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the IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

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“Return of the Sledi” takes Second Place Overall Waterloo also walks away with Top Breaking honours



Dan Foong

4B Civil



(left) The Sledi team unloads their toboggan and takes the time to pose in their intimidating, yet sexy, fighter pilot styled coveralls. (right) Waterloo celebrates after one of their two runs down the hill crosses the finish line without a single injury.



On a cold and blustery day in Ottawa, Ontario, the University of Waterloo fourth year Civil Engineering Class of 2004 saw the fruits of their labour finally fulfilled. With two years of planning, designing and building behind their concrete toboggan, the team finally got to see the results of all their hard work.

Hosted by Carleton University, the Great Northern Concrete Toboggan Race (GNCTR), which celebrated its 30-year anniversary this past February, lived up to the hype that we as a fourth year class had been expecting. The design of the toboggan started almost two years ago when the class of 2002 came back as champions

With a reputation preceding them, the 2004 team (named Return of the Sledi) set forth to recapture Waterloo Engineering Glory. Arriving on February 4 in Canada's Capital, the team had three days of preparation ahead of them. The first day saw the

introduction of each team that would be entered in the race. Although nineteen teams were officially entered in the race, only fifteen different schools were represented. Some schools had enough participation to enter two teams.

The Sledi's were ill-prepared for the magnitude of teams that would be present at the event. Although bringing twenty-

two participants, the size of the Sledi team was still overshadowed by many other schools.

The second-day brought with it a chance to explore Ottawa. The teams were invited to explore the Museum of Science and Technology. This probably wasn't the greatest idea, as the museum is designed more for elementary school aged children.

Needless to say, though, the Engineering students that did take part in the event found the day to be just as exciting. It was a chance to be a kid again.

The third-day was the Technical

Continued on page 9. See "More Great Northern Concrete Toboggan."

Waterloo Engineering Success at OEC Students take Three of Six First Place Prizes

Prof. David Clausi
UW OEC Faculty Consultant

Engineering students representing the University of Waterloo competed in the annual Ontario Engineering Competition (OEC) this past weekend (February 6 & 7) at Queen's University in Kingston.

"Once again, our students performed admirably at the OEC. Capturing three of the six top prizes is a terrific achievement and a reflection of the exceptional capabilities of the UW engineering students", said Prof. David Clausi of Systems Design Engineering, who acted as the UW coordinator for the event.

The OEC invites competitors from all engineering programs across the province. The competition itself involves six different categories which emphasize both societal and technical engineering aspects. Once again, UW was very successful at this competition, walking away with a total of three first place prizes, a second place prize, and three third place prizes.

A first place prize went to Elliot Smith



Winning team in the Entrepreneurial Design category (from Computer Engineering): Matthew Cheung, Robyn Paul, Ksenia Golod, and Jordanna Kwok.

and Jay Detsky (Systems Design Engineering) for their Corporate Design entry entitled "Adaptive Delay System (ADS) for Sound Reinforcement". The ADS is a new method for synchronizing sound throughout an audience during a concert, in order to compensate for electrical impulses that travel faster to the speak-

ers than the sound that travels from the stage.

Another first place prize was awarded to Hsiao-Chien Lin (Computer

Continued on page 9. See "Tactical Nuclear Weapons a Winning Formula."

Iron Ring Celebration



Dan Foong

4B Civil

You may have noticed something different on February 17, something not quite right, and something just a little off. It was a time of joy and elation for many fourth year Engineering Students. Starting the day off right, many classes enjoyed a hearty breakfast in the morning before heading for classes. Although those classes may not have been their own, classes were attended by many fourth year students. Dressed in their Tuesday best, the fourth year classes of every Engineering discipline invaded the school in force.

It was a day of celebration. After four, and sometimes more, years of hard work,

Continued on page 11. See "Fourth Years Celebrating in their Tuesday Best."

I don't know the key to success, but the key to failure is trying to please everybody. - Bill Cosby

Letter from the Editor

Jeff Henry

4B Computer

Editor-in-Chief



By the time this issue hits the day in the top right-hand corner, like most of you, I'll be finished midterms. Well, not quite, but close enough. Like a living testament to the new ring on my smallest working finger, I learned everything I needed to know to do impeccably well in all of those midterms through active and constant attendance in classes, adherence to the homework schedule laid out by the professor, and two hours of review and study for every hour of scheduled class. Well, not quite, and not anywhere near "close enough," but certainly good enough to pass, at least, I hope.

In any case, I'll do all of that leading up to the finals or, even better, I'll do it the right way next term.

clink, clink

I suppose that excuse won't work anymore. After all, this is a graduating term. That is, it should be a graduating term provided I manage, yet again, to put forth just enough academic effort to slide through without tripping any of those pesky probationary alarms.

All of this, of course, begs the question: what have I actually done to earn either this hunk of metal or, assuming all continues to go well, that piece of paper? While I've been put through all the paces, had my mettle tested as it were, and while I now sit within sight of the end of the Waterloo pressure-cooker, I certainly don't feel like I know much more than when I entered. And as much as I know that feeling is off base, I certainly don't feel like I thought I would. Though I've learned more than enough to pass, the knowledge itself has almost always been fleeting, retained long enough for that next exam but never for that next course.

Well, if I haven't garnered all the knowledge the piece of paper says I should have, then surely the next question is: what have I learned over these past four plus years here and how does that measure up to the investment, both in time and in money, which I've made?

Looking back to Engineering 101 in 1999, I remember listening to Prof. Stubleby, then director of First Year Engineering, off of a video link in Arts Lecture. And, as this part of the speech has

been repeated year over year, most of you will remember how the speech went. "Look to your left, and look to your right; these are the people you'll be spending the next five years with." It went on to describe how this speech differed from similar ones at other universities, insinuating mass failure rates and the differing philosophy here at the University of Waterloo. The speech also went on to talk about how the people next to you may be your future business partners in some, yet unknown, venture.

Perhaps that is part of the answer. Perhaps it is not the academic journey one takes through these halls, but who you take the journey with that gives it value. Whether suffering jointly through that lengthy, tedious, or particularly arduous lab, studying for that killer midterm, or on that necessarily long, sanity-retaining coffee break at four in the morning, it is that person on the right and on the left who is the only thing left after that lab is handed in and that midterm is written. I've certainly found I remember more about the experience than any of the actual work, and so perhaps it is those aspects where there's been the most valuable education. But that certainly can't be the only thing.

Last summer, Jon Fishbein and I interviewed outgoing Dean of Engineering, Sujeet Chaudhuri. When we asked him about the extra-curricular involvement of engineering students, he replied with the following:

"I have always felt that studying and extra-curricular activities go hand-in-hand. They actually feed off each other... Getting high marks is not the end of the story, it's just the beginning. What you do beyond your marks is what defines you as different from others...It is absolutely important to do extra-curricular activities. Don't think that you are great because you do very well in your studies. If you do nothing but studying, it's easy to get high marks...Leadership comes from well-rounded abilities. We have serious musicians, artists and designers here in engineering."

So yes, extra-curricular involvement should be another large piece of the answer. From the Engineering Society and the Iron Warrior through to the Engineering Student Societies' Council of Ontario and now the Federation of Students, I know that I only truly saw that part of the equation half-way through my time here. As such, I also know I'm des-

perate to make up for that lost time.

Despite this very leading and, admittedly, self-indulgent dialog, I still find myself coming back to the initial question not being satisfied with the individual parts of the answer. I continue to think that there must be something else I'm either missing in the equation, and, thereby, something I've missed during my time here. Given the shortness of the time remaining, it has become more than a small nagging question.

While academics have long left my primary focus, I do recognize that I've gained some insight and have some intuition into the intricacies of many areas in my discipline. So that aspect does contribute to the answer. However, taking into account the others on the journey and the other extra things integrated into the almost cobblestone path does leave some room: there still must be more.

Certainly if I entertain incorporating some form of engineering practice into my future career path, I would seek to plug the void with the apprenticeship and relevant experience necessary to obtain a P. Eng designation. The Engineers in Training (EIT) program with Professional Engineers Ontario (PEO) certainly would allow for that. And perhaps I would find that a greater proportion of engineering practice is in intuition with the remainder being the ability to know where to look things up.

Even outside defined and regulated engineering practice, though, the iron ring that will remain adorned on my finger shall always stand for adherence to professional ethics and to not be silent in the face of unsound judgement and poor practice. But perhaps it is the expectation that engineering as such is not in my future, that over four years of work is almost moot. Perhaps it is just that feeling lessening the impact of the other parts of the equation, leaving the conclusion that there must be more.

At the very least, though, when I do set out on whatever path I end up taking, I will still look to that person on my left and on my right, whoever they may end up being, to help form the lasting memories along the way.

Questions? Comments?

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

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the IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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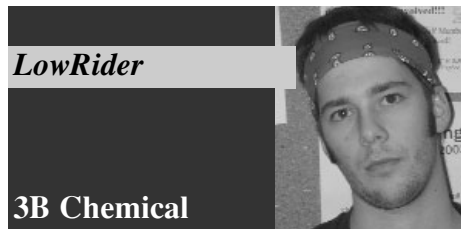
If you want to contribute ANYTHING AT ALL,

drop by our office (opposite the Orifice) or e-mail us at iwarrior@engmail

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The Iron Warrior 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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Dear LowRider: uw_LowRider@hotmail.com

<Insert Witty LowRider Title Here>

Dear LowReaders,

As promised, the answers to last week's quiz are given below. Full solutions are on reserve in the library under call number 69.

Question 1: $\text{erfc}[\text{lawn}(x) + \text{sign}(y)] + 2$.
 Question 2: $k = 3.19 \text{ (mol-h / A-L)} \exp(\text{lb-}^\circ\text{C}) \pm 43 \text{ kg-kJ-kHz / kPa-US\$}$
 Question 3: False.

Question 4: See attached Excel graph.

-LR

Dear LowRider,

I was most impressed to hear of the young lad on exchange in Germany whilst reading the last issue of this worthy publication. I am satisfied that my name lives on in sponsorship of such international tomfoolery, inebriation and boorishness rather than promoting dreary old research, as is the case for Alfred Nobel.

In any case, please let that young fellow know that he should visit Scotland, where I was born in 1827. It is exceedingly pleasant this time of year, if my memory serves me correctly, and would be well worth the trip.

Yours very truly,

-Sir Sandford Fleming (Deceased)

Dear Sir Sandford Fleming,

If this really is you, then you are definitely the most famous person to ever write in, edging out Dean Chaudhuri by a nose. I appreciate you taking the time out

of your busy posthumous schedule to write in, especially with such good diction. You used a lot of good words and stuff, which is good. I bet you could get a really good mark on the ELPE, like a 95, which is probably like the goodest you can get, and that you would never get caught using a run on sentence, which is not good, or, accidentally, use too many commas, and, that is also not a good thing to do in a good sentence, even though commas are good, sometimes.

I only hope that there will someday be a Sir LowRider Foundation to promote outstanding excellence in the field of Advice Giving and Grammatical Correctness. That would be good.

Anyway, thanks for time zones and helping to get rid of Erik for a year!

-LR

Dear LowRider,

My boyfriend and I seem to have lost our spark after 12 years of dating. I feel that we take each other for granted and that he doesn't respect my needs as a woman. We tend to have difficulty sharing our feelings and communicating. This impedes my dream of finding my soul mate to share my life with. I want to see a professional to try and revitalize our relationship, but I thought I'd write to you first because you're free.

-Sensitive Sue

Sue,

What the hell do you think this is? Send your boring crybaby crap letter to someone who cares.

-LR

Dear LowRider,

The other morning I went to the cafeteria, bought breakfast for my girlfriend and brought it up to her room to surprise her. Apparently I did surprise her. While she was studying with her lab partners. For her anatomy course. That's what she said, at least. I don't know if that's a perfectly good reason to be locked naked in her room in the morning with 3 naked guys who are as handsome and muscular as you, (but presumably not as cool) -- or if she's cheating on me. Also, my pet goldfish has been floating upside down for 3 days and won't eat his food. What do you think?

-Anxious Andrew

Dear Andrew,

Well there's some bad news and some good news. The bad news is that your girlfriend is apparently the skankiest skank who ever skanked, the dirtiest dirt who ever dirtied, as it were. On the off chance that you didn't understand that: she is most definitely cheating on you.

Now for the good news. You can use the dead goldfish (sorry, I guess that's bad news too) to exact your revenge. Go into her room and put it somewhere she'll never look, like in a speaker, and in a few days not even the most desperate Mech on campus will set foot in there!

-LR

Dear LowRider,

Should I have voted in the FEDS elec-

tion? I know that I'm supposed to be exercising my right to democracy and stuff. Since you weren't running I didn't think it was worth my 45 seconds. Who cares about the FEDS anyway, right?

-Loyal Fan Lenny

Dear Lenny,

Actually, I was planning to run in the election. However, on the last day to register as a candidate I was out of clean pants so I had to do a load of darks before I could go to campus -- but then it turned out I was out of detergent too. Sometime between buying more Tide at Sobeys while wearing my best beach towel and favourite bandana and having to put on wet pants because I was out of change, I decided that running would be a stupid idea. What if I was so busy that I couldn't continue this column? I can better serve all of you here that I ever could as FEDS president.

-LR

Speaking of FEDS presidents, LowRider has been granted an exclusive special interview with the current FEDS president: Chris Edey, President of the Federation of Students! Be sure to look for it next issue. The tough questions you want asked will be asked! The tough questions you want answered will be answered! Easy questions too!

If you have a question to ask Chris Edey, send it to my regular email. If I use your question I'll send you a genuine personally autographed LowRider air guitar.

PS: This is not a joke!

Letters to the Editor

Dear Editor,

Last issue, Leanne Whiteley, one of two Engsoc Class Rep Advisors, brought up the issue of weak participation in Engsoc events. She noted that very few representatives from each class were present at Engsoc meetings, and that participation in Engsoc events seemed fairly limited to 4th year students. I'd like to provide my personal perspective on this as a lower year student.

In this term's first Iron Warrior, the Editor in Chief wrote about the term's first Engsoc meeting, which was more boisterous than usual. In his article he presented someone's opinion that the meetings are not intended to be the best face of Engsoc. However, I feel that if any face is to be the best one, it should be the meetings. It is likely through the impressions of the class reps that go to the meetings that each class hears about Engsoc. If a class rep comes back from a meeting with a positive impression, then that will likely be conveyed to the class, and vice-versa.

Unfortunately my experience and the experience of my class reps at the meetings has not been positive. As engineering students, our time is valuable. Why should a class rep invest their time in a meeting? Meetings generally take place to exchange ideas, and make decisions. The majority of Engsoc meetings is taken up by announcements, something that is easily taken care of by email lists. I have gone to Engsoc meetings, and did not feel that my presence was really necessary. I did not take anything away from the meeting, and no decisions were being made. My input

was not really required, apart from "Does the Xx class have anything to announce?" before most of the meeting hits the bar. Even if someone had a contribution to be made, the atmosphere was more social than serious, making it harder to feel that your contribution would be taken seriously. It is simply not worth it to sit through 1.5 hours of easily emailable announcements interspersed with inside jokes. The term's first meeting was not an exception to the rule, it was simply the rule to a greater degree.

This is the impression that my official class reps and I came back with, and it is likely that this impression spread to the rest of the class. Additionally it is possible that a similar process may take place with lower year students participating in Engsoc events: Participating in one doesn't really leave you itching for more. As tech crew in the Engplay last term, my sentiments were not far off.

While it's true that apathy plays a big role, there is a saying that goes: blame the process, not the people. As it is, the process is only suited towards very-outgoing social people, which leads to a cliquey organization, a topic covered more than once in this very newspaper. Lately there have been a number of ideas expressed regarding the direction of Engsoc and its traditions. All of them have been very incisive in suggesting new directions that Engsoc could take. I suggest we consolidate these suggestions and put them to action, to talk, poll, or survey the students of their opinion of Engsoc, and perhaps form a small committee to implement changes to re-align Engsoc with the stu-

dent populace. Without major change, Engsoc may become irrelevant to the majority of the student body, save for its dusty laurels of old exams, "cheap" photocopies and coffee. Worse yet, as Leanne's article highlighted, irrelevance may have already begun to set in.

David Yip
2A Mechanical

Dear Editor,

There has been much discussion in the last issue of Iron Warrior regarding the significance, or lack thereof, of the iron ring and the question was raised whether or not the iron ring makes one an engineer. A better question to ask is whether or not receiving a bachelor degree in engineering makes one an Engineer and allows one to practice engineering. According to the Professional Engineers Act, the answer to both questions is a resounding no.

As in law or medicine, the engineering profession is regulated and in order to engage in engineering practice, one must first be issued a license to practice engineering. Licensed Professional Engineers can be identified by the designation P. Eng. An "engineer" without a license is the equivalent of a "lawyer" who has not yet passed the Bar examination. It is illegal under the Professional Engineers Act, punishable by a fine up to \$25000 for a first offence, for an unlicensed individual to practice engineering or to use a title that would lead one to believe that the person is qualified to practice engineering such

as "process engineer", "project engineer" etc. The moral of the story: The learning does not end at graduation. It is up to each individual engineer to establish and continually develop his or her competency through training and professional experience. Indeed, the journey is just beginning. I would strongly encourage all new engineering graduates to register with Professional Engineers Ontario (PEO) upon graduation and pursue licensure.

W.K. O'Keefe, P.Eng.

PhD student

Department of Chemical Engineering

Dear Editor,

After your letter in the first issue, I was looking forward to reading an interesting debate on the role of traditions in the second issue. I believe you said it would be the subject of the "Point - Counterpoint." However, when I picked up my copy of the second issue, I noticed there was only one side presented.

On such an important topic, I was wondering why there was only one side of the debate presented in the Iron Warrior. Despite the disclaimer, printing only one side makes it seem like "The Newspaper of the University of Waterloo Engineering Society" is taking a specific side.

Thanks in advance for clearing that up.

Confused Student

Continued on page 4. See More Letters to the Editor.

Columns

More Letters to the Editor

...continued from Page 3.

Dear Confused and Readers,

I would first like to apologize to anybody who was left confused by the dangling point in the previous issue. Unfortunately, I did not anticipate the confusion, or I would have found a way to allocated more space towards an explanation. I shall rectify that oversight here.

As is often the case with this and other publications, promised content is not always delivered, or, if it is delivered, it is not always done in a timely manner. Deadlines and the reality of content density in the paper often dictate what can and does get published in any given issue.

In this particular case, the counter-point to the debate was not submitted and it could not be guaranteed before the paper needed to go to print. Furthermore, one half page worth of advertisements was displaced by content in another section of the paper and they required a new home. As editor, I was left with the option of bumping the one-half page space worth of vacant counter-point or assuming the counter-point would come in and bump submitted articles somewhere else. All other things being equal, had the other side of the debate been the one presented, then it would have stood alone.

Hopefully that clears all of this up.

Jeff Henry, Editor-in-Chief
4B Computer Engineering

Scandal Heaped upon Scandal?

Andre Beltempo

3A Mechanical



In case anybody has emerged from the characteristic bubble surrounding UW during midterms, they probably heard something about a big political mess in Ottawa, relating to sponsorships or something. This is the third great scandal to emerge from Liberal dominated Ottawa in 10 years, and is the first political crisis for the Federal Liberals under Paul Martin. In fact, recent polls show that support for those Liberals has dipped to pre-1993 levels for the first time.

First, let's go over the two other major monetary messes the Liberals have mellifluously tiptoed around. The first was the great HRDC scandal in 2000, where, like a bolt from the blue, Human Resources Development Canada, the federal department responsible for, among other things, welfare, job training, social benefits, literacy, and youth employment, announced that they 'lost' approximately 1 billion dollars, give or take a million or so, of the public's money. Astoundingly, the Minister of HRDC at the time, Jane Stewart, did not resign, and merely sloughed off the blame to the outgoing minister, Pierre Pettigrew. He disavowed any knowledge of the mismanagement, blaming civil servants in the department. In the end, no one was fired or lost their jobs directly, and somehow the general public remained somewhat subdued as to

the misplacement of the money, although it eventually came out that improper management led to over-budgeting, and the money was never actually 'lost', just unaccounted for.

The second great financial scandal was the institution of the gun registry. This seemed like a great idea at the time, and appeared to be a bargain basement price of a few million dollars. Unfortunately, the Federal Government failed to take into account the immense task of creating a database system capable of recording all the required information, that was easily accessible across the various levels of government and law enforcement across the country, and that didn't take a team of 50 software engineers a year to design, test and build. The result of these oversights, as well as the fact that many Canadians

never registered their weapons on time and continue to register to this day, has led to a massive backlog of data entry, as well as a semi-functional database, which law enforcement officials publicly laud and privately lament. The final price tag for the gun registry is actually not even on the

radar, but during the week of 16th February, the Prime Minister approved additional funding equal to a billion dollars to complete the task. If this is added to the billion already spent, we can rest safe knowing our guns are registered, and that it only cost each Canadian man, woman and child \$80 each. Yet, despite these two massive public outlays, the Liberals remained high in the polls and Jean Chrétien earned the moniker "Teflon Jean".

The most recent scandal is actually the smallest in terms of money lost, spent, or otherwise misappropriated, but it is also the most damaging, due to the fact that the usage of this money verged on the criminal. In 1995, in case anyone forgot, Quebec had a referendum, which basically decided the fate of the country. In the historic event, the no side won by less than a percentage point, and the future of the country seemed bleak at best. In this pessimistic atmosphere it was decided, no one knows by whom, that it would be a good idea for the federal government to literally 'show the flag' more in Quebec, by supporting more cultural and social activities in the province. The Federal sponsorship program was borne out of this decision. Basically, the sponsorship program allocated federal funding to all kinds of events, and in exchange, the "Canada" graphic was to be prominently displayed, and the federal government listed as a contributor. These events could be very small arts festivals, requiring no more than \$5,000, to large international festivals, such as the "Just For Laughs" comedy festival, which takes place in Montréal every year. Any festival in the country was technically eligible to receive sponsorship

funding, but the vast majority of applicants came from Québec. This may be due specifically to the fact that the sponsorship program was better advertised in Quebec than in other parts of the country. The sponsorship program was managed at Communications Canada, which fell under Public Works and Government Services Canada, (PWGSC), headed by then-minister Alfonso Gagliano. At this time, Gagliano was also the minister responsible for Crown Corporations, such as Canada Post, VIA Rail, and Canada Lands Corporation, as well as the Senior Minister Responsible for Quebec. It was generally accepted that the sponsorship money was going primarily to Quebec, and this was accepted as the price for Canadian unity. Few people really believed that there was anything wrong

"...we can rest safe knowing our guns are registered, and that it only cost each Canadian man, woman and child \$80 each."

with that line of reasoning, and for a time, the Canada graphic did appear in places it hadn't, and small events and social benefits which otherwise would have floundered, flourished. The fact that more advertising for the program was done in Quebec than the rest of Canada was acceptable.

Then it came out that the Quebec companies doing the advertising happened to be skimming money from the Federal funding, and then applying for dubious contracts to some crown corporations. Since the heads of the Crown Corporations and ad companies all knew one another, Gagliano, and in some cases, the Prime Minister, the entire system looked really suspect. In 2001, Gagliano was forced out of office by the attacks of the opposition, and Chretien appointed him Ambassador to Denmark. It was widely regarded that Gagliano, who was a long-time Chretien supporter was being given a break, as well as distance from the widening trouble surrounding sponsorships. An investigation by the auditor general was begun, and the findings were announced earlier this month. The findings were quite damning, and the results have fallen hard on the new Prime Minister, so hard, in fact, that the Spring election date may actually slip. The new Conservative party of Canada, still leaderless, and lacking any policies whatsoever is actually climbing in the polls, the Federal Liberals are scrambling for damage control, and the scope of the investigation seems to be getting broader and broader. The heads of all Crown Corporations are now seriously looking at their resumes, Gagliano has lost his ambassadorship, and Chretien himself may be called to testify.

The political fallout from this scandal is far from over, but it is, by an order of magnitude, the worst scandal to have hit the Liberals since they took office in 1993, with the great irony being that the brand new Prime Minister is stuck dealing with the problems of the old one, and may lose his job because of it.

Exchange Seminar

Andreas Vetter

Engineering Exchange Student

Every fall and winter term, the current exchange students from Braunschweig, Germany present relevant information about going on exchange to our home uni-

versity including information about the university, the program, studying, as well as the city, Germany, and Europe.

The Braunschweig seminar for this term is happening on Wednesday, March 10th in DC 1304 starting at 4:30 p.m. All students interested in the program are invited to come and ask questions.

FED HALL PRESENTS
blacklight
MARDI GRAS
FRIDAY, MARCH 5

FREE Sets of Beads B4 11pm
Most Beads = Free DVD Player
Retro / Old School / Top 40
Off the Wall Graffiti; Wear White

Indoor Line-up

19+ required

Palm Computing: How I wasted my \$\$

David Yip
2A Mechanical

It's odd. Once you start making money, all of a sudden you have a shopping list. Prior to my last co-op term, I lived without a care in the world, in a desireless, almost monastic state of anti-consumerist bliss. Right. Sixteen weeks of 40 ± 10 hours each at the high side of 15 dollars per hour later...

"You know what guys, I think I need a Palm."

"A what?"

"A PDA (Personal digital assistant). It's so useful! I could keep track of all my assignments, and stay on top of my work, and plan my time, and write notes, play mp3s."

The remaining part of my monastic conscience told me that I was really just unnecessarily complicating my life further, as I could buy enough paper organizers to last me until the year I marry with the cost of a Palm. Besides I wasn't that busy; had I 7 directorships or something I might have more of a case for myself. Still, consumerism won out. While surfing eBay I came across a glittery Palm Tungsten E for \$175. I know a bargain when I see one, and so I snapped it up. One day later, from Wingham, Ontario, came my package.

All PalmOS devices come with a set of core software: Calendar, Contacts, Tasks, Memo, Expense, and Notepad. They are all self-explanatory, except for Notepad, which is like a Palm doodle pad. First thing I did was replace my tattered class schedule by inputting it into Outlook, and syncing with the PDA, so that Calendar would show my classes. Ok. That was one useful aim accomplished. I got into the habit of writing things down into Tasks that I needed to do and remember, and so my laundry was done more often. A friend of mine (into paper organizers) found that you must write everything down. Remembering some stuff and writing down some other stuff just doesn't work. The writing system takes some getting used to, though, and I suspect that I'd be faster just tapping at the on-screen keyboard. Writing, however, is cooler.

Soon I wanted to extend my handheld's capabilities beyond the core software. I began to think of it less as an organizer,

and more of a pocket computer. A wide variety of software is available for PalmOS, and I sampled a fairly broad range.

The first was Adobe Reader for PalmOS. I converted .pdfs of calculus solutions into PalmOS pdf, and tried taking just my handheld with my instead of the full solutions manual. Because the pdf just contained a scanned image of the solution manual, the PalmOS version is essentially an image optimized for the Palm screen. It was definitely legible, but unfortunately scrolling back and forth to see a whole formula at once was somewhat tedious. I concluded it's usefulness as a paper replacement was somewhat limited.

The next application I tried was powerGraph. It's a graphing calculator that runs on PalmOS, and has all standard TI-83 calculator functions and more. However, what I really wanted was 3D graphing, and in this respect powerGraph couldn't deliver. After a week of midterms I started looking again, until I stumbled upon PDACalc. Not a terribly original name, but after half an hour of playing around with samples I finally put

$f(x,y) = 150\cos(\sqrt{x^2+y^2})$ in it's contour-mapped glory. However the trial version would not allow me to edit the script that generated the graph. The full version is US\$49.95. This seems a bit hefty, but it is a fully-programmable calculator that does foreign-to-2A-mech.-student stuff like Kaiser Windows for some-type-of-filter. However, I don't see my Palm replacing my Sharp DAL anytime soon, for the simple reason that a real calculator is larger, and hence easier to use. Statistical software for Palm such as PDAstats also exists, which is handy for generating histograms and regression fits on the run.

Finally, I gave "Due Yesterday" a shot. "Due Yesterday" is organization software

designed specifically for students with the purpose of tracking assignments, due dates, and grades. "Due Yesterday" is organized by class. You can set up professor contact information, class locations, times, and the marking scheme. Under each class you would add your assignments, due dates, and such. As you complete each assignment, you can enter your grade, and the software will update your current mark.

Beyond productivity, of course, computers are good for games and entertainment. Already I have a good collection ranging from 3D Air Hockey to Bubblewrap. Bubblewrap is a fun game where you pop a sheet of virtual bubble wrap. It's quite realistic if you use your thumb on the touchscreen to pop the bubbles.

Another key benefit of a handheld computer is having vast amounts of data at your fingertips. Many references manuals exist for those in the medical and legal field, and similar applications exist for engineering as well. Just about any sort of reference, ranging from IEEE

standards to machining feed rates can be found. In addition, more entertaining references, such as a guide to mixed drinks, and the infamous PalmaSutra are also available. Not that I'd be getting any use out of that.

More practical, perhaps, are integration tables or the periodic table of the elements. A variety of hobby software also exists; for photographers to track the exposure settings, for cinephiles to track their DVD collections, and many others.

Mapping software is also popular on handheld computers. I tried Mapopolis and downloaded some trial maps of Waterloo and my native area of Niagara. The maps were accurate, but information such as phone numbers was somewhat outdated. It had MapQuest-like search abilities for

addresses and key locations. The permanent non-trial version is US\$9.95 for Waterloo, which includes a driving directions function as well. An alternative is Handmap. Handmap requires \$16 viewer software, where Mapopolis viewer software is free. However it is US\$9.95 for 4 maps instead of just one. I didn't have a chance to try Handmap, but from screenshots it seems the maps are easier to read. On the indie power user front is MapMap, which is software that was designed to replace paper maps. It allows users to scan in maps, and set coordinates on that map so that locations can be searched. I plan to do this with a map of the campus sometime. Some map software also has the capability to be connected to a GPS module.

Certain PDAs also have the capability to act as media players. I think this is the most use I've been getting out of my Palm as I use it to play mp3s. With my model (Palm Tungsten E) there is some hissing audible at low volume levels, and everytime you touch the screen there is some feedback, so if sound quality is your bag, a Palm may not be your best choice. It is also capable of playing videos that have been converted specially to a Palm-specific format.

My Palm is a handy device. I find personally that a PDA is most useful to me in its core function as an organizer, partially because of my limited scope of existence (Eating, sleeping, studying). Shelling out some dough for some software will broaden its capabilities, but that's something I am not used to doing. Most likely, the most involved and the busiest of us will find a PDA the most useful. While I may find it more useful in the future or on co-op terms, for now it is a device I probably could have done without.

Sources:

eBay: www.ebay.ca

Tungsten E: www.futureshop.ca

Mapopolis: www.mapopolis.com

3D Air Hockey: www.handango.com

Bubblewrap: www.freewarepalm.com

MapMap: www.mapmap.8m.com

PalmaSutra: www.palmasutra.org

Due Yesterday: www.freewarepalm.com

PDACalc: www.adacs.com

PDAstats: www.palmgear.com

Periodic Table: www.standalone.com

Experiences and Complaints with Copy Protected CDs

Maria Simoes

4B Computer



The last few weeks a lot of attention has been given to music downloading and copyright issues within Canada. The recent court case introduced by the Canadian Recording Industry Association (CRIA) to determine and sue 29 music "uploaders" has led to much discussion about piracy issues and legality. One measure that has been taken by the recording industry to prevent music piracy has been to introduce so-called "Copy Protected" or "Copy Controlled" CDs. The purpose of this is to prevent users from copying music that they have bought and/or distributing that music on the internet. However, this process is not meant to divert from a user's listening experience once they have bought the music.

A little over a year ago I bought my first copy protected CD. It was Radiohead's Hail to the Thief, which I had been waiting for and snatched it up as soon as it was released. Later that evening, I tried to listen to the CD on my laptop and found that I couldn't. I looked at the back of the jewel case and noticed that the copy

control techniques were supposed to be "compatible" with a PC computer. Yet, no matter how long I waited or how hard I tried to get it to work, my main music listening device (at the time) was incapable of playing this copy protected CD. Being a computer engineer, I went online and tried to find a few solutions - turning off Autorun before inserting the CD or running the CD in analog instead of digital mode - none of these methods worked. The CD just refused to PLAY. I finally gave up on actually playing the CD. However, I still figured I had

a right to listen to the music that I had just bought - so I went online and downloaded a pirated copy of Hail to the Thief.

Since then, I have bought a few more copy protected CDs - each time with a feeling of reservation. After trying numerous methods to PLAY the CDs on my laptop, I gave up and brought in my old CD alarm clock from home. I figured this way I could at least wake up or fall asleep to copy protected CDs that I had paid for. However, even this still caused me problems. Copy protected CDs would at random times

"Copy protected CDs would at random times in random songs decide to halt..."

in random songs decide to halt, requiring me to skip to the next track in order to listen. This DEFINITELY diverted from my music listening experience.

So now, I could play my CDs - it would have to be when I was at home (which is rare) and it would require me to be located near to my player in order to

kick it into gear when the need arose. This was not optimal. For those reasons, I started investigating into methods that would allow me to load music from my copy protected CDs on to my two primary music players - my laptop and my iPod. The first obvious way that came to mind was to go "online" and find someone with a pirated copy of the CD. However, this would have forced me to listen to music ripped by others - not allowing me the customization that I am used to in terms of bit rate and encoding schemes. Furthermore, try as I could to remove it, I had some level of morality that made me feel it was wrong to download those songs even though I had paid for the right to listen to that music. Giving up the "downloading" method as a last straw tactic, I looked into a few more methods.

One method to copy protect CDs involves adding errors to the actual CD.

Continued on page 12 See "Bad CDs."

Engineering Society Executive Reports

Help FEDS Help You

Laura Mooney

President



Hope everyone enjoyed their two days of study catch-up time last week. Now that we're back, and the last month is upon us, there's plenty to do and get involved in!

If you're looking for a way to get involved in the Federation of Students, there are still a few positions on council open for engineering students. If you're

interested, drop by the Feds office and they'll get you involved! If you'd just generally like to hear about what's going on with the Feds, stop by their website www.feds.ca - the latest and greatest is right on the front page.

Of course, how could I write this report without mentioning the biggest event of last week (for some people the biggest event of the year) - IRS. Congratulations to all fourth years on getting your iron ring. I hope you all enjoyed your day of celebration!

As always, if you have any questions for myself or any of the exec, send us an e-mail or drop by the Orifice. See you out at MOT!

WEEF Proposals are Good

Michael Henheffer

WEEF Director



The funding process for WEEF continues over the next few weeks with many important dates approaching. Proposals are being accepted until March 5. WEEF has \$35 000 in funding available this term for use on lab equipment and student projects so make sure you get your proposals in on time. Proposal forms can be found online at

<http://www.weef.uwaterloo.ca/proposals.html> and both a soft copy and hard copy must be submitted. The soft copies can be sent to weef@engmail while the hard copies can be dropped off at the WEEF office (E2-2394a) or to the WEEF mailbox in the Engsoc Office.

The presentations of the proposals that are received this term will take place on Tuesday, March 9 from 5:00-7:00 pm. Presentations will also be made on Thursday, March 11 if necessary. The funding council meeting will then take place on Tuesday, March 16. The locations of these meetings will be announced closer to the date of the meetings in the next edition of the Iron Warrior.

Is Orlando Bloom Coming to the Semi Formal?

Kate Kelly

Vice President, Internal



Okay, so before I get into my normal spew of all the great EngSoc events happening in the next two weeks, I want to heavily focus on two things. First, I want to talk about the Semi Formal. It'll be taking place on Saturday March 6th in the Faculty/Grad Lounge on the third floor of CPH, if you don't know where that is its two floors above POETS, but don't worry, we'll put signs up! And the theme you ask? Well, personally, I'm really excited about the theme, and I hope you guys are too. It's called "Once Upon a Time Semi" and the theme is fantasy. I'm thinking Princesses, I'm thinking knights, I'm thinking Greek Gods and Roman Goddesses, and I'm thinking Lord of the Rings, The Princess Bride and Shrek! I'm thinking Shakespeare and the Grimm Brothers, I'm thinking Sir Launcelot and Guinevere. You get where I'm going with this right? The Semi will start at 9:00 PM and go to 1:00AM, refreshments will be provided, and Bar Services will be visiting. Door prizes will be awarded and there will be a prize for the best outfit, and the best pair. Tickets

are on sale now in the Orifice and cost \$7.00 or \$10.00 at the door. So, really, nobody has any excuse to miss this semi! It's gonna be awesome! Get your tickets before we sell out! And boy oh boy do I ever hope Orlando Bloom is coming!

All right, now to another topic that is near and dear to my heart: the environment. Are you a person who is constantly asking yourself, "How can I make the world a better place?" Just bring any old ink cartridge to school, and if you look in most of the computer labs, and the Orifice, you'll find a green box, that says 'Rworld' and 'cartridge recycling.' All you have to do is toss your old cartridge in, and voila! You've just helped to create a recycled ink cartridge that someone else who cares about the environment is going to use!

Another important event is TalEng. It will be taking place at 8 p.m. on Thursday, March 11th, at Weavers. If you've got some talent and you're ready to show the world, sign up in the Orifice or email talengw2004@hotmail.com for more details.

Whew, so what else is going on you ask? There can't possibly be more, but, there is! After midterms, we're back into the swing of things with events and what-not! MOT is Friday the 27th of February, and it sounds like the POETS managers have quite a party planned. That Sunday, the 29th, is A**5 Bowling at Brunswick

Lanes, be sure to sign up a group and be ready to bowl! A**5 actually begins National Engineering Week, and lots of events will be happening that week. There'll be a "Women in Engineering" reception, the Bus Push on March 6th and

much much more! And if you haven't done so already, you should sign up for Explorations, which is happening on March 15th. Simply sign up on the engsoc webpage, <http://engsoc.uwaterloo.ca>. It'll be a blast!

Surveying Your Debt

Jonathan Fishbein

Vice President, Education



Well, with the winter term upon us and midterms done it is that time again. Go take a guess? If you guessed that its time for the faculty of engineering debt load survey, give yourself a pat on the back because you got it. For those of you frosh who are unaware of what a debt load survey is, sit back and prepare for enlightenment. Every winter and spring terms, the office of the dean of engineering along with EngSoc administer a survey to try and gather data about how students are coping with the financial aspect of being an engineering student. Your class reps

will be given a package of surveys and will find a time in class to distribute them. You will then have the opportunity to complete the survey and let the administration know how you are dealing with tuition and living costs. The dean's office takes these results very seriously so be sure to answer the questions truthfully and write in any comments you feel are relevant. Once the results are tabulated they will appear in a later edition of the Iron Warrior for all to see. Class Reps, stay tuned for further information as to when the survey packages will be ready for pickup.

Other educational events that will be happening soon are a forum on the new professional development co-op courses and a workshop on how to use the new CECS online system that will be in place next fall. Watch for announcements as to the dates and times for these events.

VPX to Students: I Need You!

Nick Lawler

Vice President, External



Wow, I can't believe how fast this term is going. Already we are into the end of February and this means many great events are on the horizon. First off is National Engineering Week, taking place from February 28th to March 7th. The NEW directors have many things planned, both with external outreach, and with some internal fun. All engineers celebrate this week across Canada, and events are being held in almost every city with an engineering school. So come out and show some of that Waterloo Sprit. Also, the K-W Children's Museum is

holding a K'Nex workshop on the weekends of NEW. They want student volunteers to help the kids build structures, and things out of the K'Nex. Local professional engineers are also helping out, and this could be a great opportunity to network, and make some contacts. You also get a free t-shirt! (What more do you need?) Visit www.engineeringweek.on.ca to volunteer.

As well two great events coming up that need student volunteers. The Bus Push will be on March 6th, and, like every year, we will be pulling a bus from POETS to Kitchener City Hall to raise funds for charity. This is a great opportunity to do some good. It looks great on a resume, and you might even get your face in the local paper. Rumor also has it that the TOOL will be making an appearance at the Push. Explorations is happening on March 15th, and this events sees thou-

sands of kids from the region schools come and see what Waterloo Engineering has to offer. Both grad and undergrad projects will be on display, and the organizers need volunteers to be tour guides to help lead groups around the buildings. All you have to do is follow the directions that they give. As an added bonus the 2006 Concrete Toboggan Team will be serving up Boggan Burgers, as they kick off their fund raising drive. As you can see we have a very exciting and busy month ahead, which culminates with finals, all of which I hope to pass.

Please see my article elsewhere in this edition of the IW explaining some changes that are being made to the PEO's Student Membership Program. These changes mark a significant change in philosophy for the PEO, and is indicative of the changes that the engineering profession is currently undergoing in Ontario.

ENGINEERING
SOCIETY



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

Charities Food Drive



Maria Simoes

4B Computer

next Charitable event across the campus. Now, I bet you're asking "Whose names are on the boxes?". Well, look no further. The names on the boxes are:

- 1) DEAN SEDRA and SUE GOODING
- 2) MARY BLAND and James Kunz
- 3) THE ENGSOC EXECUTIVE
- 4) Members of The Incoming FEDS Executive
- 5) The POETS Managers
- 6) The GradComm 2004 Chairs

Want to participate? Well, all you need to do is to bring non-perishable food items into POETS and drop them into the bin or bins of your choice. It's THAT simple! The drive will have started by the date of this publication and will be running until the 6th of March. Please donate any food that you have to spare!

If you have any questions about this or any other charity, please contact the Charities Directors - Leanne Whiteley (lcwhitel@engmail), Mike Henheffer (mphenhef@engmail) and Maria Simoes (mssimoes@engmail).

This term, EngSoc is having another Food Drive for the Kitchener-Waterloo Food Bank. This is yet another time of the year where the Food Bank is in need of food for those in our community who are less than fortunate.

As in previous terms, the drive is a competitive one. Bins have been placed in POETS. Affixed to the bins are the names of certain individuals or groups of individuals. The competition arises in that the group with the most amount of food (in quantity of items) by the end of the drive will be the "winner" of a "special reward" [read: interesting punishment]. This term's reward will be to dress up for St. Paddy's Day and advertise on behalf our

Bus Push for Charity



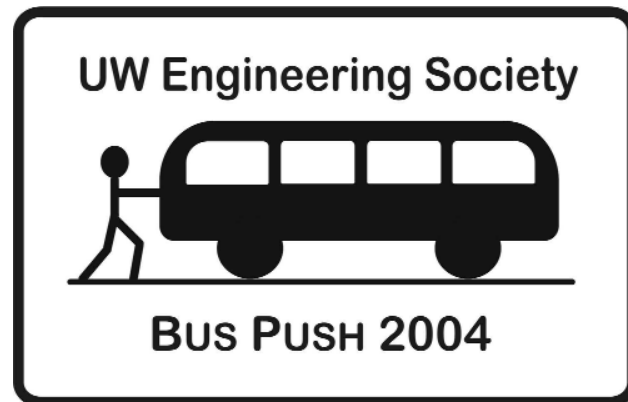
Michael Henheffer

4B Computer

participate is sign up and get a pledge sheet from the Orifice. You then need to collect some donations and show up to POETS on the morning of the 6th. Every participant who raises over \$25 will receive a free bus push T-shirt and be entered into draws for various prizes. You will also receive a free breakfast and lunch the day of the event along with P**5 points for your class. Plus, this will be a great way to support a local charity.

During each of the past 27 winter terms, Waterloo engineers have pushed or pulled a bus from the university to downtown Kitchener in an effort to raise money for local charities. This event has been known as the Bus Push and it will be happening once again this year. We're looking for as many participants as we can get to help us pull a bus to downtown Kitchener on the morning of Saturday, March 6.

All you have to do to



Middle of Term Pub Night



Chris Deck

4B Computer

it promises to be a good time to get together and forget that you've just been through Midterms. If you're reading this on the same day printed in the top corner of the paper, then MOT is tonight!

As usual the night will open with some early festivities which should be enjoyed by many of the recently ringed as well as any one else who decides to join us. Then at 9:00pm it will be off to POETS to enjoy a cold one while listening to "Sopha and the Loveseats" who will be gracing us with their presence and with what promises to be another great show.

Bring your friends, bring your enemies, but don't bring your worries about school. We'll see you there!

Midterms got you down? Don't want to think of what happened with that calculus midterm or you want to forget about the stress of that circuits/materials/mods midterm that you and all your friends just failed? Well, we can help you out for one night at least!

The Middle of Term pub night (MOT) is coming up this Friday, February 27 and

National Engineering Week Tricycles, K'NEX, and Much More!

Andrew Kowpak
3A Software

would like to recommend a prof that we can approach, please contact Marc Joyce at mejoyce@engmail.uwaterloo.ca.

February 28th to March 7th is National Engineering Week. EngSoc and ESSCO are running several events to promote Engineering in the community.

On Monday March 3rd we will be holding Prof/Student tricycle races somewhere on campus. The top student on a tricycle will get to face off against the top prof. This event can only run if we get enough profs to participate. If you are a prof who would like to participate, or

The following day, we will have several student projects on display at Conostoga Mall. The projects will be there all day and its well worth the trip to go and see what your fellow students have been working on.

ESSCO will be running a K'NEX construction workshop for children at the Waterloo Region Children's Museum on February 28, 29 and March 6 and 7. If you are interested in participating in this event, contact k2ma@engmail.uwaterloo.ca.

More Money



Rajat Suri

Vice President, Finance



Michael Henheffer

4B Computer

The budget passed and donations passed. Life is good for everyone. But is it really? Hmm.

If any of you donations requestors or directors want me to write you your cheques, just email me at asoc_vpfin@engmail. However, I warn you that I tend to be rather forgetful, so don't be shy in reminding me several times. Use any means necessary - I will not mind. Or will I? Hmm.

Other than that, finances seem pretty much in order.

A few weeks ago you may have noticed a lot of people (both students and faculty) taking whipped cream pies to the face. Well, this was all part of a charity event that was being run in Engineering, not only at the University of Waterloo, but right across the country called the International Pi Throw.

The money raised by the event here at UW went towards the local chapter of Engineers Without Borders and to Gradcomm 2004. In total, the week raised \$790.30 for these two charities.

Pi Throw a Resounding Success



Thanks to everyone who ordered pies for people and to all of those people who chose to participate when a pie was sent their way.

Upcoming Engineering Society and Other Events

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
29 A**5 Bowling	1 Prof-Student Tricycle Races	2 Bridging the Gap lecture Project Displays Conestoga Mall	3 WIE Reception	4	5 IW submission, WEEF proposal deadline	6 Bus Push (NEW) K'NEX Workshop	Gradball tickets on sale at lunch in CPH Foyer. Until March 12, tickets are only \$55. After March 12, they go up to \$65.
7 (NEW) K'NEX Workshop	8	9	10 EngSoc Meeting #5	11 TalENG (Weavers)	12	13	

Columns

How PEO is Changing Your Student Membership

Nick Lawler

Vice President,
External



As many of you know the Professional Engineers of Ontario (PEO) is the regulating body for engineering in Ontario. They control the practices and dealings with those who have the right to call themselves "engineers" by definition of the Engineering Act. The Engineering Student Societies Council of Ontario (ESSCO) is like a provincial version of EngSoc, and each VP External from each engineering society in Ontario sits on this council. A few years back ESSCO brought forth an initiative to the PEO, which eventually became the Student Membership Program (SMP). The goal of this program was to provide resources and information to undergraduates who study engineering, with the hopes of encouraging more students to obtain their P.Eng after graduation. The PEO set

up a website, and each student member received the PEO magazine "Engineering Dimensions" and a membership card in the mail. As of February 2004 out of the 14 schools in Ontario, the University of Waterloo has the most members at 1729 (both A and B Soc combined). Compare that to a school of similar size, U of T who only have 539 members. Waterloo engineering students make up almost 25% of the total membership of the SMP.

Professional Engineering in Ontario is changing. A new group, Ontario Society of Professional Engineers (OSPE) has been started. The goal of this group is to be the lobby group for engineers in Ontario. Where the PEO is the regulating body, OSPE fights for rights and goals that P.Eng's might have. As a result of the creation of OSPE, many good people have left the PEO for OSPE, the coffers have dried up a little over at the

PEO. So, when money runs short, what do you do? That's right – cut back. One area the PEO is cutting is the SMP. No longer will they be mailing member cards and Engineering Dimensions to your personal address. They will be sending these to your local VP External (that's me and Jeff

Alfonzi on BSoc), so we can distribute them. This marks a major philosophical shift in the SMP. The PEO has removed the whole personal touch of the program, instead opting to just send 2000 copies of Engineering Dimensions and one envelope of membership cards to the Orifice. You might be wondering what would happen when you are on co-op term and cannot possibly pick up your copy of Engineering Dimensions, or your renewed membership card. Well, the PEO says you can read the online version of Engineering Dimensions, and your membership card will be waiting for you when you get back to school.

Before I go off on a rant and give my opinion of the changes, I want some feedback from the student body. Even if you are not a member of the program, I still want to hear your opinion on why you are not one. It is impor-

tant that we take action now and let the PEO know how we feel, either good or bad, about the changes being made. Class reps are asked to pick up a package of surveys in your mailbox in the Orifice. By taking the time to fill out the survey I can get a better feeling for what people actually think about the program. The results from the surveys and the Engineering Societies' official response to the changes will be published in the next edition of the Iron Warrior.

"One area the PEO is cutting is the SMP. No longer will they be mailing member cards and Engineering Dimensions..."

Students enrolled in SMP		
# 1	University of Waterloo	1730
# 2	McMaster University	745
# 3	Carleton University	730
# 4	Ryerson University	683
# 5	University of Western Ontario	646
# 6	University of Toronto	539
# 7	Queen's University	522
# 8	University of Guelph	487
# 9	University of Windsor	269
#10	Lakehead University	245
#11	University of Ottawa	208
#12	Royal Military College of Canada	63
#13	York University	52
#14	Laurentian University	33
		Total: 6952

Professional Engineers Ontario (PEO) Student Membership Program (SMP) enrollment by university as of February 2004.

Climate Change Education & Awareness Competition

Jason M. Hammond
CCEAC Co-ordinator

Welcome to the Climate Change Education & Awareness Campaign's Pledge Competition! This offers the whole University of Waterloo community a great opportunity to raise our awareness about climate change. There are also two chances to win \$100 for our student organisations or charities.

What constitutes a pledge?

A pledge is an individual's signed commitment to learning more about climate change and taking personal action to reduce greenhouse gas emissions. This commitment takes the form of a signature on the Pledge Lists that CCEAC will provide. Teams must collect unique pledges; each pledge must be from a real person, with no duplicates accepted. Pledges can be collected from the whole campus community: undergrads, graduate students, staff, and faculty. Each person can only have their pledge count towards one team's total.

What is the team structure?

Teams will register with the CCEAC office, and collect unique pledges on campus. Teams can have any number of participants, and may be organised by clubs, residences, sports teams, classes, departments, or even groups of friends. The teams will register their team name, members, and intended recipient, and will use competition materials provided by the CCEAC office. Teams will regularly submit completed lists to the CCEAC office for our records and safekeeping.

What are the prizes?



There are two \$100 prizes available, thanks to our continuing fundraising activities. One \$100 prize will be awarded to the team who collects the most unique pledges. Ties will be broken by random draw. Another \$100 prize will be awarded to a team that does not win the top prize, but collects more than 100 unique pledges. This second prize will be based on a random draw of eligible teams.

Who is eligible for a prize?

There are two types of organisation that can receive a prize. The first is student organisations whose finances are controlled by the Federation of Students or the University of Waterloo. Charities can be registered as recipients if they are registered with the Canada Customs and Revenue Agency as a charitable organisation.

How do teams collect pledges?

Teams can collect pledges through any reasonable means. For example, teams from clubs or residences could collect pledges from their members. With an instructor's permission, Pledge Lists could be circulated in a class or lecture. Teams may choose to approach large lectures, or to seek pledges from as many staff, faculty, and students as possible within a department. Essentially, teams should act politely and with minimal intrusion, seeking permission as necessary.

When does the competition take place?

The competition will begin on the

first day of the Climate Change Fair, on Monday, February 9th, 2004. All competition materials, used or not, must be returned to CCEAC staff by Friday, March 19th, 2004. The winners will be announced during the Climate Change Expo, March 22nd to 26th, 2004.

We are still seeking donations!

Donations and sponsorship for the Climate Change Education & Awareness

Campaign are appreciated. Tax receipts are available for donations over \$25; please contact our office or visit one of our many events for more information. The prize money for the Pledge Competition has already been included in our existing budget.

How can I reach the CCEAC staff for more information?

By phone: (519) 888-4567 ext. 2182
By email: cceac@uwaterloo.ca
In person: The UWSP office in SLC 3102

Visit the Climate Change Education & Awareness Campaign online at climate-change.uwaterloo.ca

Climate Change Talks

The Climate Change Education & Awareness Campaign is hosting numerous lectures and seminars to promote awareness on the various facets of the problem of climate change and how individuals can work to prevent it. Brown Bag lunch seminars are open to staff, students, and faculty daily in various rooms across campus. Taking place over the lunch hour (12:10 - 12:50), they offer a wonderful opportunity to learn while enjoying your lunch.

The CCEAC also continues to promote public lectures every Monday morning from 10:30 a.m. - 12:30 a.m. in AL 124. The series is also offered for credit to third and fourth year students as GEOG 475 (topic 002) or GEOG 675. The course focuses on current topics in climate change from a Canadian perspective and

brings in numerous guest speakers to talk about the broad range of issues.

CCEAC - Brown Bag Lunches	
Friday, February 27	PAS 2083
Monday, March 1	RCH 307
Tuesday, March 2	RCH 205
Wednesday, March 3	PHY 235
Thursday, March 4	MC 1085
Friday, March 5	OAS 1229
Monday, March 8	RCH 307
Tuesday, March 9	RCH 205
Wednesday, March 10	PHY 235
Thursday, March 11	MC 1085
Friday, March 12	PAS 1229
Monday, March 15	RCH 307
Tuesday, March 16	RCH 205
Wednesday, March 17	PHY 235
Thursday, March 18	MC 2066
Friday, March 19	RCH 307
<i>All lunch seminars take place between 12:10 p.m. - 12:50 p.m.</i>	

More Great Northern Concrete Toboggan Race

...continued from Page 1.

Exhibit; a three-hour long event that gave each team a chance to show off their toboggan. After seeing the other toboggans, the Waterloo team became confident that their design would bring about top honours. As the event drew to a close, a group photo was taken and each team was again given a chance to explore the city of Ottawa.

As the day broke on the fourth day, the teams assembled at the bottom of a run-down ski-hill. The Sledi's, dressed as X-Wing Fighter Pilots, would run 15 of 19. Each team was given two cracks at the hill and the best aspects of each run would be taken to tabulate a final score. On their first run, the Sledi's put a "light" flight crew on their sled. Each run required that five members of the team would be required to ride the sled. On their second run, a "heavy" sled would man the controls.

Topping out at a dismal 39 km/hr the team walked away from the hill slightly disappointed. The disappointment would be relieved by the team's incredible braking system however, coming to a complete stop in an unbelievable 3+ metres.

When it was all said and done and the snow had settled the Sledi's would walk away with top braking honours and second overall.

A complete list of the results is

as follows:

Overall Standings

1. University of Calgary
2. **University of Waterloo**
3. University of Toronto

Best Rookie Team - Ecole de Technologie Superieure; *Best Non-Competing Team Overall* - Carleton University Alumni; *Most Improved Team* - University of Calgary; *People's Choice Award* - Ecole de Technologie Superieure; *Top Speed* - University of Toronto; *Most Spectacular Run* - Ecole de Technologie Superieure; *Best Braking System* - University of Waterloo; *Best Concrete Mix Design* - University of Toronto; *Best Toboggan Aesthetics* - Queen's University - S.W.A.T.; *Best Technical Display* - University of Calgary and Ecole de Technologie Superieure; *Best Uniforms* - University of Calgary; *Best Team Spirit* - McMaster University; *Best Technical Report* - Ecole de Technologie Superieure.



Even with all that Civil weight, the Sledi braking system managed to stop in about 3m.



The Return of the Sledi on elaborate display in our nation's capital.

Tactical Nuclear Weapons a Winning Formula

...continued from Page 1.

Engineering) in the Editorial Communications category. He provided an editorial from a personal viewpoint entitled "Tactical Nuclear Weapons: The Right Direction For Nuclear Technology?" Hsiao presented his viewpoint that the current initiative to produce sub-kiloton nuclear weapons has inherent dangers that pose a tremendous threat to the world.

The third first place prize was captured by the team of Robyn Paul, Matthew Cheung, Ksenia Golod, and Jordanna Kwok (Computer Engineering) in the Entrepreneurial Design category. Their M-CED - Mobile Cardiac Emergency Medical Services (EMS) Dispatcher is a system designed to collect and analyze real-time cardiac data for a user. Upon detection of a heart attack, the system sends a wireless alert message to facilitate the prompt delivery of medical assistance to the user.

The Entrepreneurial Design category also yielded a 3rd place prize for UW. Chris Goodall, Sachin Agrawal, Angus



Elliot Smith presenting his first place entry "Adaptive Delay System for Sound Reinforcement" at OEC, February 7, 2004.

Fan, and Drew Morris (Systems Design Engineering) presented their PageTurn Pro, a software system that automatically detects the progress of a musician as they

play from a digital sheet of music. The system automatically turns pages and provides user feedback on mistakes.

In the Parliamentary Debate category,

a second place prize was earned by the team of Adam Kaufman and Melanie Blass (Systems Design Engineering) and a third place prize was earned by the team of Mohit Sharma and Matthew Stevens (Chemical Engineering).

Jay Detsky (Systems Design Engineering) placed third in the Explanatory Communications Category with a talk entitled "Downloading Your Brain". The overriding theme of his talk was the advancements in human understanding of the brain that will lead to the possibility of downloading memories, emotions, and other information stored in one's brain to a computer. This marked Jay's second year of success at the OEC, since he also finished first place last year in the same category.

The first and second place teams will represent UW at the Canadian Engineering Competition (CEC), scheduled for McMaster University during March 4-7, 2004.

For more information, please contact me at dclausi@engmail.uwaterloo.ca or by phone at (519) 888 - 4567 x2604.

POINT VS. COUNTERPOINT

Is our level of reliance on electronic communication appropriate in society?

Taneem A. Talukdar
1N Systems Design

It is estimated that by 2005, 9 trillion emails are going to be sent each day. That's almost 14 times the pieces of mail that will be delivered by the U.S. Postal service this year. Are we dependant on electronic communication? You better believe it. Yet with all revolutions, we embrace this one with a vague sense of worry.

What is it about email that irks folks? Email can't be touched, and its existence is perilously dependant on one click of the delete button. Thus, while we inevitably shift all of our communication to the digital medium, some are painting a picture of catastrophe when our servers and computers fail and our letters and records disappear forever. And so we insist on keeping printouts of records and important letters. This is perceived as being more "real".

What is it about a paper copy that makes it real? Its tangible quality is purely a psychological crutch. Otherwise, it is amazingly easy to lose a piece of paper. Age destroys its integrity, fires and floods have an irreversible effect and we all know about those damned coffee stains.

Email is probably even more permanent and safe than your shoebox or filing cabinet filled with letters: the delete button is usually only the first step in a series of steps before one can manage to completely make a message disappear. Keeping backups is ridiculously easy, and having multiple server backups on computers that are physically located at different places is standard practice. That way, fires, floods and the like are highly unlikely to completely wipe out your information. I have emails and old websites dating back 5 years. I wish I could say the same for paper letters. I have just a handful of really important ones. Maybe.

The thing is that we are social animals. We need to talk, yell and scream at each other. Our entire civilisation can be seen as a struggle to get better at doing this – it started with grunts and drawings on cave walls. It moved on to Caxton's printing press. And then on to letters. It exploded again with telegrams, radio and TV. Email was the next logical medium.

Instant Messaging, Chat and forums have taken this to a new level and the change in the type of language that it being used on these mediums has been well documented. Many despair over the loss of proper English, as phrases like LOL and TTYL become a regular and accepted part of our vocabulary at least online. My question is, what is wrong with this? We have never spoken language for the sake of speaking it – a big part of why Esperanto and Latin are both dead. We speak because it's a good way to communicate, and if we find a faster, better and more textured way of doing it, LOL, why not?

Some decry the lifeless blandness of emails, lacking the feeling and emotion that fills a letter in the mail: its texture, the

handwriting, a whiff of scent, the creases and so on and on. To all this I say: get over it. People said many of the same things about steam trains. In the end however, we are a species that exists to improve itself. Those trains are now found in museums.

The main vague threat however is that our computers and our email systems run on electricity, and one day everything might come crashing down in rolling blackouts. And then won't we regret not having paper copies of everything, haha, told you so. Well, lets consider for a moment – we need communication only when we've first established basic survival capability. To accomplish basic survival, some kind of power source is required. If this is made available, then voila, we can also power for our computers and email.

There were probably Cavemen too who worried about the day they would run out of ochre for their cave walls.

At any rate, massive global blackouts that kill off our main systems and backup systems will probably occur only in the following scenarios:

1. Somebody releases a super bad virus that kills us all
2. The world ends, in a variety of ways
3. The sun goes supernova
4. A rift opens in

space and billions upon billions of aliens flood Earth

In which case, the need for any communication is probably futile so it doesn't matter. Is our level of reliance on electronic communication appropriate in today's society? Yes, absolutely because our use of communication tools that are better, quicker and easier is inevitable.

Dan Foong
4B Civil

When one connects into the world, they almost become dependent on the electronic devices that they need to stay in touch. It has become almost comical when you evaluate the number of devices that the "average" person uses on a daily basis. As a society, we have become completely over-reliant on electronic devices that allow us to communicate with each other. Examining the microcosm of a world that is the University of Waterloo, it is evident that we have become too reliant on our electronic means of communication.

This is completely evident in the Engineering Society, and its practices. For example, many directors have become reliant on the mass e-mail list that has been established to announce their events. The traditional method of posters and class announcements has been thrown out the window and they have fallen back almost entirely on the hopes that people will respond to their mass e-mails. As a result of this reliance many activities go unannounced and participation has dropped to an all time low.

Remember when you used to give someone a phone number so that they could contact you? Well those days are gone. Nine times out of ten, people are trading e-mail addresses instead of telephone numbers. We're losing the touch of human contact that is almost completely necessary for proper human growth.

E-mails aside, as sometimes it is the best way to communicate to a mass of people who are completely wired into the world, let's examine the growing popularity of instant messaging (IM). People spend hours upon hours "chatting" with

friends on IM services. We are becoming ever more reliant on these electronic forms of communication, as they leave a more impersonal touch to everything that we do. There are many that go into withdrawal symptoms if they are not constantly connected to the internet so that they can see what their friends are up to. Although IM has provided a means to connect with multiple friends at the same time, what ever happened to just meeting up at a certain time at a certain place? It seems to have worked in the past; otherwise our parents wouldn't have been able to meet up with each other.


The electronic world has become a drug to so many. Ten years ago, and before the internet became really popular, there were no clinics for users of internet chat rooms or anything else like that. Now, they exist for the sole purpose of helping those that are addicted to this form of communication break that addiction. There's just something not right about requiring rehab clinics for people who use the internet too much.

The internet aside though, as technology makes leaps and bounds forward, forms of communication increase necessary (or so they say). Let's take a look at the use of cellular phones. When the cellular phone was first introduced, it was bulky, cumbersome and not very useful at all, and yet the world some how managed to work. As cell phones became increasingly portable and actually useable, their presence in day-to-day activities increased as well. It is now almost impossible to find someone without a cellular phone. Are these people so important that they must be in constant contact with their businesses? You can find cell phones in the most awkward of places. While at the gym I notice that many exercisers have their cell phones close at hand. Frankly, it doesn't sound very professional if your conducting a business transaction while huffing and puffing on a treadmill, or attempting to lift a weight.

As technology furthers itself and we shrink the global community down, we become more and more dependent on our electronic means of communication. This over reliance can become extremely dangerous if our information networks are ever disrupted. Take, for example, what happened just this past August when the entire power grid for the northeastern coast of North America was disrupted. People were thrown into a mass confusion due to lack of information. No one knew what was going on, and many people became stranded because cell phone usage became unavailable. However, thanks to tried and true methods of communication, people were not injured.

Although we see these leaps and bounds of technology, we cannot continue to rely on these "advancements". Over-reliance leads to instability should something ever disrupt the flow of information.

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



BRIDGING THE GAP
LECTURE SERIES

The PEO and You
Getting your Professional Designation

Presented by:

Noreen E. Calderbank, P.Eng
Manager, Pre-licensing Programs,
Professional Engineers Ontario

Tuesday, March 2, 2003
11:30 a.m. to 12:30 p.m.
CPH 3385

REFRESHMENTS PROVIDED

Presented by the Engineering Society and the Dean of Engineering, Sandford Fleming Foundation and Centre for Society, Technology and Values

The Bridging the Gap Lecture Series is open to all students, staff, faculty and friends.

Fourth Years Celebrating in their Tuesday Best

...continued from Page 1.

it was finally time for the fourth years to receive their Iron Rings. The "day" ended in POETS where 90+ students gathered in the small lounge to symbolically count-down the seconds until the Iron Ring Stag (IRS)! After that, many fourth year students disappeared. Most of them headed home to rest up for the nights festivities, which would prove to be most exciting.

Let's just clear up a few things right now. Most first years and some upper years are unaware of the difference between IRS and IRC. Most believe that IRS and IRC are one and the same; however, they're not. IRC, or the Iron Ring Ceremony, is when fourth year students receive their Iron Rings. It is a very serious time and throughout the proceedings everything is quite ceremonial. What you see during the daytime is not what happens when Iron Rings are placed on working hands.

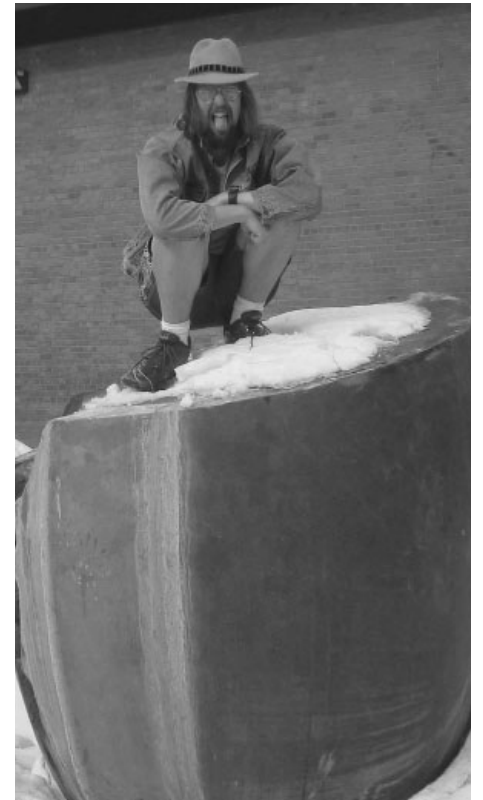
Starting at 4:30 and lasting until well past the scheduled ending of 7:30, each and every fourth year student lined up to recite the Oath and receive their Iron Rings. A very solemn time, each student must swear upon their honour and cold iron that they will uphold the high standards of the Engineering practice.

With that, it was time to REALLY celebrate the day. With the sun going down, and the night growing young, the newly ringed engineers headed for the Wax to celebrate. Through the use of shuttle buses, party goers were ushered from the University campus to the Wax.

Dressed in their Tuesday-best again, but not for long, it would be an event that many would not remember, but that all would cherish. Once arriving at the Wax and checking all coats, bags and dignity at the door, something even odder happened. If you are or are not aware of what happens at IRS,

frustrations are released through the imbibing of beverages of a refreshing nature and through the removal of tight constricting articles of clothing.

For being able to celebrate such a joyous occasion with our equals and our betters is something that I think that none of us will ever forget.



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

REMINDER

Debates

Please contact your department undergraduate office if you are interested in participating in the Sandford Fleming Debates. The winners of the faculty finals receive \$100 each and the runners-up receive \$50 each.

DATE **March 8, 9, 10**
TIME **11:30 – 1:00**
PLACE **E2 - 3324**

Finals: Friday, March 12
Noon
Outside POETS (CPH)

Refreshments will be served at the finals
 Everyone is welcome

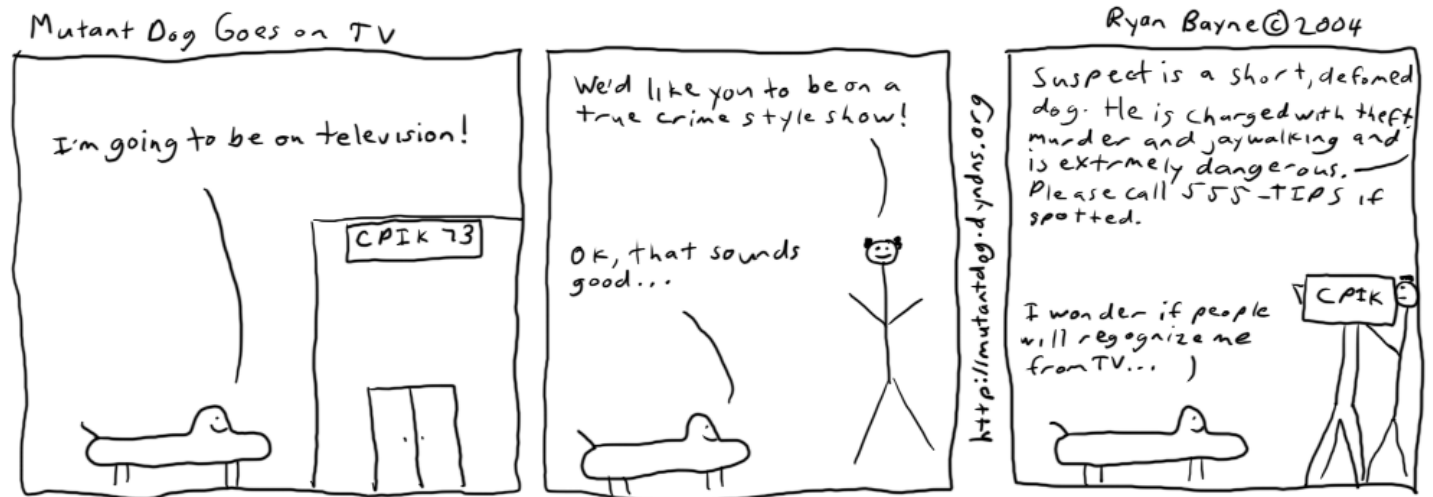
Columns

Bad CDs

...continued from Page 5.

Error correcting software can be then used to to read and rip from the "erroneous" CD. However, the software tended to skip the "erroneous" track. So, this was fine, if I was okay with not getting all of the tracks from the CD (which I wasn't). Another method I stumbled upon while trying to rip my CD at work on a Windows 2K box. The copy controlled CD included a built-in computer "player". After inserting the CD into the Windows 2K machine and loading the player, I found that I could then load my own ripping/playing software and use that to get the music off the CD in a format that appealed to my sensibilities. Of course, this method is contingent upon having that form of copy protection and upon the drive being able to actually read the CD. Since then, I have made sure to gain access to a machine with Windows 2K whenever I buy certain CDs.

Now, I dislike being forced to go through hoops to play music that I have legally purchased. Copy controlled CDs are mostly more trouble than they are worth. Copy protection technology has forced me to download music off the internet. Recently, this technology has also influenced my buying decisions: I have pretty much given up on buying copy protected CDs unless I really like the artist and feel that they are worthy of my monetary support. The technology is flawed and needs to be fixed. It still doesn't prevent ingenious users from copying and distributing music on the internet; rather, it does the exact opposite as users flock to find digitized forms of music they legally own. As I follow the CRIA fight against music sharing and copy protection, I long for the day when the CRIA realizes that digital music is the future and when copy protection is no longer my enemy.



Important March Dates from CECS

March

Mar 1: IMPORTANT: Due TODAY or earlier

Hand in one copy of your résumé package along with a completed Continuous Phase Referral form to the Paging Desk, Ground Level, TC by 4:00pm
JOB POSTING #3 EXPIRES at 8pm

Mar 2: JOB POSTING #4 AVAILABLE by 12 noon

Mar 3: JOB POSTING # 4 EXPIRES at 8pm

Workshops:

Job Search Strategies

Learn the "how to" of the job/work search, networking, and employer research. Creative and traditional methods will be explored. Note: Much of this information is similar to the Co-op 101 Job Search session. Co-op students should attend only if they need a refresher.

3:30-5:00pm TC 1208

Mar 4: JOB POSTING #5 AVAILABLE by 12 noon

Workshops:

Interview Skills: The Basics

Learn the fundamentals of successful interviewing. Note: Much of this information is similar to the Co-op 101 Interview Skills session. Co-op students should attend only if they need a refresher.

2:30-3:30pm TC 1208

Interview Skills: Preparing for Questions

Discuss and learn from taped excerpts of actual interviews.

3:30-4:30pm TC 1208

Mar 5: JOB POSTING #5 EXPIRES at 8pm

Mar 8: JOB POSTING #6 AVAILABLE by 12 noon

Mar 9: JOB POSTING #6 EXPIRES at 8pm

Mar 10: JOB POSTING #7 AVAILABLE by 12 noon

Mar 11: JOB POSTING #7 EXPIRES at 8pm

Workshop:

Interview Skills: Selling Your Skills

Don't stop at the fundamentals; you must also prove your skills in the interview. Here is your opportunity to practise and improve. 3:30-5:30pm TC 1208

Mar 11: JOB POSTING #7 EXPIRES at 8pm

Workshops:

Letter Writing

Learn how to use letters to your advantage in the job search.

3:30-4:30pm TC 1208

Resume Writing

Discover techniques for writing an effective resume.

4:30-5:30pm TC 1208

Mar 15: JOB POSTING #8 AVAILABLE by 12 noon

Mar 16: JOB POSTING #8 EXPIRES at 8pm

the Iron Inquisition

Leanne Whiteley, 4B Civil

If you were FEDS President, what would be the first thing you'd do?



"Start our plan to embezzle money from the university."

Jason & Simon - 2A Systems



"Being FEDS President is the first step to taking over the world."

Patrick Brown - 3A Mechanical



"Get rid of Jeff Henry!"

Sharon Attwood - 2N Civil



"I'd quit!"

Laura Mooney - 3A Systems



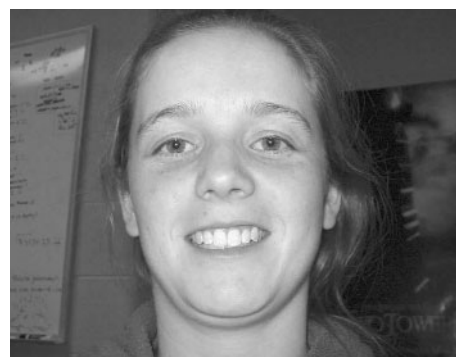
"Go to Hawaii."

Sarah Sirega - 3N Civil



"I'd have a keg installed in my office."

Sheldon Petrie - 3A Mechanical



"I'd ask Jeff to show his belly."

Leanne Whiteley - 4B Civil



"I'd reveal my true identity with a big bang. NOT!"

Boxman - 4N Applied Box Studies