pies available, it really is amazing that we can choose at all. To combat this growing global concern, I would like to suggest that we invent some kind of super pie. I haven't figured out all the details of exactly how it would work, but we could find a way to include all the best pie flavours into one super pie. When you consider all the problems in the world that such a pie could solve, it's clear that we probably should've thought of this sooner.

VPX Report

Events and Elections

ANGUS MCQUARRIE
VP EXTERNAL

We've got some exciting events going on this term: Canada Day, Student Life 101, even a joint charity event between Waterloo and the University of Western Ontario. We're going to need volunteers for all of these things, so keep that in mind in the weeks ahead.

ESSCO Annual General Meeting is going to be later this June, and we'll be electing a new ESSCO Executive. Waterloo has had at least one member on the ESSCO Executive for the past several years, so if you're interested in running for a position on our provincial body, please get in touch with me and let me know. Speaking of Elections, somebody who may or may not be your Vice-President External is graduating (we hope) next year. As such, he's not going to be running for re-election. If you're interested in running for that role, please feel free to come to me with questions about what the roles and responsibilities are and what you can do to prepare for running for the position.

VPI Report

KIRI NEUFEGLISE
VP INTERNAL

So the fantastic summer term or awesomeness is finally here after the long, painstaking term of the real world and we have a phenomenal number of awesome events happening this hot, cool summer!

Some of the fantastic highlights of this term include:

- Wonderful White Water Rafting
- Beachiful Beach Volleyball
- Outstanding Othello (A Spectacular Trip to the Stratford Festival)
- POETS Pantastic Pig Pyre (or P**4 if you prefer)

These are just some of the amazing and exciting events happening this summer! But for the next few weeks, before midterms show up to horrify us into our books for the rest of the term, here's what you can expect:

- Super Skydiving
- Exciting Enginuity #2
- Ubertastic Ultimate Frisbee

The next few weeks before midterms don't have too much going on, but after midterms our schedule is jam packed full of colossally exciting events! Keep your eyes and ears open for other upcoming events!

WEEF Report

BRANDON DEHART
WEEF DIRECTOR

First off, I'd like to welcome everyone back to class this summer for sweltering labs and overacting air conditioning. A storm like we had on the 15th would be welcome once or twice a week if it keeps us from having to deal with the humidity. However, I'm shirking my duties of informing you about WEEF and its goings-on.

Refunds just closed on the 18th, going smoothly with results to follow in an upcoming issue of The Iron Warrior. Proposals have now opened! A new system has been put in place to allow ease of use both for you, the undergrad Engineering students submitting requests, and for myself in organizing the booklets for the Funding Council.

On the subject of the Funding Council, we advise all classes, both on- and off-stream, to check the council page on the WEEF website at http://www.weef.uwaterloo.ca/council.html and ensure that the name beside your class is actually your class WEEF representative. There is a possibility of a joint Funding Council meeting in the next couple of weeks where both Societies should be represented. I will provide more details as I receive them.

Finally, I am currently working on having new shirts made to be sold at the Novelties store. Much like those of ages past, they will be advertising WEEF in a humorous fashion but I would like your help: any T-shirt designs (for the front of the shirt - the back will have WEEF information) that will highlight how well endowed WEEF keeps us, while remaining inoffensive, can be sent in vector format to weef@uwaterloo.ca for consideration. A free shirt and other Novelties swag will be awarded to the designer with the WEEFiest design.

Mandatory Field Trips to the Bank

Architecture Students Travel Globe to Study Craft, Satisfy Course Requirements

ANDREA MURPHY
2B ARCHITECTURE

One of the many perks to being in Architecture is that you are practically guaranteed a good field trip or two and an academic term in Rome. The first-year trip is to New York City, in second year it is to Chicago, and of course, fourth year is Rome. Recently, the 2B Architecture class returned from a trip to Chicago, which included bus trips into and through Wisconsin, Illinois, Michigan, Indiana, and Ohio. For the avid traveller, this seems like the ideal excursion to check out five states in one trip, but as they discovered, it is not easy on the pocketbook. So there is the lingering query: is it fair to make a field trip which costs hundreds of dollars "mandatory"?

First we must consider the subject matter and the implications of a mandatory trip. There should be something critical which students are expected to experience while on a trip or else they should produce work pertaining to the trip which will eventually affect their marks. That would seem to make sense. Of course, there are exceptions to every rule, and so some activities are simply encouraged since every Architecture student should experience a bit of the big city before graduating. But what percent of the planned activities should be academic to make it "mandatory"? Everyone wants to have free time to explore in the big cities, but is it worth what they are paying?

We, of course, should think about the actual cost of the trip in dollars and cents. Sure, we all just came off work terms, but every Engineering student knows that without OSAP and without family donations, it's not easy to keep your bank account out of the red. When a course introduces a cost of hundreds of dollars which is "mandatory", it creates a fee about equal to the tuition for that course. Now it's not like the major Architecture field trips are in courses which are optional: as it stands, you cannot graduate without passing these courses, which means one must spend the money to go on these trips. For students with financial difficulties, the worth of this experience is always in question: how much should you pay for three days in New York or for five days in Chicago? What is considered a "deal" when you book a tour of a famous piece of architecture? Is experiencing the city and going on all these mandatory tours really worth hundreds of dollars?

Of course, there are pros and cons to these mandatory field trips, and it seems that there are as many opinions about these trips as there are students in the program. As varied as our opinions are about the "mandatory" part, the Architecture students are all thankful for the opportunity that this discipline offers us to experience excursions, and to visit the major metropolises of North America.

Formula SAE Team Unveils 2007 Car

MIKE SELISKE
1B COMPUTER

The University of Waterloo Formula SAE team's 2007 car made its first public appearance on Monday, May 14, 2007 to members of the press, alumni, friends, and family in parking lot C. The car was designed to enter an international engineering design showcase, which highlights the talents of 130 universities from around the world. The team travels to Michigan every year to compete with the best in the world and showcase Waterloo Engineering's innovation.

The 2007 season began 12 short months ago immediately after the completion of last year's competition. The team, comprised mostly of fourth-year Mechanical students, spent the majority of their free time over the past year designing, building, and testing this 80-horsepower, 430-pound machine.

Each year at the beginning of the season the team rebuilds an engine that once sat in a Honda Motorcycle and customizes it to the optimum fuel, air, and power consumption. They also run computer simulations to optimize the strength to weight ratio on many key areas of the chassis and drivetrain. Due to safety rules, the air intake is limited and therefore the theoretical maximum power of the engine is 87 hp under optimal conditions, which is close to what this year's team achieved. Some special features added to this year's car include real time wireless transmission of telemetry data from the car to the team's RIM Blackberrys for real time diagnostics.

The team managed impressive stats on this year's car, boasting a better power to weight ratio than a Ferrari Enzo and going 0 to 100km/h in 3.5 seconds. The team could never have pulled any of this off without the help of their sponsors who graciously donated funds, services, and support. RIM, Cycle Improvement, Hallink, WEEF, and the Office of the Dean of Engineering were instrumental in the design, building, and upkeep of this year's car.

The year was culminated at the FSAE competition in Romeo, Michigan last week, where the team showed off over 12 months of work and competed against 129 other universities. The team has now returned from Michigan to Waterloo, getting back on Sunday evening. However, there is little time for rest, as the next competition is just 12 short months away. Computer simulations need to be run, drawings need to get started, and improvements on this year's car need to get underway.

The team would like to encourage anyone that is interested in participating in next year's team visit their website at uwfsae.com. New recruits from all disciplines of Engineering and even from other faculties are welcome. The only prerequisite is enthusiasm and the willingness to learn theoretical and practical skills. Experience with machines or manufacturing is not required and students are taught how to machine, work with carbon fibre, and use modelling programs such as Unigraphics. Inquiries can be sent to uwfsae@gmail.com.

Engineers Without Borders Update

The Summer of 200.7

DANE CORNEIL
3A SYSTEMS DESIGN

So, what exactly is this 0.7 thing that's being plastered around the school?

The short answer: 0.7 is a goal, one to which we first committed almost 40 years ago.

In 1968, the President of the World Bank commissioned a report on the state of international development. To head the commission, he approached Lester B. Pearson, former Prime Minister of Canada and winner of the Nobel Peace Prize. The Pearson Commission's report was released the following year. It recommended that rich countries commit 0.7% of their Gross National Product to reducing poverty around the world, through development assistance.

In 1970, the United Nations General Assembly adopted a resolution committing to the 0.7% goal. Developed countries, including Canada, agreed to set a plan for increasing their development assistance to 0.7% by 1975.

That never happened. Canada has repeatedly vowed to achieve this goal; most recently, in 2005, the House of Commons unanimously passed a motion committing to reaching 0.7% by 2015. However, a timetable has never been established to make this happen.

Several rich countries (Norway, Sweden, the Netherlands, Denmark and Luxembourg) have met and surpassed 0.7%. Seven other countries, including Germany and the U.K., are close to the goal and have a timetable for reaching it. Canada, on the other hand, currently gives 0.34% of our GNP. That puts us below the average and in the "under-achieving" category, along with Japan and the United States.

Why is this important? Back in 2000, the General Assembly adopted a set of eight goals, aimed at eliminating extreme poverty. These Millennium Development Goals, including "Eradicate extreme poverty and hunger" and "Achieve universal primary education", all came with a target date of 2015. This summer marks the halfway point to that target date. However, without a large increase in development spending by rich countries, the goals cannot possibly be met.

What can Canadian aid do? Jeffrey Sachs, a world-renowned economist, estimated that the difference between Canada's actual development assistance in 2005 and what it would have been under the 0.7% goal (a difference of approximately $5 billion) would have been enough to fund "an entire global initiative to control Malaria in Africa" (The Globe and Mail, April 22 2005).

Engineers Without Borders wants to change this. With your help, we aim to remind the government of our commitments, and ensure that a firm timetable is established for reaching the 0.7% mark.

If you want to let our government know that you think 0.7% is important, please e-mail or write to your local Member of Parliament. If you're interested in learning more or getting involved in Engineers Without Borders, come out to "EWB Presents" or our SWAT Team meetings, held on Tuesdays at 5:30pm in E2-1303E. You can also find out more at our website (uwaterloo.ewb.ca).

And make sure you don't have anything planned for 07/07/07.

Feds for Engineers

Recent News regarding the Federation of Students

JEFFREY AHO
3A MECHATRONICS

A new term of office for the Federation of Students (Feds) began at the start of this month. Along with a new set of executive, we have new councillors and new board members. For the next year, these people will represent you at the University, Provincial and National level and work to improve student services and student life on campus.

The current Engineering councillors for the 2007-2008 term are Kristi Herlein, Michael Sue-Kam-Ling, and Jeffrey Aho, the latter being the Engineering representation on the Feds Board of Directors.

Most important for Engineering students this term is that we fill our three councillor vacancies (held over due to co-op). If you have any interest in filling these seats or sitting on any committees for Feds (or what ones there even are, though they have been going out over the EngSoc mailing list), get in contact with one of the Engineering councillors (feds.ca will tell you how) or drop by the Feds Office in the SLC and meet the executive members. The minimum commitment for a councillor is to attend once a month council meetings for a 1-year term, though you'll have the opportunity to get more involved if you'd like. Travel expenses are covered for council meetings while on co-op.

As you may have heard, Feds is currently in negotiations with GRT regarding a Universal Bus Pass that is aimed to be implemented by the Fall term. This was the result of a binding referendum held last term. Another possible event coming up this term is the renovation of the Feds Office to move the convenience store Aussies across the SLC Tim Horton's from its present location at the bottom floor of the SLC. Unlike last summer, the Bomber (and Fed Hall, I suppose) is open and with the recent renovations, and patio, I expect to see you all out.

Some of the issues that will be worked on for Engineering students over the next year are the Arts-Engineering inequity in tuition for the same courses, the rental of on campus venues at affordable costs to Engineering-connected groups, and the PDEng program. If you ever notice an issue, you should raise it to your Engineering councillors who can then take it to the higher authorities for you

Feds Council held its first meeting on May 6th and only dealt with procedural issues and committee filling. Anyone is welcome to attend the council meetings and I will make an attempt in this reoccurring column to indicate when and where they will occur and what topics will be there to be discussed.

To inform the Engineering a little bit about Feds bylaws, for this issue I'll explain how a referendum begins. It can be initiated either by the Board of Directors, Student's Council, a General Meeting motion or by a petition of 10% of the undergraduate student body, which means roughly 2200 signatures. In contrast, the Faculty of Engineering has roughly 5100 full time undergraduate students. Of course, the referendum question would have to be carefully worded ahead of time and consulted on to ensure that the President of Feds can't throw it out, but generally if you get a petition of that size, action will take place, just as it did with a referendum for the Universal Bus Pass.

GradComm: So Much More than just Pizza

Who We Are, What We Do, and Why We Need Your Support

EVAN MURPHY AND BAHMAN HADJI
GRADCOMM CO-CHAIRS

Before we explain what GradComm is, we have an announcement for the 2008 grads. Please go to http://www.newschoolphotography.com/ENG2008 [Ed: omit hyphen] right now and sign up for a grad picture sitting (dates are available from May 28th through June 28th). You have to do it this term if you want to be on the large grad class composite that gets put up in the hallways. There is a $40 fee, which includes your sitting, a class composite, your pictures on a CD and in the Yearbook, and a casual class picture taken outside POETS at a time to be announced. And now, without further ado...

What is GradComm? Who is GradComm? Some say it is a shadowy group of ninjas who hold camp somewhere on the mysterious fourth floor of RCH, others maintain that it is ancient German for "a whale's blowhole", and still others believe that the real translation has been lost for eons. Well, young engineer, here is the real story.

The Graduation Committee, or GradComm to its closest friends and relatives, is a group of fourth years whose job it is to make sure all the events leading up to graduation go off without a hitch while raising money to make sure they are as cheap as possible. These events include IRS, the Iron Ring Stag party that takes place after our Iron Rings are handed out next year, and Gradball, the formal gala held towards the end of our last term here. GradComm is also responsible for producing the Yearbook, which isn't really an event, but you get the point.

One of the main jobs of GradComm is to ensure that all of these events have enough money to run successfully while being affordable to the graduating students. It is not general knowledge that Gradball is an event with a budget of over $40,000, or that the Yearbook costs about $40,000 to produce. It is not realistic to expect every graduating student to be able to afford to attend the events and buy the yearbook with the steep prices that they would be faced with were it not for GradComm's fundraising efforts.

A lot of the money for Gradball is budgeted for the dinner, music, and decorations, as well as renting out Bingemans for the night. Non-fourth years can also attend Gradball as ushers or guests. The Yearbook, meanwhile, is going to be incredibly large, with the 2008 graduating class being among the biggest Waterloo Engineering has had to date at about 900 students. It will include standard blurbs and photos from grads, as well as pages on student teams (including The Iron Warrior), and a separate section for each of the 13 different classes.

The Iron Ring Stag is what the big countdown clock in POETS is counting down to (it also includes a smaller countdown for the lower year classes as well). IRS is held at a large venue like Federation Hall or Elements and is a party for the newly-ringed engineers with several traditions. This event also costs a lot of money to organize, and is arguably the biggest day of a Waterloo undergraduate engineer's almost five years here. Non-fourth years have the chance to volunteer to do security for the big day. Security's job is to make sure the celebrations stay civil and the day runs smoothly as planned.

As mentioned, since the events cost so much, GradComm does a lot of fundraising to make it cheaper for the fourth years to attend these events and buy the yearbook. Some of the initiatives you may have noticed include selling GradComm Pizza (every Wednesday in the CPH Foyer), ECE Work Term Report checking, 50/50 draws, and selling Pub Crawl T-shirts.

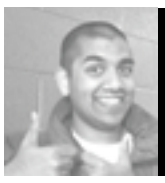
So, if you haven't tasted our delicious pizza yet, or bought one of our beautiful Pub Crawl T-shirts, we encourage you to come out and do so and support the graduating class. We sold all 220 T-shirts from our first order in less than four days, but the next order of T-shirts will be arriving shortly and should be on sale next week while we are selling pizza. Fourth years, you should know that every time you support GradComm by donating money, you are making our graduating year just a little bit better. And lower years, you should support GradComm, because one day, maybe - just maybe - you too will be GradComm.

If you have any questions or want to get involved and help with our fundraising, please e-mail gradcomm08@gmail.com.

GradComm supporters sporting their Pub Crawl T-shirts in front of POETS

Should Plastic Grocery Bags be Banned?

Point vs. Counterpoint



JAY SHAH
1B MECHATRONICS

Humble plastic bags. They're everywhere. You go to the grocery store, get a week's worth of food, come home, put everything away, and then... There is a pile of plastic bags sitting on the kitchen counter, looking for a home.

What do you do? Do you throw them out? After all, it's a quick, painless solution – until you find out that a recent CBC article claimed that cutting the use plastic grocery bags in Ontario in half would eliminate one *billion* bags per year. The same article claims that Ontarians use close to seven million plastic bags a day. If every single one of those bags was sent to the dump, the province would have a serious problem on their hands pretty quickly.

There is another option though – stash the plastic bags somewhere, maybe a kitchen cupboard or a drawer somewhere. This works well, until you open the cupboard and are buried under an avalanche of plastic. Sure, you'll probably end up using some of them in garbage cans and for storing stuff, but how many plastic shopping bags will you use?

What if the plastic grocery bag was banned? What if instead of packing your groceries in a bag that will take years and years to degrade, you used a sturdy reusable canvas or paper bag? Sure, maybe you'd have to specifically buy bags for lining garbage bins, but there are biodegradable plastic bags available, if you're willing to pay a little extra to ease your environmental conscience. San Francisco has already banned plastic grocery bags, as well as some other smaller communities.

Somewhere in the distance, I hear someone screaming, "We live in a free society, its *my* choice to use plastic bags". This point is one that is good for debate. The majority of people have very busy lives; they don't consider the negative impacts that the simple, convenient plastic bag produces. Many companies such as No Frills, Food Basics, and IKEA have started charging for plastic bags ranging from 5 to 20 cents. Perhaps this is an indication that even the largest distributors of bags agree that the bags need to be limited or replaced. IKEA has reported that introducing a cost for the bags reduced yearly bag consumption from 70 million to 35 million bags.

Let's take a look at things that we can gain as a society if we chose to eliminate plastic bags. From a resource stand point, we would consume less oil (since oil is used to make plastic), perhaps contributing to our desire to rid ourselves of an oil dependent society. In turn, we would have fewer plastic bags in the garbage, contributing to our desire to limit how much we each pollute. "What about recycling?" you ask. Well, the truth is that plastic bags aren't that recyclable, and the best recovery processes end up consuming more energy than making a new bag does. So even if you put the bag in the recycling, it doesn't offset the negative impacts.

On a broader scale, it is important to note that product quality and lifetime has decreased over the past decade. It is true that we live in a disposable society. The fact that products are designed to only last for a short period of time so that the consumer has to purchase the product again (in order to increase company revenue) is appalling. It's one of the biggest things that I think needs to be fixed with Western society. Perhaps eliminating plastic bags will be the first step to changing the way we think about the lifetime of our products. So, what is the suggestion? Use sturdy canvas bags instead of constantly using cheap plastic bags. Maybe some time in the near future, hopefully we will be writing about the lifetime of our large appliances; wouldn't it be great if your dishwasher lasted for ten years rather than two? (And in fact, this is how appliances used to be before the mid-'90s.)

The next time you go shopping, think about using a reusable canvas bag to store your goodies. There are so many positive things to be gained that it just makes sense. Maybe in a few years you we have a choice, but for now, let's show the world that we are able to make a well-educated choice on our own. Your choice represents the ugliest facet of our society, its degree of disposability.

DAVID MORRIS
1B ELECTRICAL

The plastic grocery bag: North America's little helper. Their large numbers and cheap production costs assure convenience, while their high strength ensures reliability. They are used not only for the transportation of groceries, but for a myriad of other functions which are less noticed. They are most certainly not unused.

That being said, however, they aren't an ideal product. With increasing environmental awareness, the negative sides of these bags are being more and more focused upon, and alternative bagging mediums are being explored throughout the world. In fact, San Francisco has completely banned the use of plastic grocery bags!

So, then, if these plastic bags are so wasteful, why use them? The first thing you have to consider is how much we really do use these things. Let's say that you're walking your dog, and your dog does what he/she/it does best and you're left to clean up the mess - with a cloth bag. After disposing of the waste in a garbage bag, another issue will crop up: you'll have to wash the bag before you can use it again. In fact, these bags will have to be constantly washed and maintained, unlike their plastic cousins. But, washing a bag once in a while isn't that big of a deal, is it?

It's finals time, and time is short. Coming home from classes, you stop off at the grocery store, and oops! You forgot to bring your bag with you in the morning. Shelling out an extra $1-$2 for a (disposable) paper bag, you continue to walk home with your new load, when it starts raining.

As you might now see, plastic bags have a number of qualities superior to cloth and paper bags. Their low production costs make them incredibly excisable and convenient, while their waterproof and airtight properties can help keep cheese fresh or keep clothes, bike seats, or even a gaming system dry in the rain. There are even types of plastic bags that decompose at the molecular level when exposed to sunlight (photo-degradable plastic).

That's not to say that having governments support re-usable, non-plastic bags is a bad thing; it's just that our society depends on them more than we might think, and a complete ban would eliminate an incredibly versatile tool. People should be encouraged to re-use existing bags, and to recycle or properly dispose of old ones; in fact, modern incineration techniques can efficiently convert most plastic bags into energy with very little pollution. Stores like No Frills have already taken measures to encourage consumers to re-use their own bags by charging them for new ones, and if the other major grocery companies followed suit using measures such as that one, we could still have the versatility of plastic bags without the waste.

Upcoming Events Calendar

Monday May 21 Victoria Day	**Tuesday May 22** EngSoc Budget Proposals Due 5:30 : IW Meeting (CPH 1323B)	**Wednesday May 23** GradComm Pizza 5:30 : EngSoc Meeting #2 (CPH 3385)	**Thursday May 24** Boggan Burgers	**Friday May 25**	**Saturday May 26** You@Waterloo Day Skydiving	**Sunday May 27** Skydiving
Monday May 28 5:30 : IW Meeting (CPH 1323B)	**Tuesday May 29**	**Wednesday May 30** GradComm Pizza 11:30 : Enginuity #2 (CPH Foyer)	**Thursday May 31** Boggan Burgers	**Friday June 1** IW Issue 2 Deadline (6pm) GradComm Pub Crawl #2	**Saturday June 2**	**Sunday June 3**
Monday June 4 5:30 : IW Meeting (CPH 1323B)	**Tuesday June 5**	**Wednesday June 6** IW Issue 2 Publication GradComm Pizza	**Thursday June 7** Boggan Burgers	**Friday June 8**	**Saturday June 9**	**Sunday June 10**

Check out up-to-the-day event postings on the EngSoc website at engsoc.uwaterloo.ca

UWAFT Vehicle Nears Completion

Only Canadian Team in Competition with American Universities

DEVIN CASS
2N ELECTRICAL

The University of Waterloo Alternative Fuels Team hosted a "ride and drive" event on Tuesday, May 8th. This event showcased their recently (almost) completed Hydrogen fuel cell powered vehicle. For those who don't know about UWAFT, it is a UW student team participating in an international competition. The goal of this competition, called "Challenge X", is to take a stock Chevrolet Equinox and match the performance and consumer acceptability of the stock vehicle, while decreasing emissions and improving efficiency.

So far, UWAFT has been able to capture a first place overall win in this four year competition and hopes to do so again this year. It is the only team in the competition with a powertrain consisting of a hydrogen fuel cell and the only team to have zero emissions. UWAFT is competing with 16 American Universities, and as such is the lone Canadian team in the competition. It makes me proud to know that UWAFT is first place material in a competition with 16 American Universities, including Virginia Tech and Wisconsin-Madison. Our student team is competing against formidable competition; these teams mean business, and will be hard to beat. With the zero emission Equinox that UWAFT has created, they have a very good chance.

The ride and drive on Tuesday showcased the power of the vehicle and the similarities to a vehicle that one could purchase today. The vehicle has awesome acceleration and around the same horsepower as a stock Chevy Equinox. If you watch the tailpipe, a small trickle of water comes out, that being the only emission.

The team is passionate and dedicated to their work. They have the potential for victory and international glory. We wish them luck as they travel to Milford, Michigan for their third year of competition.

UWAFT's zero emission Chevy Equinox

JobMine Replacement's Goal "to be Live in about Two Years"

JOBMINE
Continued from Page 1

The Iron Warrior: How did JobMine come to be and what were some of the goals and objectives it was supposed to achieve?

Dr. McKay: JobMine is possibly the sixth version of software to be used by CECS since the 1970s. A previous development project was being done with an outside commercial company that ended about 1999-2000 for a number of reasons. The University had to quickly recover, and given the technology, tool-sets, and available people at that time, JobMine was developed. Its main objective was to provide a good platform for students and employers, as well as the co-op administration. Compared to its predecessors, it met many goals, but requirements and expectations have changed since '99.

IW: How did the new project take shape?

MK: The CECS Employment Process Review that was done in 2006 served as an opportunity to question ourselves as to what kind of IT platform is needed by students and employers in today's world, given the evolving nature of the co-operative education system. JobMine was a great learning opportunity to understand the process and challenges involved in matching the right students with the right employers using a web-based package. And, since the current system was to be redeveloped in a couple of years because of changes associated with Oracle's purchase of PeopleSoft, it was decided to start from scratch and incorporate all that we've learned and understood from the JobMine experience.

IW: What makes Waterloo different from other universities when it comes to the co-op process?

MK: The major difference is that Waterloo is unique in many ways. For example, we have the largest co-op program, at least 80% of our students are hired away from the KW area, and we have a huge number of programs. Approximately 5000 students take part in the co-op selection process each term, three times a year, and this is a far higher activity level than at any other university. Using the new requirement study as a base, we asked what we could do to improve the student/employer matching process, and set goals and objectives for the new system. We did look at three other systems to see how their functionality stood up to our requirements and the current JobMine. We found that they are not that much different from what JobMine is now, in terms of its capabilities, philosophy, and style. They also cannot address the UW requirements of the information system as we now understand them.

IW: What are some of the goals and objectives of the new system?

MK: The new system looks at the whole employment process. When you think about co-op, it's more like a "dating" or "matching" game. It's not just about transactions and updating records. It's about information and the value of the information, and its impact. We aim to improve the information-sharing and enrich the type of information students can provide employers and give the employers the ability to put up sites and market their jobs and opportunities. The idea is to go towards e-portfolios and web-spaces, so students can supply additional information about themselves to employers. At the same time, some features being considered will aim to standardize the system. For example, in addition to custom and free-format resumes, we're going to have a 'resume builder' and standardize its formatting which will allow us to create information processing tools for employers. A similar concept will be done with postings, so that we can provide better tools for students. It's about providing more information, different types of information, and different ways of seeing and sharing information, as well as different ways of sharing feedback. It's not just about putting up a posting or a resume; it's also about what's in the posting and resume. At the end of the day, we want to help students find the best employers to apply to, and to help employers identify who to interview and to offer a job to.

IW: What led to the decision to build the new system all in-house?

MK: Our situation has unique needs not addressed by commercial systems. For example, we need to understand student behaviour while they are searching for and applying to jobs. We need to understand employer behaviour while they are reviewing and selecting resumes. We need seamless integration of communication. We need a system that can handle very high peaks. When all postings go live together, all of a sudden five thousand students are applying for jobs at once. When rankings are due, thousands of employers are submitting their decisions. It turns out that there are many, many other unique needs at UW as well, and the currently available commercial systems cannot address them.

IW: How do you plan to interact and engage the users?

MK: We will set up a portal, do daily builds, and demos. Students and employers will be able to see the system as it is being built and provide feedback and take part in discussion forums. We're going to have a very high level of stake-holder involvement throughout the project.

IW: How large of a team will you be leading and from which areas of the University will they come from?

MK: The team will be made up of five Engineering/Math students and five professional developers. We'll also have a senior student from Psychology/Sociology, as well as personnel from CECS, and student and employer task forces. It's a fairly big team and project.

IW: What will the Psychology/Sociology student contribute?

MK: The main responsibility of the student will be interacting with the stakeholders, compiling all the feedback we get from employers, students, CECS, and others so that we can make sense of the feedback and incorporate it into our design. The student will also be involved in helping us with documenting and training members of the team on how to conduct ethnographic studies and how to use these studies to identify software features that will improve the user experience.

IW: When is the projected release date for the new system?

MK: The goal is to be live in about two years. We are doing the detailed project planning this summer and the final date depends on who we hire, what the final design is, and other associated start up decisions. The release date of the first version may move a bit depending on these factors, but right now, we are shooting at a two year target.

IW: Many of the current students will not get to use the new system as undergraduates. Will intermediate developments made for the new system make their way to the current version of JobMine?

MK: Unfortunately, the two systems are totally incompatible, and there is no way to merge the two systems. However, you will see it as a future employer of Waterloo co-op students!

IW: What is your strategy for hiring co-op students?

MK: We would like to see students return for a second term. Of course, this would have to be mutually agreeable to both parties. Like other employers, we hope to get more out of students the second term, and students would be given more responsibility and accountability. A second, returning term makes sense for many reasons. But after the second term with our team, we think that they should leave and try something else. This is not a general rule for all jobs, but we think it applies in our case. We plan on hiring some exceptional junior and intermediate students and will not normally hire senior graduating students because they should really use their last work term strategically. It is interesting that employers have already indicated to us a strong interest in hiring students after they do two terms with us.

IW: How much funding is being made available for the project?

MK: Because we will be phasing in the functionalities, the project is funded for three years. The numbers are not finalized yet, but the estimated budget is considered adequate. While we are not building a gold-plated beast, the project funding will allow us to build a solid, robust system with the improved user functionality we need.

IW: How can interested students learn more about the project?

MK: Any student who wants more information can e-mail me, set up an appointment and we can meet.

Dr. McKay can be reached at kmckay@engmail.uwaterloo.ca or at extension 35585.

Frosh Welcome at EngSoc Events

MIKE SELISKE
1B COMPUTER

This summer is the last term we'll be ridiculed as "Frosh". What a relief! As our 1B term begins and we struggle in libraries to keep up with unreasonable amounts of work, a not-so-comforting idea also becomes evident: this summer all of our high school friends are enjoying a nice long holiday.

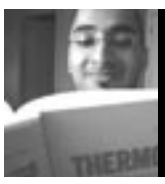
Looking back to first term you remember the fun of Frosh Week and seeing so many new faces and then coasting through the first few weeks of introduction and high school review. You met people on your residence floor and your classmates but probably not many of your upper-year classmates. Many of you were too shy to attend Engineering Society events, and if you did, probably stuck to the familiar faces and were afraid to meet those scary smart people who somehow got through two or more terms of engineering torture. Before you knew it, finals were here and many realized how much work you truly *didn't* do during the term. But as we all return to campus, we feel much more comfortable and willing to spread our social tentacles to see what we can find. The first-year turnout at BOT was a very good indication of how much more willing the Frosh are to come out to events.

As you read this I am sure you are thinking to yourself, "What's the point of this article and why is he rambling on?" Well, I just wanted to point out that we'll be at this school for 4 more years and there are many more people to meet than just classmates. If you come to some EngSoc meetings it immediately becomes clear that it is one big happy family. Everyone knows everyone else's name even if they are three years younger and in a totally different program. I would like to encourage all of you 1B engineers out there to take an evening out of your busy schedules and instead of partying in residence with your familiar friends, come to an EngSoc event and meet the other people in Engineering. It's not just to make friends, its also a great way to get advice from people who have gone through your program and know what you are going through.

I see more and more first-years coming out to the events but I'd like to see more. I was scared going to ComEng, the first EngSoc event in the Fall, the day after Frosh Week was over. To be honest, I knew no one and it wasn't that great but as I met people and attended more events I quickly found out how fun these things were. I recently convinced my 2B Electrical friend to come out to an event and he had the time of his life. He didn't even know what "Soc" he was on before that day and is now hooked and planning on coming to all of the EngSoc events. You don't have to be of legal age to participate in the events and they are fun no matter what.

The moral of this story? Come out to the events put on by the Engineering Society and meet all the wonderful upper-year students who are so much older and wiser and have so much to offer.

Stereotyping in the Multicultural World



YUVRAJ GOEL
3A MECHANICAL

We are blessed enough to have people from all over the world at the University of Waterloo. Our campus, the residences, and the Faculty of Engineering are home to many international students and landed immigrants. It is inevitable that a lot of these people undergo some sort of assimilation process during their first few years in Canada.

For many, this process can be frustrating and involve changes in accents, choice of words, body language, clothing, beliefs, attitudes, and lifestyle. During the course of our academic and professional careers we meet people at various stages of the assimilation process. We may inadvertently (or purposefully) start to think negatively about these people, considering them to be somewhat inferior due to their inability to adapt. I think the reason we want them to adapt is so that we can better predict their behaviour, since one of our human tendencies is to reduce uncertainty in our surroundings. When we see that a certain group of people are different from the mainstream culture but similar to one another, we create a new category for them to supposedly help predict behaviour. This keeps the practice of stereotyping alive.

We are all guilty of stereotyping to some extent, and this hurts not only society but also the people who participate in it. It takes a substantial amount of effort and commitment to mutual respect to treat every individual as a whole in himself or herself, as opposed to a mere projection of his or her culture. It takes courage to define someone by values and personality instead of background. The path of least resistance is always tempting, and beckons us to put people in categories as often as possible so that we don't have to worry about too many factors. Even those among us who try to fight this tendency may find themselves treating each new person they meet as a specimen to re-evaluate existing paradigms about a race or culture. I think the most important step in eliminating stereotyping is to observe ourselves, and ask ourselves whether any possible stereotype against us would be able to fully capture who we are. The answer, of course, would be a resounding 'no'.

Human nature is something so unpredictable and unique that extrapolating a few observations to an entire people is bound to be error-prone. The truth is that cultural stereotypes, especially negative ones, reinforce our human weaknesses and bring us down from the level of civilized people. Every act of discrimination on our part is a statement that we are incapable of higher values such as equality and consideration. I think that when we discriminate against others, we really just discriminate against ourselves, insisting that we don't consider ourselves worthy of greatness. We know deep down that stereotyping is something wrong and undesirable, but only those among us who have significant self-respect are able to convince themselves that they are ready to stop doing it.

In our fast-evolving, information-driven world, we are all under pressure to make quick judgments about people, quite often based on incomplete information. This makes it all the more tempting to judge and categorize people. While we cannot change the fast-paced nature of our environment, recognizing that we are a part of that environment and can change ourselves is perhaps more important. We have the ability to choose how we react to what is around us. We can decide to treat people with respect even if we think they dress poorly, speak incomprehensibly, or move awkwardly. When we value others for what they really want to be valued for – their true qualities – we get the same kind of respect and consideration back from them.

I'm sure the whole idea of treating everyone with dignity irrespective of what our instincts tell us may seem daunting at first, because it is really an acquired skill. In the early stages, one may choose to be forcefully polite to people and listen to them even if does not seem worth it. It may seem like a waste of time to see things from someone else's perspective, especially if that someone is a person who we used to consider inferior to us. However, one may eventually find that it is our true nature as humans to be kind to one another; it just happens to be a quality that can become submerged under layers of confusion and an overload of information. The more we rediscover our real values and treat people in accordance with them, the more satisfaction we get out of all our relationships and interactions with people.

To sum things up, stereotyping is just not rewarding in our multicultural world. While we are all aware of the negative impact it has on the fabric of society, I would like to insist that it also damages the integrity and self-respect of the perpetrator. The process of eliminating stereotyping starts from an individual level. It requires us to examine ourselves and ask ourselves a fundamental question: By what criteria should a human being be judged, if at all?

I hope that in the end we will all come up with the same answer.

The Importance of Bilingualism

KEVIN CEDRONE
4A MECHANICAL

For my last coop term, I arranged my own job and worked at a nuclear power plant near the city of Lyon, in the southeast of France. It was a good opportunity and I learned a lot about the culture and history of France and much of the rest of Western Europe. I started out without much more than the choppy conversational offerings I acquired from Ontario's old curriculum Grade 10 French.

I was in the enriched French program in elementary school, not immersion, because they didn't exist together. My parents thought it would be better to become strong in one language, instead of mediocre in two. Little did they know that studying engineering would whittle away whatever command of English I did have.

Anyway, during my four months of immersion in France, I learned more French than during all my previous elementary and high school courses combined. More importantly, I learned that as residents of an officially bilingual country, we Canadians don't do a very good job of being bilingual.

While in France, I had a string of 3 and 4-day weekend trips to Ireland, Holland, Paris, Switzerland and some small villages in France, Germany, and Austria. I also spent the last two weeks in Italy with my girlfriend. One recurring theme is that European students, and particularly those in professional programs like Engineering, are required to take a second language as part of their compulsory studies. In fact, with the exception of Ireland, all students in Europe are required to study a foreign language. Not to single out the Irish; Irish students study Irish and English, but neither is considered a foreign language.

Maybe Europeans have more of a reason to study foreign languages. For the most part, you have very densely populated countries with distinct cultures and histories in close proximity. Consider that France and Spain combined have about three times the population of Canada, but are about half as big as Ontario each. Economically, politically, and historically, it makes a certain amount of sense to be fluent in more than one language. As Canadians with French and English, we're pretty lucky to learn two of the most widely spoken languages in the world. Lucky because tourist signage in most parts of the world includes English, and because French imperialism and colonialism are responsible for sending French far afield to places like Vietnam, French Polynesia, and French Guiana.

One thing that became clear very early on was that my level of French was lacking. My previous education consisted of repeatedly learning the same topical vocabulary and basic handful of verbs and tenses - barely more than lip service.

I'm not advocating mandatory French necessarily, but I do think we should embrace one of Canada's principal strengths, multiculturalism, and require a second language, any second language, in a more serious way. There is a rich experience in learning a series of foreign expressions and slang that is definitely lacking right now. Learning French was an intellectually and culturally rewarding part of my time there. Plus, now I have twice the number of swear words at my disposal.

According to Statistics Canada, Chinese and Italian are the third and fourth most natively spoken languages in Canada after English and French. Spanish is a somewhat unintuitive seventh, despite the fact that it is a solid second or third in terms of number of speakers globally.

Maybe I'm wrong about this. I mean, Ontario has an English literacy test in Grade 10. Maybe the education system should focus on the basics, on math and science more, or bring back the classics like Latin and Greek. A solid base in Latin would make Italian and Spanish a cinch. After all, foreign language courses are available, meaning low enrollment can only be attributed to a lack of interest or perceived benefit. I think a serious effort at learning French could be a gesture of good faith to our Francophone neighbours in Quebec, whose cultural identity is very much linked with their language. Less tenuously, learning these languages would also make us more competitive globally, as it does for so many European students. It would make foreign academic or work exchanges easier to manage and possibly more frequently available. That kind of experience looks good on a resume, and is loads of fun as well.

Photo of the Every-Other-Week

MIKE SELISKE
PHOTO EDITOR

The "Photo of the Every-Other-Week" caption contest is an opportunity for UW engineers to show off their creative talents and win a super random prize in the process!

All you have to do is send your caption submission for the above photo to IWcapcon@gmail.com.

Rules:
1. The caption must be submitted to IWcapcon@gmail.com by Friday June 1 2007 at 6:00pm.
2. The caption must be appropriate for print.
3. You must include your name, term, and program upon submission.

Some of the best submissions will be printed in the next issue, with the top submission winning a random (extremely random) prize.

Headliners Included Feds Exec, Profs

FUNDRAISER
Continued from Page 3

As the event wrapped up on the 30th of March, the money was still trickling in. We had a closing ceremony in the SLC on April 2nd, where we announced our fundraising total, presented a giant cheque to the Canadian Cancer Society, and thanked our volunteers. We also planned to shave the heads of several of our headliners if our total reached the amounts necessary. The total we announced at the ceremony was $21,700. Nonetheless, Renjie, Michelle, and Professors Harder and El-Shatshat thought that we had done a job worthy of reward in the form of haircuts. Michelle donated 10" of hair, and the others all had their heads shaved. Harder also gave up his prominent moustache.

But it doesn't end there. The money was still slowly coming in at that point, and continued to for almost two weeks. By the time we had finished counting the money and were ready to hand it over to the Canadian Cancer Society, we had a total of $24,311.86. We're proud to call the event a huge success, and a month ago we were Proudly Bald.

Jason Shirtliff presents an oversized $21,700 cheque to the Canadian Cancer Society

Sandford Fleming Foundation
E2 3336, ext 84008, sff@engmail
www.eng.uwaterloo.ca/~sff

Technical Speaker Competition

All students are invited to participate in the Technical Speaker Competition. The presentation is to be based on a work term experience, but does not have to be the most recent. Candidates are asked to submit a brief abstract by May 25 to the Technical Speaker Competition co-ordinator, Prof. James Craig of Civil and Environmental Engineering in E2.

The competition will take place on Friday, June 1 at 10:00 am in DWE 2534. The winner of the competition will receive $500 with the runner-up receiving $250.

Refreshments will be served
Everyone is welcome

****

Debates

The Foundation has established the Sandford Fleming Foundation Debates in order to encourage the art of debate among engineering undergraduates. Each term there is one faculty wide competition. Please contact Prof. Scott Jeffrey of Management Sciences at sajeffre@engmail.uwaterloo.ca if you are interested in participating. The overall winning team will receive $300 each and the runners-up will receive $150.00 each

DATE	**July 9, 10, 11**	**Finals:**	**Friday, July 13**
TIME	**11:30 – 1:00**		**Noon**
PLACE	**E2 - 3324**		**Outside POETS (CPH)**

Refreshments will be served at the finals
Everyone is welcome

Flip a Coin - Facebook

COLIN OLIVER
4A COMPUTER

Facebook, MySpace, FaceSpace - all right, I made that last one up. But let's look for a minute at the pros and cons of online communities (Facebook specifically, since it's the only one I've actually used). I'll try to look at both sides of the topic in this column I call, *Flip a Coin*.

Good: Sometimes there are people in your life that you just hate to lose contact with. Though often it is no one's fault, circumstances sometimes dictate that you are no longer able to see some of them, and it's a shame, but that's life. But wait! You're on Facebook now. All of those forgotten people are there for you to see, and instantly you can tell so much about them. All they have to do is accept you as a friend and you're set! Are they in a relationship now? What kind of movies do they like? Where do they live? Better yet, let's message them and let them know how much we miss them. It's someone's birthday? Why, thank you Facebook for the heads up! You make sure to call them. Oh, and they have such wonderful interest groups on here. You can join them and everyone will be aware of your passions in life, and you can share in them. You can even add your friend from down the street! Let's see if he's free tonight! Facebook is awesome.

Bad: Sometimes there are people in your life that you just love to lose contact with. They really pissed you off while you knew them, and finally the natural order of things dictated that you no longer have to associate with them in any way. But wait! You're on Facebook now. All of those hated people can see you, and try to add you as a friend. Sure, you can reject them - but they'll know, and you don't want to stir up bad blood. Why are they adding you anyway? Probably just trying to get their friend count up using everyone they've ever met so they can feel better about themselves. Oh great, you broke up with your girlfriend. And everyone knows instantly. You didn't even have a chance to tell your close friends. If you see one more "u k?" on your Wall, you're going to shoot someone. Hey look! It's your birthday, and there are so many best wishes on your wall - though none of these people actually remembered; Facebook just told them it was your birthday. Wait a minute. What's that group you just got invited to? If this person gets 500,000 members in his group, he won't kill all the puppies in that picture? Seriously. What the hell? You've got your buddy from down the street on your list - let's see if he wants to go to the bar with a few friends. Oh, he said forget it. He'll just talk to you on Facebook. Facebook blows.

Extreme? Very. Nevertheless, while the good was no doubt the intention of the creators, it's clear that the benefits of online communities can also be considered a step towards complete social mediocrity. Let's look at this from another perspective: I call this the Traffic Effect. While you're driving, a car may cut you off, and the driver may be someone who would never be so rude in person, but that person knows you can't see him or her. You'll never know who that person really is - just this jerk they've chosen to be so that they can get a little farther ahead on the road. When that occurs, you let loose a flowing stream of expletives and lay on the horn. After all, they'll never actually see you either.

With the Internet in general, it's as if everyone is in a car that they've created for themselves. You'll never really see them. You don't know if the person they're portraying themselves to be is who they really are. And even though the majority of people are good, there's nothing stopping everyone else from completely ignoring human decency.

What do you think? Flip a Coin.

How to Write Good Trivia

Advice from a Genius Bowl Director

DANIEL MILLER
4A COMPUTER

Most of us enjoy the occasional bit of trivia, whether it's an episode of "Are You Smarter than a Fifth Grader," a game of Trivial Pursuit, or even just fun facts on the side of a cereal box. Not everyone knows how to write good trivia questions, however. Contrary to popular belief, it is not as simple as opening a book and grabbing the first fact you see – there is a certain art to it. Ideally, a good trivia question should elicit one of these responses:

"I know the answer to this!"

"Hmm, that sounds familiar... Let's see if I can remember."

"I'm not sure, but I can take a reasonable guess."

"I don't know, but it sounds interesting - I'd like to find out the answer!"

The important thing to understand is that a piece of information is not automatically a trivia question. It's fairly easy to come up with a fact; it's more difficult to turn it into a good question. For example, take Darryl Sittler's record-setting 10-point game for the Toronto Maple Leafs on Feb. 7th, 1976. A typical bad question is, "How many points did Darryl Sittler collect in one game to set the NHL record?" This is rather boring, and the most probable response from players will be along the lines of, "Who cares?" Questions that ask for some statistic as the answer should generally be avoided. It's also best not to ask for the date on which some event occurred, unless the date itself is famous (for example, the day of Julius Caesar's assassination).

A better way to phrase the question would be, "What Toronto Maple Leaf captain set the NHL record for most points in a game, with 10 against the Boston Bruins?" This is something that more players may know, even if they don't know how many points were scored. It also adds a bit of extra information to the question – the fact that Sittler was captain of the Leafs, and that the game was against Boston. Adding supplementary knowledge like this is a good way to spice up an otherwise dull question. It's also a favourite trick of the Jeopardy writers.

Match questions to your audience. It's easy to modify the question above to make it more or less difficult. In a general-knowledge trivia competition, you might use something like "Darryl Sittler holds the NHL record for most points in a game with 10. What team did he play for when he set the record?" This makes the question more accessible to everyone – you don't necessarily have to know hockey to know that Sittler played for the Leafs. On the other hand, if it's a tournament for die-hard hockey fans, you can take it up a notch: "What unfortunate goaltender was in net for the Bruins when Darryl Sittler broke the NHL record for points in a single game?"

The format of the competition also needs to be taken into account. This has become more of a problem since about 1998, when two Ph.D. students at Stanford started up a little website called Google. On shows like Jeopardy or Millionaire, where contestants don't have access to a computer, the Google-ability of a question isn't really a factor. However, for something like a radio call-in contest, where players have time to look things up, it can be tough to come up with trivia that is not readily accessible on the Internet. A possible solution to this problem is to ask "list questions", where players are given several items and asked what they have in common. For example, you could ask what distinction is shared by California, Georgia, Missouri, New York, and Utah. Searching for these five states on Google is unlikely to yield the fact that they are the only U.S. states to have hosted the Olympic Games.

As with anything, the best way to write good trivia is to practice, although reading lots of trivia helps. And to that end, Genius Bowl is coming in July – start getting your team together now! I'll leave you with one final question to whet your appetites: In 1938, George Bernard Shaw became the first person ever to have won both an Oscar and what other distinguished award? (By the way, Caesar was killed on the Ides of March - the 15th - and the goalie for the Bruins was Dave Reece.)

The No-longer Starving Student

Quiche: Omelettes and Pie Together at Last

JACLYN SHARPE
3A MECHANICAL

Everyone knows the best kind of food is free food. The second best kind of food (too often overlooked) is homemade food - cheap homemade food to be exact. But what do you do between deliveries from your mom? That's where this column comes in. I'll be bringing you five recipes this term, so you can eat like a king (well, maybe not a king, but better than a student anyway) for less than the price of a slice of Campus Pizza. These recipes will be nutritionally balanced, quick to prepare, and easy to store as leftovers, so they'll be as easy to eat as KD after a long day of classes.

I've picked quiche as my first recipe because it's one of the cheapest, easiest things you can make. Just fill up a frozen pie shell with whatever you've got lying around, cover it with eggs and milk, stick it in the oven, and walk away. Quiche is a great way to use up leftovers, because you can put just about anything in it. Cheese, spinach, tomatoes, mushrooms, broccoli, peas, green beans, zucchini, onions, bacon, ham, and salmon are some common ingredients. To top it all off, it can be eaten hot or cold so it makes a great lunch for when you get tired of making sandwiches.

Quiche - 3 Servings

1	Frozen Pie Shell	$1.90
3	Eggs	$0.63
3/4 C	Milk	$0.16
24 g	Cheese, cut up	$0.28
1/4	Broccoli, cut up	$0.48
1/2	Onion, chopped	$0.28
100 g	Ham, chopped	$1.69
	Total	$5.14
	Serving	$1.71

Heat oven to 375º.

1. Microwave onions and broccoli, covered for 2 minutes, stirring once. Drain if necessary.

2. Place pie shell on baking tray for stability and fill with cheese and ham.

3. Beat eggs with milk and cooked vegetables and pour into pie shell.

4. Season with salt and pepper.

5. Bake for 35-45 minutes, until a knife stuck in the middle comes out relatively clean (no milky residue).

Serve hot or cold.

Serve with a salad (lettuce, tomatoes, and dressing for $0.40 per serving) for a complete, balanced meal at just over $2.00 a serving.

MANHUNT!

Tag Meets Hide-and-Seek

ERIC MIGICOVSKY
3A SYSTEMS DESIGN

A new craze is sweeping the world, and has finally made it to Waterloo. This craze even has a name, and that name is MANHUNT! Just when you thought Wednesday evenings couldn't physically get any better, allow me to introduce you to the best form of recreation involving three or more persons.

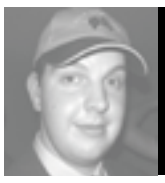
Modelled after the elementary school game of Tag, Manhunt is a hybrid of hide-and-seek and general running around in a frenzied fashion. One person, the Manhunter, starts out as "It". All other players have 120 seconds to disperse into the game area before the "It" person can come after them. Once the original Manhunter catches and tags another person, that new person is now "It," along with the original guy, and is free to go out and tag others. Think of it as your worst zombie scenario, except with less flesh eating and more people alive at the end of the evening. Usually the game goes on for about 30-40 minutes, until all players have been tagged. After that, we either play another round, or head off to the bar!

It's a ton of fun and definitely worth coming out for, so give it a try. From the just-learned-how-to-walk, to the *parkour* experts, the game accommodates all levels. We play in exciting locations, usually in an urban setting, including many back alleyways, and always with some classic hiding spots. All you have to do is bring an armband to help differentiate yourself from the non-players that will be milling through our games!

The location of the game changes every single week, giving you a great opportunity to explore Kitchener-Waterloo and maybe get outside of the same locales you've seen for the last five or more (for some of you) years. The game starts at 9pm, but remember to arrive at 8:45 to be briefed on the precise locational constraints.

You can find out more about this awesome weekly game, as well as sign up for the weekly mailing list announcing the location of the weekly games, by searching for 'Manhunt' on Facebook, or on our website as soon as we can commandeer a page from Engineering Computing. Come on out, you can be assured of a grand old time!

Better Know A Beer: Corona Extra



RORY ARNOLD
3A MECHANICAL

If there is one thing that we value most about Mexico, it would have to be Corona Extra.

Corona is a Mexican beer brewed by Grupo Modelo in their eight breweries throughout the country. It is known around the world for its sleek sexy bottle and lime, and is served in over 150 countries making it the world's forth most popular beer. Grupo Modelo brews ten different brands, five of which are exported to the rest of the North American market and holds nearly two thirds of their domestic beer market.

Grupo Modelo opened their first brewery in Mexico City in 1925 and continues to be Mexico's largest brewer with its extensive international recognition, having the distinction of being the best selling Mexican beer in the world. Today, the brewing company is 50% owned by Anheuser-Busch. Grupo Modelo is very active in helping protect the environment. They participate is programs which help protect Mexico's forest from illegal logging and also in forest restoration programs. The company is also the owner of Santos Laguna soccer team from Torreon, Mexico.

In Canada it is imported by Molson and is known as the best selling imported premium beer in Canada. It was first introduced to Canada at EXPO-86 in Vancouver, and is currently available in 207, 310, and 710 ml bottles at your friendly, neighbourhood beer store. Corona was also the proud sponsor of the 2006 Roger's Cup Tennis tournament.

Corona Extra is an excellent choice for your summer barbeque or just an afternoon of front porch sitting. It's best served ice cold from your cooler and is a perfect compliment to some barbeque chicken or some spicy Mexican food. Corona Extra is a pilsner with very little hop bitterness and almost no after taste. The first thing you notice when it hits your tongue is its appealing, almost sweet taste. Its golden colour is easily visible through its clear bottle. Corona's image is one of the most recognizable in the world, and is associated with summer fun and Caribbean leisure. However, Corona is not the cheapest choice you will have and thus it should be drunk slowly and lightly, so you can enjoy every drop.

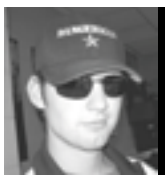
One of the most recognizable aspects of Corona Extra is that it is served with a lime in neck. The reason for this is highly debated and no one really knows the reason. Two main theories have come about to answer this. One is that the lime is there to mask the skunky aroma caused when the hops degrade under ultraviolet light. This happens because Corona is served in a clear bottle as opposed to the brown ones common with most Canadian brews. Another is that the lime also serves as a way to keep insects from climbing into your beer. Since it is most appropriate to sit outside when drinking Corona, the lime is an essential part of the experience. In some parts of the world where limes are uncommon, a lemon wedge or similar citrus fruit is used. It may also be important to know that in Mexico, other than the tourist areas, no lime or anything of the like is used.

When drinking Corona Extra I like to compliment it with some music from any of Kenny Chesney's CDs recorded after and including No Shoes, No Shirt, No Problem, especially his song from The Road and the Radio, "Beer in Mexico". Corona is a favourite drink of such famous people as Jacques Chirac, Jim Morrison, and Clint Eastwood.

Corona Extra receives a 9.5/10 on the official Rory Beer Scale. It earned perfect scores for both taste and aftertaste, as well as a perfect score with its image. Corona promotes itself as a beer for relaxing on a beach somewhere in the Caribbean, and while I can't afford to do so, sipping a cold Corona on the backyard while my roommate barbeques can only be described by one word: perfect. The lost point came with its price. It's just too much for the average student to be able to drink on a regular basis. However, if you're lucky enough to have your parents pay for your school, you should make Corona Extra an important part of your life and studies. (Note that it should be drunk after you study, not before or during.)

Beginning of Term Pub

The Dawning of the Age of Aquarius



ERIC BLONDEEL
3A CHEMICAL

Golden living, dreams of visions, and mystic crystal revelations. This summer's BOT was a rousing success, turning POETS into a disco inferno (Hair, 1979). With an ever excellent turnout, the evening was complemented by extravagant lights and a killer 70s soundtrack, heavy on the Bee Gees and other undeniable classics like "Shake yo' Booty" by KC & the Sunshine Band.

Before the night was through, many a disco craving, referred to clinically as "Disco Fever," was heartily satisfied. The phenomenon, said to appear randomly in humans and some dolphins with a relative frequency of approximately 30 years, reached its popularity peak in the late 1970s. This pandemic (the largest in recorded history) is said to have occurred in North America, with later subsequent pandemics in Soviet Russia and India, though little documentation currently exists for these cases.

Though the origins of Disco Fever are relatively unknown, given the disorder's lack of acknowledgment from the medical or scientific communities, it is generally accepted that Disco Fever occurs most readily when the moon is in the Seventh House, and Jupiter aligns with Mars. It is then believed by Disco aficionados that peace will guide the planets, and love will steer the stars. (Hair, 1979)

Particles of "Disco", a sub-atomic particle of unknown size, are believed to be carried in high concentration by gold chains and pieces of vinyl clothing, as well as radiating from within disco "balls". They are believed to embed themselves in the skin over an extensive period of time, and upon reaching a "critical mass", cause reactions in the brain in the area known as the "neo-cortical disconium".

There are suspicions that certain fads known as "raves" and "clubbing" may have occurred as a result of drug-induced mutation of the cells that send and receive disconic neurotransmitters, but this is a matter to be further researched.

BOT attendees under the influence of Disco Fever

POETS

MOVIE SCHEDULE

SHOWINGS BEGIN AT NOON

Wednesday May 23	Thursday May 24	Friday May 25	Monday May 28	Tuesday May 29
Monty Python - Holy Grail Monty Python - Life of Brian Monty Python - Meaning of Life	V for Vendetta Crash The Score	Identity Hostel The Butterfly Effect	Shawshank Redemption Fight Club Braveheart	Drawn Together
Wednesday May 30	**Thursday May 31**	**Friday June 1**	**Monday June 4**	**Tuesday June 5**
The Terminator Terminator 2: Judgment Day Terminator 3: Rise of the Machines	Guess the link day! Three movies. One connection. Can *you* solve the puzzle?	Heroes	Brick Fargo The Fugitive	Entourage

HUMOUR AND SATIRE

Dear LowRider...

Now on Facebook - Search for LowRider

Dear LowRider

I hate work term reports; I don't understand why we have to do them! I came into engineering to get away from all of that English stuff, and now they make me write this 15-page report. I have been telling some of my classmates, but they don't seem to care! What can I do?

1B First Timer Softie

Dear Softie,

WTRs are a fact of life, just like how some places in the plaza still only take cash so you still have to go ATM if you wanna go there. But seriously, did you ever stop to think that maybe the Work Term Report could teach you something, get a little technical writing on your resume, so this term you can have a better job title than Office Gopher? Maybe you should've thought about doing the WTR three months ago instead of getting together with your 'friends' for another rousing round of DnD.

LR/

PS. Wait for it... loser.

Dear LowRider

I have a new math equation that I want to try out, I was wondering what you though of it, seeing as how you are in Systems and therefore must be a math genius:

FreeFood&&OpenBar=SandvineRocks.

EnamouredDrunk

Dear ED,

I think your equation is pretty much spot on. You're just missing one thing (see photo).

LR/

PS. You might want to consider getting a little blue pill - you know, for your 'dysfunction' ...

FreeFood&&OpenBar =SandvineRocks&&PricelessPictures

Dear LowRider,

I am having trouble keeping in touch and planning stuff with my friends. I have now gotten past my cheapness and been thinking about getting a cell phone but I don't know what company to go with. Do you have any wisdom that pertains to my current situation?

Communiationsless

Dear Communicationsless,

Congratulations on finally taking the plunge and getting a cell phone - I expect you'll be listening to Party Like It's 1999 on your Walkman when you go to the store to get it. Feel free to correct me if I'm wrong here. But seriously, I understand - there are so many providers and so little info. Your best bet is to probably sit down and watch all of the commercials for all of the companies and then pick the one that pisses you off the least. That, or go to the store where you have the greatest chance of picking up the saleschick.

LR/

Dear Diet Cherry Cola Rider,

Somehow it appears yet another golden ChemEng tradition has been bastardized and taken to the dark SYDE. I figured I'd better come ask Mr. Half-the-calories-but-supposedly-the-same-great-taste LowRider himself for advice on what ought to be done.

Though, before you start solving anyone's problems, you might want to make a priority out of popping that cherry first my Delicate-Flower Rider. That and give up flexing your meaty exterior at the Chem girls. Unlike your groupie fan-chicks (a.k.a. your 8-year-old sister and her dollies) they're not impressed by your white trash, Willie Nelson, red rag wearing excuse for an engineer. Good luck writing like you actually have a pair.

Sincerely,

Dangerman

PS: Welcome to The IW.

Dear Needs to wear a belt, hat, and possibly T-shirt for people to remember his name,

From what I've seen the only so called "Golden Tradition" coming out of ChemEng is their skills in waste management, and they're not even that great at that. Honestly, next time you send me an e-mail try to put in a stock tip or your favourite herbal medicine so that your e-mail goes straight to my junk folder and my secretary doesn't have to deal with it.

I can do one thing though. I do think I'll stop flexing at your precious Chem girls, only because I am pretty sure I don't have much to compete with. Honestly, have you looked in the mirror recently? Usually, people don't let themselves go until they are married and have hit their thirties. But seriously, through your two bouts of streaking, people have seen all you have to offer, and yet you're still single... that pretty much says it all.

Yours truly with all the calories and much much more,

LR/

Till next time boys and girls… later days

LowRider

Send your pithy comments and questions to LowRider.Alwaysridgid@gmail.com.

The Adventures of Dangerman

World of Warcraft: Almost as Fishy as Scientology

Dear Reader,

Have several of your friends or loved ones suddenly undergone a drastic change in habits and personality? Have they gone missing for weeks at a time, only to reappear looking pale and malnourished? Do they mutter quietly about quests and raids? If so, put your wooden-stakes and garlic back in the cupboards friends! You are not in the middle of a growing vampire infestation, but are rather simply not playing World of Warcraft.

World of Warcraft, more commonly known by the abbreviation "WoW", is a computer game developed by Blizzard Entertainment out of their original Warcraft saga, which had three previous installments popular throughout much of the 90s (they were fun - I played them). WoW is classified as an MMPORG (Massive Multi-player Online Role-playing Game) and is well known for its addictive qualities. Ever hear those rumours about people dying in 24-hour computer cafes after staying awake too long playing computer games? Those rumours grew out of the obsessive playing habits of individuals loving WoW. With several million players and more signing up each day, this love seems to be growing.

When my friends first started playing World of Warcraft, I wasn't particularly concerned. I'd seen them get together on weekends to play Dungeons and Dragons and I'd even joined them on work terms to play a text-based online RPG (based on the Terry Pratchett Discworld series, which ironically enough I have never read). I imagined that WoW was simply the newest thing on the scene, and if anything I'd probably end up playing eventually. That was before people started dropping one by one - like that random episode of Star Trek where everyone on the Enterprise gets brainwashed by that weird head-set game and Wesley Crusher ends up saving the day (God help me that I just illustrated a point against a geeky computer game with an even geekier TV show reference, but whatever - Waterloo is a geek's paradise, let's keep the love flowing).

Who can't sympathize with the enjoyment you can derive from getting outside yourself and your world for a while? When I was younger I was just as obsessed with reading fantasy novels, my personal favourite being the Wheel of Time series by Robert Jordan. There's an attraction to letting yourself stay in a universe with magic, adventures and levelling up to become stronger and more powerful. Not to mention, when the alternative is mind-numbing lectures, lame jobs, a world full of war, death, starvation, disease, and PDEng, it's little wonder that so many people are so willing to turn their backs on reality and bury their heads in a computer screen like an ostrich in order to kill the same thing over and over again for hours upon hours to raise their "experience bar" by half a centimetre.

There are redeeming qualities to reality though and they're not just that you can't have sex playing World of Warcraft! I'm looking out the window as I write this (my own head buried in a computer screen) and the sky is as blue as I've ever seen it. There's a beautiful bright green grass covered in dandelions, and damn it, I'm gonna go sit in it and enjoy my world. If you're reading this now, I hope you'll take a few minutes to for yourself to do the same.

Till next time,

Dangerman

How Life has Changed: 1977 vs. 2007

How has life changed in 30 years? I don't really know. I wasn't alive thirty years ago. But I'm going to guess - and you'll probably agree with me.

Timmy and Mike get in a fight after school.

1977: A crowd gathers; Mike wins. Timmy and Mike shake hands and become best friends.

2007: Police called; SWAT team arrives, arrests Timmy and Mike. Both are charged with assault and expelled even though Timmy started it.

John can't be still in class; sometimes disrupts other students.

1977: John is sent to the principal's office and is given a good slap by the principal. John then sits still in class.

2007: John is given huge doses of Ritalin. He becomes a zombie. The school gets extra money from the government because John has a disability.

Sam breaks a window in his father's car and his dad gives him a whipping.

1977: Sam is more careful next time, grows up normal, goes to University and becomes a successful businessman.

2007: Sam's dad is arrested for child abuse. Sam is removed and sent to foster care. He later joins a gang. Sam's sister Jane is told by the child support psychologist that she remembers being abused, and the dad is sent to prison. Sam's mom has an affair with the psychologist.

Chase gets a headache and brings some headache medicine to school.

1977: Chase shares his headache medicine with his teacher. Chase no longer has a headache.

2007: Police are called and Chase is expelled from school for drug violations. Locker is searched for drugs and weapons.

Pedro fails high school English.

1977: Pedro goes to summer school, takes English, passes, goes to college and gets a successful job.

2007: Pedro's failure is taken up by the government. Newspaper articles appear nationally explaining that teaching English as a requirement for graduation is racist. A class action lawsuit is filed against the school system and Pedro's English teacher. English is now banned from core curriculum. Pedro is given his diploma anyway but ends up mowing lawns for a living because he can't speak English.

Mark takes apart leftover firecrackers sticks them in an anthill and blows them up.

1977: Ants die.

2007: Department of National Defence is called; Mark is charged with domestic terrorism. Mark and his siblings are removed from the home and his parents questioned. Computers are confiscated. Mark's dad goes on a terror watch list and is never allowed to fly again.

James falls while running during recess and scrapes his knee. He is found crying by his teacher. She hugs him for comfort.

1977: In a short time, James feels better and resumes playing.

2007: James's teacher is accused of being a sexual predator and loses her job. She goes to jail for three years.

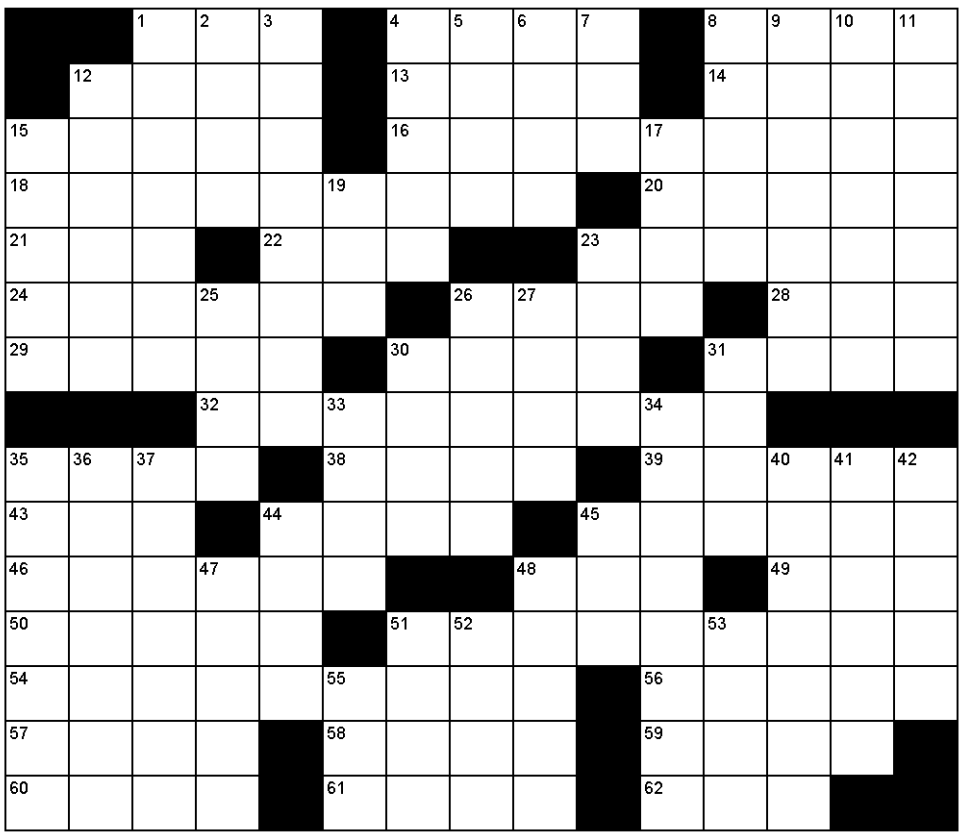
It is early morning and a bit icy outside; a man is going for a coffee. He slips and falls on the ice in the parking lot of the restaurant next door that doesn't open until 10.

1977: The man realizes he is okay - no harm done - laughs a little at himself, and gets his coffee.

2007: The man sues the restaurant next door for $10000. The legal fees amount enough that the little ma and pa restaurant have to declare bankruptcy. The man's lawyer makes a lot of money.

Crossword

MICHAEL SUE-KAM-LING AND HILARY LOCKIE
3A CHEMICAL



Across

1. System of beliefs
4. Atop
8. Large freshwater fish
12. Towards the inside
13. Norse trickster
14. Finished
15. Pyromaniac's pastime
16. Pertaining to a company
18. Daytime TV genre (2 wds.)
20. Louvre's location
21. Lodging
22. Deface
23. Salty water
24. Make deeper
26. Banister
28. Toilet
29. Mistake
30. Kiddy curse word
31. Castrated
32. Alias
35. Vein-like ore deposit
38. Horse restraints
39. Poetic units
43. Like a st. or rd.
44. Grain storage
45. Spanish madam
46. Type of discount
48. Congeal
49. Halfwit
50. Elegance
51. Plentiful quantity
54. Worthy of respect or admiration
56. More sick
57. Plant embryo
58. In addition
59. Black, in Montreal
60. Small amounts
61. Casual shirts
62. Obtain

Down

1. More crazy
2. Common street sign
3. Elementary polymer units
4. Swelling caused by abrasion, e.g. in the stomach
5. Robin Hood's clients
6. Gumbo pods
7. Puppy's bite
8. Reef
9. Insatiable greed
10. Pertaining to the rear of the eyeball
11. Verb tense
12. One who presses clothes
15. Technique to create dramatic irony
17. First year engineering director
19. Hook's nemesis
23. Communication for the deaf
25. Supreme pontiff
26. 2003 Cuba Gooding Jr. movie
27. Soon
30. High noon activity
31. Mysterious Half-Life character
33. Great lake
34. Relenting
35. Most massive
36. Abroad
37. Argued
40. Nighttime sky quality
41. Arm band
42. More secure
44. Flower's body
45. Redden or Heatley
47. Lactic and citric, for example
48. Estimate
51. Physically fit
52. Flagship Labatt product
53. Sunburn remedy
55. Skillful

For Mary Jane

YUVRAJ GOEL
3A MECHANICAL

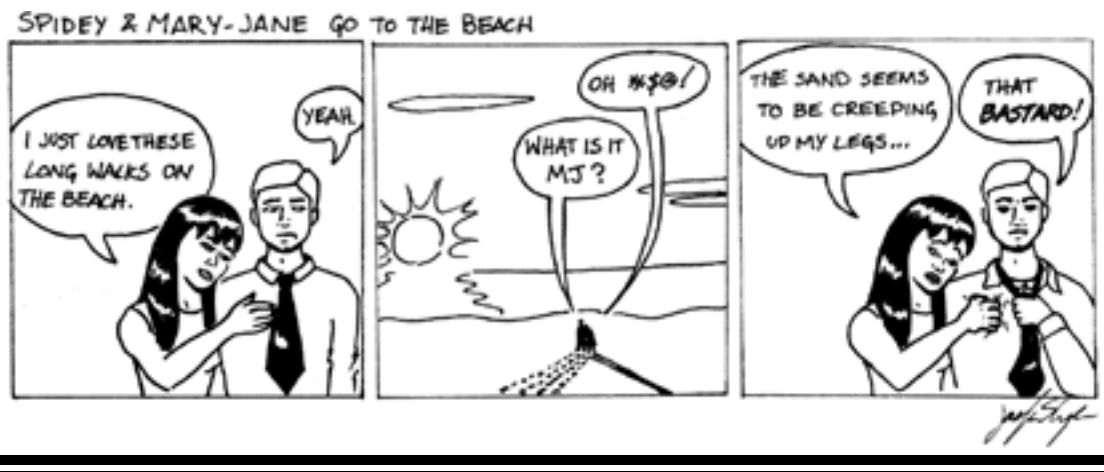
There wasn't much we could keep tame
Every time we met her face lit up like a weak flame
Sweet games, bleak pains that were delicate
Went to the zoo and we laughed at the elephant.

Nothing to say, saying nothing wouldn't be nice
So we sang a song and sang it again three times
The air was our free wine, the evening was feline
The time was ours, so what if it couldn't be mine.

Getting high on bubble tea, we cared not for subtlety
I knew all her troubles since mine couldn't trouble me
Couple of troubled teens who were up to no good
There are things I could tell, but promised I never would.

We stared down the sun until we couldn't see fine
We didn't hold hands because her hand had three nines
Adorned by the sunset, the evening was feline
The time was ours, so what if it couldn't be mine.

YUVRAJ GOEL AND JACLYN SHARPE
3A MECHANICAL

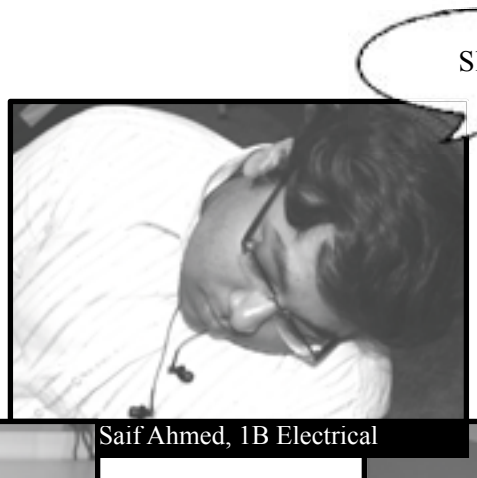


THE IRON INQUISITION

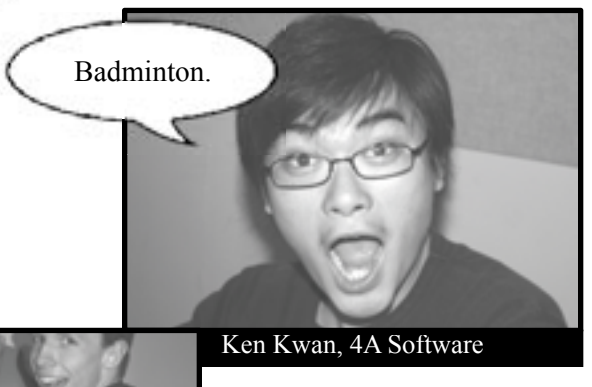
Mike Seliske, 1B Computer

What do you do during the summer to supplement your academics?

Tom Uniat, 3A Electrical



Saif Ahmed, 1B Electrical



Ken Kwan, 4A Software

Landen Tessmer, 4A Mechanical

Tristan Lehari, 1B Mechatronics