Note: This document is hosted here for archival purposes only. It does not necessarily represent the values of the Iron Warrior or Waterloo Engineering Society in the present day.

the IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

Volume 26 Issue 1 | Wednesday, January 19, 2005

http://iwarrior.uwaterloo.ca/

SHOULD ENGINEERS HAVE A FULL READING WEEK?

PAGE 5

COMMON QUESTIONS ABOUT WEEF

PAGE 9

Touring Local Establishments for Gradcomm

The first Tour de Pub of the Winter term took place on Friday night. Starting at POETS, the tour wound through the University plaza, and eventually made its way to the Silver Spur. This Gradcomm fundraiser drew a large crowd with all years and programs representing. Be sure to catch the next tour in February, and support Gradcomm by purchasing a t-shirt in POETS.

The Truth of EngDating

JAY LIU
4B COMPUTER

If there is something contentious, someone sooner or later will bring it up and cause an outcry. It all started with "The etiquette of engdating" (TEE) last term, and was promptly followed up by the rather aggressive response in "The Upsides to EngDating" (TUE).

To summarize the arguments for those left out of the debate but cannot be bothered to check IW's archive, the main points included

- Whether the girl being smarter than the guy is a good thing: TEE thought smart girls watched Hugh Grant movies. TUE implied that girls existed whose bra sizes were larger than their IQs. (Riiight...) TUE also said that engineer girls are more susceptible to nerdy jokes; yet they have most likely heard those jokes themselves so the effect might be limited, whereas to someone who is not familiar with derivatives might be duped into thinking it is something more interesting. Score: -0.5 for TEE for a weak argument. -1 for TUE for creating a falsely optimistic imagery.
- Whether the girl being with you all the time is a good thing: TEE complained that the girl would be some kind of a bumper sticker, forbidding the guy from any normal social contact, imposing a boarding school discipline. TUE offered a solution to date an engineer in a different class so that they will never ever see each other on campus. Then TUE shot itself in the foot by suggesting that the girl would care more about her homework than spending time with the guy, which is the entire reason why TEE suggested not dating someone smarter in the first place. Score: +0.5 for TUE for almost getting it. This issue is similar to workplace dating, where personal issues may interfere with professional tasks. It is really up to the parties to clearly draw a line between enough and too much.
- Engineering girls drink too much: TEE had the illusion that engineering girls drink more, which isn't necessarily the case. The illusion that engineers drink more than the ordinary arts social animal is just that; an illusion. TUE suggested that—well, what's the word you

Continued on page 11. See TRUTH.

Washing the Blood Away

CHUN LAM
3B CHEMICAL

On December 26, 2004, at 7:59 a.m. local time 150 kilometers off the coast of the island of Sumatra, two tectonic plates heaved against each other. The result—a 9.0 magnitude earthquake generated along the fault line between the plates that displaced hundreds of cubic kilometers of seawater, generating tsunami waves. These tsunami waves fanned throughout the Indian Ocean, creating high speed waves in excess of 10 metres above sea level, heading towards something that would dissipate all this momentum—unfortunately, it was the coastlines of 11 countries inhabited by millions. The cost of the tsunami waves, as of January 12 2005, is an estimated 150,000 confirmed dead, tens of thousands missing, and millions displaced in refugee camps throughout the region. However the nations of the world have banded together in great solidarity to assist the nations affected by the tsunami disaster—the governments of the industrialized nations have, as of January 14 2005, pledged more than $5 billion USD—with Australia donating the most at $1 billion USD to relief and rebuilding efforts in the affected countries. The Canadian government has pledged $425 million, but more importantly, the people of Canada have donated another $137 million and counting from their own pockets as of January 12, 2005; a feat which I'm especially proud of my fellow Canadians for.

Though the loss of life and lifestyle have been enormous, through the destruction of the disaster may come a better life for these affected countries. One of these countries in particular is Sri Lanka. Sri Lanka is a nation of 19.2 million people, and was the second hardest hit nation in the tsunami disaster, after Indonesia, with approximately 40,000 deaths and 1 million displaced persons. The tsunami hit most of the eastern coastline of the nation, from the city of Jaffna in the north to the southern resort towns. Currently, Canada has its disaster relief team, DART, in the city of Amparai in Sri Lanka to assist with relief efforts.

Now how could Sri Lanka benefit from this disaster? Well, the nation has been engulfed in a destructive civil war since 1983 between the two major residing ethnic groups: 1. The Buddhist Sinhalese which dominate the south and western regions of Sri Lanka and make up the majority of the population of Sri Lanka; and 2. The Hindu Tamils who reside in the northern and eastern parts of the nation. In

Continued on page 6. See SRI LANKA.

"You get married to your group members, and a certain percentage of marriages end in divorce. So we're holding a G-session to help you have a happy marriage." — Prof. Seviora

Letter from the Editor

JIMMY SKOFIELD
EDITOR-IN-CHIEF

It was only as I began to put together this first issue of *The Iron Warrior* of the Winter 2005 term that I came to realize just how much work is involved in producing a newspaper. This is my fourth term being involved with *The Iron Warrior*—I began as webmaster in my 1B term, later took on the layout editor position, and then volunteered to be editor-in-chief this term. However, in all my previous experience working on the newspaper, I had been relatively well-insulated from the stress of meeting publishing deadlines and the trauma of trying to sufficiently calm a group of hyperactive engineering students so as to conduct a meeting. (Perhaps the free donuts and drinks used to bribe people to attend the meetings provide too great of a sugar high.)

I would like to take a moment to detail the process by which this paper is produced. I hope to fill in some of the grey areas that are likely unfamiliar to most.

After some initial anxiety about taking on the EIC position, the first meeting went well, as ideas began to flow and staff members enthusiastically volunteered to write articles. As the week progressed, those articles slowly began to arrive, along with some advertisements, and much to my amazement, nearly everything was on time for the Friday deadline.

The process by which a collection of freshly written, unedited articles transforms itself into the paper you are presently holding is often seen to take place like magic. In fact, it is quite a formidable task. After articles have been submitted, each one goes through a minimum of two proofreads, and must be meticulously laid out.

Most people I know despair at the thought of doing layout. Personally, I am one of those weird individuals who would almost go as far as to say I enjoy it. In its simplest form, laying out a page involves drawing a collection of boxes on a blank sheet and filling those boxes with text or pictures. However, as anyone with yearbook or newspaper experience knows, the task becomes quite complex when none of the content fits within the size of the boxes drawn. After resizing everything so that the content fits, you find that either the text is flowing off the margins of the page, or more commonly, a gaping hole of white space is stuck in the middle of the page.

The manipulation required to get everything to "just fit" reminds me of a logic puzzle where the goal is to take a set of oddly shaped plastic pieces and arrange them so as to form a perfect square. There is generally one simple, yet evasive, solution, and a multitude of uglier solutions which invariably involve cutting the pieces into bits and using copious amounts of glue to get everything back together. With page layout, when you find the "right" solution, the eye flows naturally across the page, from one article to the next. When layout isn't done right, you typically spend a couple seconds staring at a cluttered mess, trying to make sense of it, before flipping on to the next page. While I do my best to make the page look good, I confess that I don't always succeed.

Although the content and the quality of the articles are most often the standard by which the entire paper is judged (and I am grateful to have so many talented and dedicated writers working on the paper this term), the layout also plays an important role. Many people *do* judge the book by its cover, and the quality of the layout and design can easily determine how much of the paper somebody will read. Also important, the perceived quality of the paper can have a notable impact on the number and size of advertisements we receive.

As Friday afternoon comes, I begin to put the paper together. After drawing up a rough outline, it appears that there is enough content to fill 16 pages. I'm relieved. The work continues throughout the weekend, and with each page taking, on average, an hour to complete, there is plenty of work to be done. Dan, Gabriel and Mike help with layout and proofreading over the weekend.

By Sunday night, ten of the sixteen pages are nearly complete, although several empty blocks remain as placeholders for the few straggling articles which have not arrived. It appears that my original layout plan was somewhat overly optimistic, and I will need to find some dreaded filler to complete the last of the pages.

On Monday, work continues on filling in the blanks. The missing articles arrive, and unsurprisingly do not fit in the space I had reserved for them. After spending most of the afternoon working towards the remaining six pages, we break for our weekly staff meeting, where the discussion shifts to planning for the next issue, which will be published in two weeks.

As the night progresses, the work nears completion. The night custodians occasionally venture a curious glance inside the office. Soon, all that remains to be done is to write the letter from the editor, which I can procrastinate on no longer. My roommates (Rob and Sunit) drop by some time later with snacks, and proceed to rummage through the boxes of archived photos in the IW office.

Some people often ask me why I bother to get involved with things like this. Surely a Waterloo Engineering course load is enough work to keep me busy. For me, I simply wouldn't be satisfied with merely trudging through my five years here without doing anything other than attending class and studying. I firmly believe that you get out of life what you put into it. My experience at Waterloo has been much more enjoyable as a result of my involvement with *Iron Warrior* and the other non-academic things I do.

If you're still with me after that rambling, incoherent spiel, you may notice on the credits bar to the right that there are several vacant positions. To give a brief description, the advertising manager is responsible for working with businesses to obtain advertising contracts for the paper. The distribution manager oversees the distribution of each issue of the paper. And the technical editor is responsible for the upkeep of the computer in the office and resolving any support issues. If you're interested in taking on any of these positions, or helping out with the paper in any other way, please drop by our weekly meetings on Mondays at 5:30 in CPH 1323B, or drop me an email at iwarrior@engmail.uwaterloo.ca.

Questions? Comments?

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

iwarrior@engmail.uwaterloo.ca

the IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

Editor-in-Chief
James Schofield

Assistant Editor
Dan Arnott

Photo Editor
John Olaveson

Layout Editor
Gabriel Chan

Technical Editor
[Vacant]

Webmaster
Cindy Bao

Advertising Manager
[Vacant]

Distribution Manager
[Vacant]

Offstream Editor-in-Chief
David Yip

Staff

Katherine Chiang
Francis Hope
Chun Lam
Quoc Huy T. Le
Richard Li
LowRider
Christine McCullough
Kevin Quan
Michael Simoes
Edward Tan
Sung Hon Wu

Contributors

Rahul Bhardwaj
Andrew Dodds
Ken Hanes
Jeff Henry
David Johnson
Karim Lallani
Andre Masella
Chris Olekas
Kevin Po
Andrea Rayner
Mike Spendlove

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.
Mail should be addressed to **The Iron Warrior**, Engineering Society, CPH 1327, University of Waterloo, Waterloo, Ontario, N2L 3G1. Our phone number is (519) 888-4567 x2693. Our fax number is (519) 725-4872. E-mail can be sent to *iwarrior@engmail.uwaterloo.ca*

LowRider Comes to B-Suck! Limited Time Offer!

LOWRIDER
4B CHEMICAL

Dear LowRider,

Welcome to B-Soc! I'm so happy that you and your A-Soc friends could come join us. I'm part of the official Welcoming Comittee, and we'd like to do everything we can to make you guys feel at home. Please drop by our office sometime for a slice of Welcoming Cake and some punch. We were hoping to make a big banner to hang CPH or maybe RCH but somebody forgot. That's really unlike us, because B-Soc usually has soooooo much spirit! You can't spell Best without "B"! See you later, A-Soc gater!

—Perky B-Soc

Dear B-Suck,

You guys are sketchy to the max. I'm perfectly happy hanging with my A-Sock posse, thank you very much. I'm glad you botched the banner, because I hate all the buildings that aren't DWE and EL. What's with you guys? Jeeze.

—LR

Dear LowRider,

I am totally bummed right now. Last term I tried so hard at classes and making my resume but then I didn't get any interviews at all. I applied to all sorts of really interesting jobs, and did lots of networking, just like we learned how to do in Co-op 101.

Now it's January and I have no hope of getting a job at all. I fell sad and also depressed. What can I do?

—Unemployed Frosh

Dear Frosh,

First of all, let me assure you that you're not the only little Frosh without a job. I'm sure that there's hundreds of you teenagers with no work experience and only a rudimentary knowledge of calculus. So keep up your spirits, because things will improve. You're way better off than a large portion of the people who'll be graduating pretty soon and don't have any chance of getting jobs because they're idiots. Most of them have long forgotten the rudiments of calculus, by the way.

—LR

PS: Feel free to use me as a reference in the future. I have a lot of friends and fans in important places.

Dear LowRider,

I have a girl problem. I thought I'd ask you because you're the man with all the lady friends. I'm about to get ringed and haven't felt the touch of a woman since high school. There was this one time that I got with this Brock chick (you know what they say about Brock chicks). I started the festivities off making her feel real good (I learn from all the movies I watch). This went on for hours. I thought my bad luck had finally run out. But when it was my turn, I left with empty pockets. I couldn't believe it. Please help me! I'm gonna graduate lonesome and blue. Can I borrow some of your mojo? Do you think that my crappy white Honduh Civik is the reason why the ladies run from me?

Heartbroken and Hornie,
—Anonymous Mechie

Dear HH,

That's horrible. You suck. I know exactly your problem. Your car. Maybe you should put a four foot aluminium wing on the back and a sideways coffee can exhaust. I heard they'll give you 14.78930 horsepower at the wheels, cool guy. Loose the car and your life will be saved. Invest in a fine auto with a V and a W somewhere on the back. The chicks will flock. Take it from me, your friendly neighbourhood LowRider.

—LR

PS: I almost forgot. You should get a bandanna too, obviously.

Dear LowRider,

My parents gave me a really horrible sweater for Christmas. My mom spent about 3 months knitting it. It's kind of brown and orange with a big fluorescent green heart on the front that my initials are embroidered on. I really don't want to wear it, obviously, because I'll look like a level 99 idiot. On the other hand, it's really warm and the weather has been really cold when it's not raining or freezing raining. I really appreciate how much time she put into the gift, but I'd much rather have something more practical, like an new pocket protector, or an expansion set to my latest online role playing game.

—Soft Eng with a Sweater

Dear Softie,

I have to take exception to a few things that you said. First of all, I can't beleive that you're calling this pathetic excuse for a winter "cold". Southern Ontario is full of dainty little cream puffs like you and it makes me sick. That being said, the sweater in question sounds like exactly the kind of thing that I would expect a Softie to wear. Especially a B-Sock Softie like you. In conclusion, that was really sweet of your mom and you should write her a thank you note.

—LR

Have a problem? Need advice?
Email LowRider at:
uw_lowrider@hotmail.com

Club DC

EDWARD TAN
3A COMPUTER

Since many of us B-Soc'ers where not here in the fall term, you may have just become aware of the new layout of the Davis Centre library. Yes, it's true, the DC library finally reopened at the beginning of the fall term. Its closure caused many of us a fair amount of inconvenience. For me, its closure meant I could no longer study and had to resort to other activities to pass the time, such as clubbing and drinking. I was very enthusiastic about the reopening of DC because it meant I could resume my studying, or so I thought.

Upon entering, you may notice that the library seems more open. This is because all of the study desks have been moved to the center of the library and all of the bookshelves were pushed to the sides. Most would see this as an improvement, and if you were to visit the library now, you would most likely agree as well. However, my work term was in Waterloo this fall. Around the time of final exams, I decided that I would visit DC and mock the people who had to study for their exams.

To my disappointment, my mocking was completely drowned out by the noise in there. Since it was exam time, the library was packed with people. Unfortunately, unlike with the old layout, where the study desks were separated by bookshelves, which muffled some of the noise, this new layout only amplified the noise level. With everyone congregating in the same place, people had to talk louder than the people around them in order to be heard. DC now seemed more like one big coffee shop, or a club for socializing instead of studying.

Unable to derive any entertainment from mocking people, I decided I would play with one of those many new computers that they installed. Those beautiful 17 inch LCD monitors were just calling me. Little did I know, that those monitors were attached to a 551 MHz processor. That's like installing chromed rims on a Pontiac. Did someone think that they could fool us into thinking they upgraded all the computers simply because they replaced the old monitors? Maybe they could get away with something like this at Dana Porter, but this is DC. This place is filled with Engineers, Mathies and people who attend Star Trek conventions.

I think this change was a huge waste of money, money that could have been put to better use. We could have smaller classes, more TAs who speak English, or a lowering of our tuition. Instead, all of this money was spent on bringing us Club DC.

The author is unimpressed with the slow computers and the congested layout of the new Davis Centre library.

Letter to the Editor

Dear Iron Warriror,

(In consideration to other editors and readers of the newspaper, please turn off your cellphones and pagers while reading.)

In the last editorial of the spring '04 term, the previous editor-in-chief commented on the human noise of his class during lectures, and how it can be incredibly distracting and shows a lack of respect to the lecturer as well as fellow students. However, the act of talking in class has existed as long as the institution of school itself. In my letter, I'd like to bring the readers' attention to the development of technology.

The widespreadness of cellphones today makes it impossible to stop the students from using them as a communication tool. Yet, carrying such devices to class without turning them off or switching to vibrating mode seems nothing less than a lack of consideration.

Should one fail to observe the above etiquette and be reached on his or her cellphone during lecture, an apology is definitely in order following turning off the device. To my dismay, that has not always been the case; or worse, the individual in question, after checking the caller ID, "hello"ed his or her way out of the classroom. I can't even begin to stress the disrespectful nature of such behaviour.

As theatres, concerts and some restaurants (e.g. ByMark in Toronto) enforce the no-cellphone policy among their patrons, I think all students should realize what the decent handling of the situation is.

Yours truly,
Jill Hates

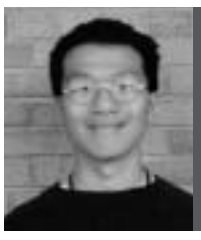
Editor's response: *Thank you for your letter. The pervasiveness of cell phones is indeed becoming a significant annoyance. My lectures are frequently interrupted by the sound of a ringing phone. While the professor may continue to lecture as the offendor rummages to find the device, which ostensibly is burried at the bottom of his bag, it is nearly impossible to follow a multivariable calculus derivation with Outkast's* Hey Ya! *blaring in the background.*

One of the more memorable moments in my lectures occurred last term. When the student's phone started to ring, the professor asked if he could answer it. The student handed his phone to the instructor, who then proceeded to carry on a conversation with the student's friend in front of the entire class. In another situation, a professor's phone rang while he was lecturing.

While it may be tempting to ban cellphones in lectures, there are legitimate reasons why a student may need to be reached during class time. In these cases, common courtesy dictates that one should turn off the ringer, and discretely leave the class before answering the phone.

—JLS

Sage and Pointless Advice on Co-op from an Old-Timer



SUNG HON WU
4B COMPUTER

Being in 4B has its advantages; one of them is knowing the co-op system pretty well. There is plenty of advice about co-op for students going for their job or for students going to their last work term, but I will add my two cents.

The first point I would make is on resumes and interviews. On resumes I have one piece of advice: look at other people's resumes! I cannot stress it enough, looking at other people's resumes lets you see what they did better than you, whether it is the look of the resume or its actual content. Look at as many as you can. Before co-op had Jobmine, I used to look at discarded resumes people had thrown in the recycling bin, just so I could see where mine fell short compared to theirs. It is good to have other people critique your resume, but doing a critique on yourself can generate far greater returns. Also, for all those first time job applicants, if you think you have not much to put on your resume, think back to your university application, you had to put all your high school and extracurricular achievements on it. Surely something from there can be put on your resume.

On interviews, I do not interview well so I have few things to say. One is at the end of an interview the interviewer will ask "do you have questions". If you cannot think of any do not ask just for the sake of it. I have noticed in myself (hopefully it is restricted to me) that I will ask a question so there is one, and the question that comes out is an odd question that sinks the interview. The other thing is to figure out what types of questions the interviewer is likely to ask. For example, big tech companies such as Amazon.com, Microsoft, and Qualcomm like to ask programming questions for developers, like "show me how to reverse a link list," "how to create a counter in VHDL," or "what's the advantage of this algorithm versus another algorithm." Another example is for the program manager position at Microsoft. Those interviews tend to consist of design questions, such as "how would you design a reliable thermometer." At other companies, the questions can be more experience or HR based, like "what was your favorite project ever," "what are you weaknesses," or "how do you deal with difficult coworkers." Figuring out the types of questions can help you relax during the interview by knowing what to expect and to give better answers to the questions asked.

My second point is about the types of jobs ECE students and techies can pursue. This is something I think a lot of 4B people would have found useful if they knew in first year. The first type of job is the crappy one; unfortunately, it is also the most common one for first and second years. Usually most ECE students will have one these before they graduate. Its common characteristics include sitting in the office doing nothing related to your education, bored out of your mind because the work could be done by any 15 year old, not a highly intelligent ECE student! My one consolation to those who end up with this job is this: you are not alone, it will happen to most ECE students and you will eventually get a job deserving of your intellect! Also, try and actually be cheerful and work hard at these jobs. Often you will rewarded with a great evaluation that can help find dream jobs in later work terms. However, sulking through such a job (as I have done) can sometimes earn a bad evaluation that makes it hard later on to get a better job.

"Figure out what types of questions the interviewer is likely to ask. Big tech companies like to ask programming questions for developers."

The second type of job is the technical job. For ECE students, this usually means four fields, software, hardware, IT, and manufacturing.

Software jobs are the most popular technical category. They are also the easiest technical jobs to get. The fields of software are so diverse; it can be embedded software, application software, database, games, etc. Famous software companies that hire coop students include Microsoft, Google, Amazon, EA, the big Canadian Banks, Qualcomm, RIM, and IBM. Usually the American companies will only consider hiring students that are finishing their 3A terms and beyond, with the only exception being maybe for the top ten students in each class. So if you want to get into this sector early, apply to Canadian companies in first and second year. My last impression of the software industry is that it is relatively stable. Since the cost of producing software is low (usually dominated by the cost of having employees), they weather economic downturns easier then in other industries.

Hardware jobs are the second most popular category; they involve some type of digital hardware and understanding of semiconductors. Popular companies that hire students are Qualcomm, Nvidia, ATI, SUN, and RIM. My perception of this industry is that it is an elite industry. Unlike software, a lot of specialized knowledge is required to get into this field. There are not many positions in the industry (even fewer in Canada) but it can be a very lucrative field to get into because so few people have the skills and knowledge required for it. Knowing what I do now, I say only students who have finished 3A or 3B should seriously consider applying to job in this field (even 3A may be a bit early). Students in 2A or 2B do not have the requisite knowledge to get one of these jobs. Also, the hardware industry is very cyclical—there can be periods of prosperity followed by intense downturns.

The third technical field is IT. This usually consists of desktop support of some sort. On the plus side, this job is a support role, so there can be long periods of time where very little is done. On the minus side, it can be incredibly boring and give a feeling that you are not learning anything.

The fourth technical field is manufacturing; these jobs usually tend to focus (in Southern Ontario) on cars and car parts. Not knowing much, the jobs usually involves designing parts and machinery. One thing to note is that manufacturing as a percentage of the economy has been shrinking for the last 50 years or so even as its total value has increased. It is a similar trend to farming. You can still find good and great jobs in this sector, but the future sometimes seems less bright than other sectors (perhaps I am biased against this sector because I have not been in it).

One important note about technical jobs: although co-op in theory lets us try all these fields and see which ones we enjoy most, in reality it can force a person down a certain field. The reason being that once a student has gained a certain expertise in IT, for example, in future work terms they will most likely get IT jobs because that's where they have the most expertise. That is why it is important to figure out which field(s) you actually enjoy, because if you realize you rather do something else like hardware, it can be a very hard task to switch fields.

Technical jobs are a big portion of what ECE students will end up doing, but a significant portion of ECE students will eventually find out they do not enjoy technical work at all! It can be for a lot of reasons—some people find that coding at work can get boring and repetitive one you have done it for a couple of terms. Some people realize they hate working in a cubicle with little interaction with other people. For these people, there are usually two routes, research or management.

Research is very technical, but it is separate since it is very different from normal technical jobs. One difference is that it does not pay off in terms of money, for example, a co-op term working for a professor can earn a student anywhere from 1800-3000 / month, which is fairly low compared to getting a job at a company. And the pay for graduate studies is not much better. So to go into research you must have a passion for learning and for research. Sometimes it is a good idea to figure out if you like research by doing a co-op term with a professor. Therefore, if you find research is not your cup of tea, it will not take you two years to find out by doing a masters, but only four months. Also, research during a co-op term can teach valuable skills that come in handy for getting that dream technical job. Another option is to get into the research department of a company; that way you can earn more money while doing research. An example would be Altera in Toronto.

The last route is management; I have no knowledge about this field.

Finally a piece of encouragement, to all those who despair of ever getting a good job or even getting a job at all. I've had my share of disappointment, including getting really really crappy jobs, really poor paying jobs, and almost not getting a job. But eventually, I actually had an interview with Microsoft for my fifth workterm… and I blew it badly! Never in my dreams did I think I would get another chance to work for Microsoft on my last work term and that I would actually get it! So remember, even if you don't get the opportunity this term, the same or even better opportunity will come along eventuall.

UW Students Storm Through Downtown Toronto

(Like Technology Crazed Zombies)

DINU NESAN
CUTC ORGANIZER

By the end of this week, the halls of the engineering buildings will be a little less crowded. Starting Thursday, January 20th, over a hundred UW students will head to downtown Toronto for the sixth annual Canadian Undergraduate Technology Conference. A staple of the academic year for many students, the CUTC is organized by UW students, and has grown to amazing heights. This year's conference will bring together over 500 students from all over Canada, ranging from coast to coast. These bright minds will get to meet dozens of speakers from all across North America, as well as company representatives from major industry leaders.

This year's conference is revamped and revitalized. With major sponsorship from Bell and Microsoft, a host of new events have been planned. Chief among these is the Canadian kickoff for the Imagine Cup competition. The Imagine Cup is an international challenge designed to blend creativity and technology, as well as inspire a generation of future leaders to think about innovation in the world today. Winners get a chance to travel to Japan and compete for huge prizes.

Among the major speakers present at CUTC this year are Amazon CTO Allan Vermeulen, IBM VP Alan Ganek, and Joel Spolsky, of joelonsoftware.org fame. These are just a handful of the great speakers who will be speaking to delegates at the three-day conference. Delegates will also have the chance to attend workshops—topics include developing for the Blackberry platform (a workshop designed by RIM), and a tutorial for creating an appealing resume. Christopher Tan, CUTC's co-chair this year, says, "The CUTC is such an amazing opportunity for students to gain an experience far beyond anything else available. The chance to interact with and learn from these industry giants is like a graduate course in technology!"

Major sponsors for this year's conference are Bell, Microsoft, and RIM, with other contributions coming from IBM, Deloitte and Nortel. To those who plan to attend CUTC, be sure to bring your resume, you never know who might be there! For more info on the conference, or for how to help organize next year's event, head to www.cutc.ca.

POINT VS. COUNTERPOINT

Should Engineers Get a Full Reading Week?

DAN ARNOTT
2A ENVIRONMENTAL

Lately, there's been talk of extending our two 'reading days' into an actual full reading week. I believe that this is an excellent idea which deserves the full support of the student population.

There is little doubt that engineering students are some of the hardest-working on campus. Between assignments, labs, projects, and the ever-present shadow of co-op, there is always something for us to do. Stress levels are high, and tend to peak around midterms, when our usual workload is supplemented by having tests to write at night. And although midterms are less prevalent in upper years, they are still an important consideration for younger students, who must work extra-hard to rise above the stress in 1A and 1B. A full reading week would provide a period of post-midterm relief, a time to catch up on assignments and studying, and a chance to prevent unnecessary burnout. Are two 'reading days' really enough to accomplish these objectives? Perhaps in a limited sense, but two days definitely do not give engineering students the downtime they need.

With two 'reading days', we're back in classes while the rest of the campus (with the exception of the Mathies/CS students) is off doing as they please. This is a concern for several reasons. One, it is damaging to our morale to see friends and acquaintances in other faculties still without classes, while we're back at it. It becomes more difficult for us to focus on our academics when it would appear that 'they're all out there having fun without us'. Also, it is somewhat damaging to our image as well. We are seen by other faculties, and no doubt by other schools, as a bunch of reclusive workaholics who can't be bothered to close our textbooks and take a look around us. Although this may be a point of pride for us, and could be viewed as an assertion of our academic superiority, it does little to foster the already-sickly inter-faculty relations here at the U-Wat.

One potential concern is that if students are given a full week, they will use their time irresponsibly, i.e. partying, drinking, disregarding all things academic. And ultimately, at a University level, what students do with their time is up to them. But in the Engineering faculty, we all know how important our studies are by now, we know how much we're paying for them, and we know how to manage our time. Sure, we may party a little harder than the average faculty, but we also study harder too. If we are given a full reading week, time management will be no more of an issue than it already is.

"It is also important not to neglect the social aspect of University life. It isn't always about getting the best marks—sometimes there are connections and friendships to maintain."

It is also important not to neglect the social aspect of University life. It isn't always about getting the best marks-sometimes there are connections and friendships to maintain. An extended week would give students additional opportunity to visit with family or meet up with friends from different schools or cities.

Another concern is that a full reading week will mean less of a gap between the end of lectures and the beginning of exams. Granted, this doesn't sound too appealing. But there are other factors which one must consider. An extended reading week means more of a chance to study and review pre-midterm material, an overall better knowledge of concepts, and a refreshed mental attitude for post-midterm material. Students will be more comfortable with the earlier stuff, and will have learned the later stuff more effectively. And although the time between lectures and exams will be lessened, it will likely be spent more effectively on reviewing rather than on scrambling to learn new material which was ignored during the term due to insufficient time for independent study.

Wrapping up, a full reading week will reduce our stress level, improve our morale and image, allow more opportunity to maintain our social connections, and possibly even help us learn our stuff a bit better. And besides all that, I mean, it's a week off, for cryin' out loud! A week off! Come on. Come on!

FRANCIS HOPE
3B ELECTRICAL

Many of you are aware that the Faculty of Engineering is thinking of extending the reading week form two days to five, or a whole week. Now this may seem like a good idea at first glance, but look at the impact it will make on the rest of the school semester.

Currently, the mechanical engineers have a full week for reading week, and they still have to have the lectures that they would have had if the reading week were shorter. This means that they have to make up the time by scheduling in lectures in at other times. This can lead to missed lectures or inconvenient class times due to scheduling issues.

And let's say that the department decides that they do not want to make up lectures. This means that there are three possible outcomes for this: one, that we have a longer semester that cuts into our break to make up the lectures; two, that the professors have to cram classes with more information per lecture to compensate for the missed lectures; or three, that less material is covered in the course. For the first case, I love to have time off to unwind after a long semester, so I don't want my term to be longer. Hell, I want to get out of Waterloo as fast as possible. Cramming more information per lecture is crap because you don't have time to absorb the information in class. The third option is also not desirable, because the University does not have as comprehensive of a program, which is not desirable for graduating students.

So I have no idea why extending the reading 'week' to a full week would be beneficial, except to have some more partying time. Which I have to agree is welcome.

Sri Lanka: Ethnic Ignorance Must Be Put Aside

Continued from page 1

1970's, the Tamils formed a militant group called the Liberation Tigers of Tamil Eelam (LTTE), a group currently deemed a terrorist group by the U.K., USA and Canada, that is known for its use of suicide bombings tactics, and known by human rights organizations to forcibly recruit and use child soldiers. The LTTE have waged a guerilla war against the Sinhalese Sri Lankan government in the hopes of self autonomy in the Tamil dominated northern and eastern areas of the country. Since war began at least 60,000 people have died as a result of the fighting and leaving the nation economically depressed.

The reason for hostilities between the two ethnic groups stem from the nation's time as a British colony. When Britain gained control of the island; it transformed the island into a major tea and coffee producer. The labor needed to maintain this manufacturing operation came from the minority Tamil population; the British even went to lengths in transporting Tamils from the Indian province of Tamil Nadu to the island to increase labor capacity. However in the process the British ignored and marginalized the majority Sinhalese on the island. Hence, the seeds of resentment were planted among the Sinhalese from the British administration's favoritism towards the Tamils. For more than a century this resentment grew among the Sinhalese, and eventually blossomed after the Second World War when Sri Lanka became an independent nation in 1948. After 133 years of repressive British rule, the Sinhalese saw an opportunity to assert Sinhalese rule over the island. From 1950's–1970's, Sinhalese nationalism asserted itself on the island. This wave of emotion led to economic and social repression/discrimination against the Tamil minority as a punishment for collaborating with the British. The Sinhalese bullying eventually led to Tamil militancy and ultimately to civil war.

"Both the Sinhalese and Tamil populations have suffered enormously and need to put aside their ethnic differences"

In recent years the Tamil and Sinhalese have made strides to end the civil war and to co-exist. Strides were made in 2002 when the two groups signed a ceasefire agreement, paving the way for peace talks. During the peace talks, concessions were made by both sides in the form of the Tamils agreeing to drop a demand for a separate homeland and the Sri Lankan government agreeing to a power sharing concept with the Tamils. However, those peace talks were put on hold when the Tamil delegation left the peace talks in 2003 and haven't restarted since; with tensions rising again, the perpetuation of civil war looms.

However, in the wake of the tsunami disaster, both the Sinhalese and Tamil populations have suffered enormously and as a result need to put aside ethnic differences and work together in order rebuild the country. However, this has not been the case; in the weeks after the tsunami disaster, the ethnic tensions boiled over during UN General Secretary, Kofi Annan's trip to survey damage in Sri Lanka. During that trip Kofi expressed a desire to view Tamil populated regions of Sri Lanka, but that request was rejected by Sri Lankan government. This ethnic ignorance must be put aside by both sides, or Sri Lanka will consume itself into a more pestilent, backwards nation. I hope the tsunami doesn't lead to another disaster in Sri Lanka.

Preparing for the End of the World

GABRIEL CHAN
2A SYSTEMS

Recently, one of the most powerful earthquakes of the past century occurred underwater near Indonesia. The result was the most destructive tsunami the region has ever seen. The death toll is at least 150 000 and rising. It is estimated within the next few years, natural catastrophes will bring unprecedented destruction to all corners of the earth, unless we…

"The only foreseeable disaster ... is a hole in the ozone layer, like the one threatening to turn Antarctica's penguin colonies into KFC's next big source of 'raw materials.'"

No, no, no! Stop there! Enough of this bullshit! Yes, the Aceh Earthquake was indeed the fourth largest earthquake recorded in the last 100 years. Yes, lots of people died. No, the world is not coming to an end. The media has a habit of exaggerating their reports. In their pursuit for profits, they tend to overlook other things. And unfortunately, the rest of the world follows them like a dumb herd.

NASA recently released a report (because they are not doing anything else useful nowadays) describing how the earthquake changed the planet's shape and how the resulting tsunami changed the planet's rotation. Because of the changes, the "mean North pole" was shifted by about 2.5 cm in the direction of 145° east longitude and decreased the length of day by 2.68 ms. Stay calm everyone: very small number divided by very big number is zero. The world is not coming to an end. QED.

The only foreseeable disaster to occur in the near future is a hole in the ozone layer, like the one threatening to turn Antarctica's penguin colonies into KFC's next big source of "raw materials". A few days after the tsunami, I saw a report on BBC news that several scientific communities have warned the world not to be distracted by the recent disaster and not lose sight of more pressing concerns, such as the continual pollution of the earth. And not surprisingly, they were ignored. Half the world does not care about the imminent disaster, including the world's biggest polluter. This shows that the human race is capable of global unity—that is, only after shit has hit the fan.

As for tsunami defence, that problem is already addressed; and the solution was already available: the UN has ordered a $30M tsunami warning system to be installed in the Indian Ocean, similar to the one in Pacific Ocean that has protected Japan for over half a century already. The Pacific system consists of a pressure sensor at the bottom of the ocean and a buoy on the surface. The sensor, measures the height of water above it, will detect a pressure increase if a tsunami passes over it, which it will send a signal to the buoy, which relays it to a satellite and a warning centre. As is with most things in the world today, the limiting factor is not in engineering, it is in politics.

Hopefully, Earth's leaders will cooperate to save the planet from more serious threats before it is really too late.

More Than One Humanitarian Crisis

CHRISTINE McCULLOUGH
2N CHEMICAL

In these past few weeks, I know you have been bombarded with appeals for money to help the victims of the Tsunami in the Indian Ocean. Hopefully you have found some way to contribute to the cause. And you can feel good about that, having reached in to your pocket to help out those less fortunate than yourself. But here's the kicker, the crisis isn't over and the worst part is that there isn't just one crisis that needs your help, there are hundreds of charitable organizations that need your help urgently.

I understand that with all the publicity surrounding the Tsunami, and maybe even the timing of it, it is easy to lose sight of the fact that there are people all over the world dying needlessly of preventable causes. The fact is, though, that for whatever reason, these other humanitarian crises don't even make our nightly news; that many people in Canada don't even know that these other tragedies are taking place. Take for example the AIDS epidemic in Africa. There are five countries in Sub-Saharan Africa in which one in five people has HIV/AIDS. And since the epidemic began in the 1970's over 17 million people have died and over 30 million are currently living with the disease. This is a preventable disease, but the affected countries don't have the resources to educate their own population regarding the spread of AIDS and to thereby stop it. So the epidemic continues. In the Democratic Republic of Congo it is estimated that 3.3 million people have died between August 1998 and November 2002 as a result of the civil war. These deaths are not only from the violence with in the country's borders, but from disease and malnutrition, as the infrastructure of the country has been destroyed. In Sudan, a civil war continues to rage. It has even been recognized by the United States government that genocide is taking place against the Black Africans in their own country. It is estimated that 70 000 people have died at the hands of the different militias. Even within our own borders, people are sleeping on the street and don't know where their next meal will come from.

"Over 17 million people have died and over 30 million are currently living with [AIDS]"

The point I am trying to get across is that even when the appeals for aid to help the Tsunami victims end, our responsibility to help does not. It is important to give funds to the various NGOs to aid in this crisis. But consider your donation as digging deeper, going beyond what you might have given to charity before this disaster. It is important for us to continue to support other initiatives within our own country and abroad. We have so much more than so many other people, even in our own community. So when the EngSoc charities directors run a food drive, support it. And when someone approaches you to pledge them in the Super Cities Walk for Multiple Sclerosis or the Great Ride and Stride for Cancer, do what you can. Even consider giving to the Red Cross, Doctors without Boarders or UNICEF to aid in their other international relief efforts. It is important that we, as Canadians with the means to support ourselves, continue to give in aid of both local charities and international NGO's and not let our support of the Tsunami's relief effort take away from charitable giving to other organizations.

Work-Term in India

International Training Program

ANDREW DODDS
1N MECHANICAL

There was a time when Waterloo's Co-op Education program was peerless. As time passed, competition rose, and now employers have a much greater selection to choose from when shopping for student labour. Once again looking to rise above the rest, UW is continually looking for ways to innovate and stand out, to cement our status as #1.

Our latest innovation comes to aid our Mechanical and Mechatronics Engineering students. Thanks to a lot of hard work by many people, not the least of which is Dr. Sanjeev Bedi, we have the International Training Program. Not only will this give students a more thorough education, but they will be exposed to a whole new world and see a whole new way of life. The 28 students will spend two months, leaving February 9th and returning April 15th, in Patiala, a small town of only 500,000 located in the Punjab province in India's northern point.

The program will place these 28 students on campus in this town of education, home to many post-secondary institutions, at the Thapar Institute of Engineering and Technology. Here they will learn both in class and in an industrial shop Mechanical Engineering skills, including: machining, welding, blueprint reading, electric circuits, CAD, and metrology. As the end nears, they will also do a design project of their own choosing similar to that of all 1A Mechanical/Tronics students, only they will get to experience the actual production and redesign elements that were missing.

While in India, they will be able to experience local culture, both by exploring the local environment of Patiala, as well as trips to Amritsar, Chandigarh, Jaipur, and Agra's Taj Mahal. They will eat only local Indian dishes, live only as the locals would (considering they will live in five Professor's residences on campus), and will be immersed in the Indian culture and way of life in many other ways. They will see, experience, and learn of things they had never before imagined, and to think it's after only one term!

Fear not though, for others might also have their chance to jet around the world before they finish even one year of university. This program, if successful, will continue to be run, offered to ME and MTE first year students to take part in during their first co-op term. Those without jobs as the term winds down will be invited to a meeting about the program, and have the chance to go where others will soon venture, to India, about as far away from UW as one could possibly get. This first attempt had 75 applicants for the 28 spots. Hopefully, with this article, and others that will follow in every issue of the Iron Warrior this term, we can create an even greater interest in the program, and give something for Frosh to look forward to. Next issue: the nitty-gritty details of the program and the lengths participants had to go to in order to participate.

Source: http://hulk.bu.edu/misc/india/places/indiamap.html

Risk Assessment Forms

Benefit or Another Annoyance for Student Societies?

FRANCIS HOPE
3B ELECTRICAL

Due to the ever-changing and evolving policies of the University, it is now making all student societies and people organizing events fill out risk assessment forms for the University. These forms were implemented to reduce ever-increasing insurance costs.

John Andersen, the VP Internal for Feds, wrote "The students' union could provide more for its students in cash and in-kind, if we stop paying outrageous prices ininsurance premiums.

"There is a negative stigma associated with students' unions, and many insurance companies consider student activities to be completely unregulated and therefore of high risk potential." Thus, these forms would alleviate the concerns of the insurance companies and function to lower premiums over time. This would also create checks and balances for any activities in the University, facilitate communications between the different organizations within the University, and help organize events run by individuals by forcing them to plan ahead, said Rick Theis, the Feds Clubs Director.

> ***"Events that go under the radar of the university and its alcohol policy might have stringent guidelines when run, or be completely stopped."***

Making people evaluate the risk of running events would make events that are centred on alcohol high risk, and thus, not popular to insurance companies. Events like these that go under the radar of the university and its alcohol policy might have stringent guidelines when run, or be completely stopped. This may make many societies annoyed at the forms and restrictions given to them by the University. However, Feds is eager to help student groups and organizations. Due to the increased insurance costs, Feds has decided to drop the charges for running first-time services for organizations that would not normally be able to afford them, said Theis. These services include renting Fed Hall for special events and getting extra funds for running events. John Anderson also said, "I have been able to find other ways to help; cross-coordinated efforts, additional funding, or simply identifying how and where students can find the resources they need."

Although having these forms has its benefits and be an inconvenience, it remains to be seen if these risk assessment forms will ultimately benefit the University or simply become another nuisance to the various students and organizations around the University.

Finding Sanity in TC

FEDS Opening Lounge for Co-op Students

JEFF HENRY
FEDS VP EDUCATION

It's almost that time again. You've been applying frantically to jobs for a week and fiddling with your HTML résumé to no end in the hopes you get that interview for your dream job. Or, perhaps, for just about any job.

With interviews starting on Monday, January 31st, many of you will start missing classes and spending those endless, stressful minutes waiting to be paged on the Tatham Centre floor. Perhaps your employer is running an hour behind. Maybe you were lucky enough to get two interviews, but with only 45 minutes between then, there's no point going back to class. Either way, you're stuck in the Tatham Centre with nothing to do but stare up at monitors that won't flash your name for a long time.

Relief is on the Way

When interviews begin, so will the new Co-op Student Services Lounge. Operated by your Federation of Students, the CSS Lounge is located behind the paging desk, around the corner in TC1207.

Waiting in the lounge are couches to relax on and a computer to do that last minute internet check on your potential employer. We even a table for you to do those assignments you've been unable to work on because of all the time you spent sifting through JobMine. Or you can just browse through the latest issue of the Iron Warrior, or numerous other publications we have provided.

So, starting on January 31st, and from 8:30 a.m. to 4:30 p.m. every day, the lounge will be open. Feel free to drop in and regain your sanity in the middle of a ridiculously busy day.

Engineering Society Executive Reports

Welcome Back!

KARIM LALLANI
PRESIDENT

I hope everyone enjoyed their holidays and is back into the swing of things in the Loo. I'd like to welcome all of the new 8-stream first year classes, because they've all switched from A-Soc to B-Soc. I'm sure you'll love B-Soc. A-Soc always says "A for awesome", but here at B-Soc, we say "B for better than awesome"!

If you don't know who the new EngSoc executives are, be sure to drop by the Orifice and introduce yourself to us. We try to be in the Orifice as much as possible, so come and visit us! The first EngSoc meeting of the term is on Wednesday January 19, 2005 @ 5:30 p.m. in CPH 3385. Meetings are held bi-weekly, so try to come to as many as you can.

A good way to keep up-to-date with EngSoc events is to be on the mailing list. To get on the mailing list, send a blank e-mail to engsoc_b_general-subscribe@yahoogroups.com. You don't have to worry about getting spam, because the mailing list is moderated.

There are over 100 directors this term that are excited to provide events and services for you. I'm looking forward to the events that they have in store for everyone. All of the EngSoc events and list of directors is available online at the EngSoc website (http://engsoc.uwaterloo.ca/www). So, if you're interested in a particular event, you can either speak to one of the exec members or you can contact the director directly.

I am thrilled to be your new EngSoc president, and I'll strive to make everything bigger and better this term. I'm learning as I go, so if you have any suggestions for improvements, send me an e-mail or come see me in the Orifice. I hope to see you all at EngSoc events this term!

So Money!!!!

DAVID JOHNSON
VP FINANCE

Welcome back! For those back from a work term, hello and welcome to my first exec report. My name is David Johnson and I'm your Vice President of Finance. Okay, now I'm going to ramble on for a few sentences.

So you paid your money to the Engineering Society because EngSoc does lots of great stuff. To start off all the great stuff EngSoc does, I am going to give away free money!!!! You might be asking your self "how do I get this free money?" Well first you must be an EngSoc director and second you must fill out a budget request form and drop it off in my mail box. Both mailbox and budget request forms are in the Orifice.

The most exciting DAY of the TERM: VERY VERY important Budget Request forms are due Wednesday, January 26, 2005 at 4:30... oo man I can't wait, yess ooo I love it like that!

The SECOND most exciting day of the TERM: Wednesday February 2, 2005, a little after 5:30... The reading of the Budget. Really, does it get any better? I think NOT!!!

Now after the budget is done, directors are going to start spending money. I would like to ask all directors to hand in their expense forms on a regular basis, at least at the end of every month. This way I don't get bombarded with a whole pile at once. If I get them all at once, at the end of the term it may take a while to get them out.

Hang in there! Enjoy the term! Get the Budget Requests forms in as soon as possible!

P**5 Is Where It's At!

CHRIS OLEKAS, CINDY BAO & KEVIN PO
P**5 DIRECTORS

Hey B-Soc kiddies, welcome back for another term. We, Chris, Cindy and Kevin, are your friendly P**5 directors. For you frosh out there, P**5 stands for Paul and Paula Plummer's Points for Participation. It's a system designed to reward participation in EngSoc events and to find out which class is the best! Further information is in The Book, that paperback you have had four months to read.

You must be wondering now, how can I possibly get these incredibly popular points? Besides showing up for engineering related events and having directorships in EngSoc, you can get points for submitting old exams, having a class name or throwing your own insane events.

If we're not cool enough for your box socials, shindigs or candlelight dinners, great stories work too (although you will get more points if we're there for the action.)

For a list of other things you can do to earn points, visit the EngSoc website.

As a little heads up, P**5 points related events which will be coming up soon (or have already passed you poor suckers) include drama auditions, Scunt, OEC, Engweek, and Engfest.

This term, we want to try to keep the website updated with the P**5 rankings, but in a very sneaky way that you'll find out about soon enough.

Also, there are plans for "P**5 Weeks of Crazy Bonuses" where certain "pranks" will be given bonus points if they are executed flawlessly. Be sure to get some sort of approval for these pranks, since distasteful ones will be dealt with swift, merciless punishment.

As most people know, there will be a deadline to submit for MOT. That deadline will be Monday, February 14th, so that you give us poor directors a couple of days to do our advanced calculations to see who will get the middle of term bonuses for being in first, second, and third place. Submitting them even earlier would be nice too.

Event Approval Paperwork

ANDREA RAYNER
VP INTERNAL

Welcome back! I trust everyone had a good fall term, whether you were working or here in school. I'd like to extend a warm welcome to those 1st and 4th years joining our wonderful stream, we promise to show you a good time.

However, along with those good times there is now some paper work. For every event that we plan on running throughout the term, we need to fill out a Fed Event Form and have Feds approve the event. Events involving alcohol, food, and transportation may require a bit of time getting approved. Feds requires the forms be handed into them a minimum of 2 weeks before the event, and for more "risky" events a little more time is suggested.

So, to all of my directors, as soon as the idea of an event pops into your head, drop me a line and we'll get the paperwork going, I'd much rather get it done ahead of time than have us all scrambling around at the last minute.

As today is Wednesday the 19th, it is also the first EngSoc meeting of the term, and I highly encourage everyone to come out and see what EngSoc is all about.

If anyone ever has any questions for me, feel free to e-mail me at bsoc_vpint@engmail or stop by the Orifice between 12:30 and 1:30 Monday-Thursday, I will most likely be there, or in POETS with my lunch!

In closing, I would like to leave you a few words of wisdom: The average human bladder can hold 13 ounces of liquid. Think about that next time you're hanging out in POETS on a Thursday or Friday afternoon!

Online Course Critiques

KEN HANES
VP EDUCATION

Here we go! Another co-op term has finished and most of us are back to the books for the next four months. Hopefully everyone had a great work term and enjoyed their holidays but now it's time to buckle down and get back at it. Although it's not education-related, I'm sure that those of you reading this have noticed the changes to POETS. I just wanted to take the opportunity to thank Stacey Charlton for all of her help over the holidays. She donated countless hours and put up with me, and she deserves a big pat on the back.

The term's off to a quick start as usual. With a bit of luck, (and maybe an all nighter or two), I'm sure everyone's managed to get their workterm reports typed, bound and submitted. The co-op postings are in full swing now, and Jenn Caroll deserves a huge thanks for running the resume critique sessions. She ran three, three hour sessions and with the help of her resume critiquers helped quite a few people with their resumes (hopefully everyone gets a job that much easier). For those of you who don't manage a job in the first phase, we are tentatively planning to run another few sessions near the beginning of the continuous phase.

There are a few major items I want to touch on briefly. First off, over the co-op term, the Dean's Office started a new planning program called "Vision 2010". The basic synopsis is that the Faculty wishes to be the number one engineering school in Canada by the year 2010, and in the top ten of all engineering schools in North America. To ensure this happens, a planning exercise has been started for both the Faculty and each of the individual departments. I will be sitting down with some of the main people behind this in the coming weeks, and as I learn more, I'll keep everyone up to date.

On another note, the development of the PD Eng courses continues rather smoothly. I wasn't able to attend many of the sterling committee meetings over the past four months due to co-op obligations, but throughout the term I will meet with the committee and be better able to update you on the path the new courses are taking. I know that the first two modules were run last term and went well. The four-stream 09 students will be getting into the courses full swing shortly.

Finally, I want to update everyone on the online course critiques. A proposal was written and sent to the Dean's Office for approval by Jonathan Fishbein last term. The approval was accepted and the online critiques are currently being developed. If all goes well, this term will be the first term where all of your course criticism and praise can be viewed over the net, as opposed to walking all the way over to the Orifice. The online records will only be available to students who pay their EngSoc fees.

Conferences!! Conferences!

CHRISTINA WATERS
VP EXTERNAL

Welcome back everyone! We have a fully packed term coming up, with many conferences and events on the horizon. There are three main conferences that people should be interested in, CUTC in Toronto, CUSEC in Ottawa at Carleton University, CSSA in Toronto at U of T, and CIRQUE in Kingston at Queen's University. If you have any questions about these conferences, please do not hesitate to contact me about them.

One very large conference that myself and other exec members attended was CONGRESS. This is an extremely important conference and it directly effects EngSocs across Canada. Please pick my brain about this conference because it was a good time and a lot of educational benefit was derived from it. It also provided rare photo opportunities for ENGINEWS, so be prepared for those issues.

Lastly, I would just like to welcome everyone back and I hope that this term will be a blast for everyone. Cheers!!

Engineering Society Executive Reports

Common Questions About WEEF

MIKE SPENDLOVE
WEEF DIRECTOR

Happy New Year to all engineering students at UW. I want to start by thanking all those that have supported us in the past through membership on the Funding Council, by proposing excellent choices for funding and by contributing each term to the largest faculty-based Endowment Foundation on campus. Every day thousands of engineering students at UW use WEEF funded equipment and benefit from your contributions and effort. My next column will be for you.

On the other hand, today's column is for all those who have obtained their refund and have asked specific questions about WEEF...

First: What is WEEF?

The Waterloo Engineering Endowment Foundation was established in 1990 by two engineering students eager to improve their education at Waterloo. By collecting voluntary contributions from students each term, promised earnings from recent graduates (i.e. The Plummer's Pledge) and donations from Alumni and others, WEEF has grown to a principal of over $5.4 million dollars. Through expert financial management, this money earns interest each year that is put directly towards enhanced equipment for departments, student initiatives including 4th year projects, and computer labs and shared facilities. Spending only the interest on the money ensures that WEEF funding is sustainable and will last through dot-com bubbles, economic crises and short-sighted government policies.

Second: What does WEEF do for me?

In the same way that economists have a hard time measuring quality of life, it can be difficult to explain exactly what WEEF does except to say that it improves the quality of one's engineering education at UW. While some improvements - such as upgraded monitors or faster CPUs in the NEXUS labs - will help by saving you a few minutes each day, others such as GPS surveying equipment, autopipettors, digital oscilloscopes and machinery for the student shop actually enhance your education by not only allowing you to execute tasks more quickly and precisely, but also to build or try things you would not be able to otherwise. Such equipment improvements are now almost always funded wholly or in part by WEEF.

Third: Why doesn't my tuition cover equipment?

If you were willing to use old, outdated equipment like at some other universities, your tuition would cover all equipment costs. However, if you want industry-standard tools for your courses and labs, you have three choices: WEEF, higher tuition or greater governmental support. Within ECE alone, WEEF now pays as much (per student) as your tuition dollars towards lab computers, oscilloscopes and other equipment. If this funding from WEEF were removed, do you really think your department could make up the difference?

Fourth: Why should I pay to support student teams?

While WEEF's constitution ensures that the majority of funding goes directly to departments, there are significant benefits to having well-funded student teams at UW, even if you are not a member yourself. See, when you graduate you get a piece of paper and an education. Sadly, while the education may give you the skills to be an engineer, the piece of paper is what will get you a job. But what kind of job you get depends on the perceived value of your education. With this in mind, how can you ignore the increase in value of your degree when other students from your school win a solar-car race... or a clean snowmobile competition... or a microchip-design award? How does you think an automotive recruiter feels about applicants from the sole school in Canada that has been allowed to participate in an international alternative-fuels competition?

Fifth: Why don't I feel like WEEF has improved my education?

Finally, if you still don't feel WEEF benefits you, there is something you can do about it: Submit a proposal! I personally challenge any refunder to tell me that there is nothing at all within UW engineering that could not be upgraded, enhanced, fixed-up or improved through WEEF funding. After all, that is exactly what WEEF is for: You!

CECS Important Dates

January 19
Co-op job postings available at 6 am

January 20
Co-op job postings close at 11:59 pm

January 21
Career Services Workshops:
Interview Skills: The Basics – Understand 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. Register online at www.careerservices.uwaterloo.ca 2:30-3:30 pm, TC 2218
Interview Skills: Preparing for Questions- Discuss and learn from taped excerpts of actual interviews. Register online at www.careerservices.uwaterloo.ca 3:30 – 4:30 pm, TC 2218

January 24
Co-op job postings available at 6 am
Career Services Workshops:
Job Search Strategies: Special Session for International Students International students will learn best approaches to search for work in Canada after graduation from UW, including visa requirements. NOTE: first hour of session covers general job search strategies; last half hour details visa requirements. Register online at www.careerservices.uwaterloo.ca 4:30 – 6:00 pm, TC 1208

January 25
Co-op job postings close at 11:59 pm
Career Services Workshops:
Starting Your Own Business - Next Steps: Picking up where The Basics left off, this workshop will offer more in-depth discussion on start-up issues. All students are welcome. Note: This session is limited to 15 participants. Register online at www.careerservices.uwaterloo.ca 4:30-6:30 pm, TC 1208
Interview Skills: The Basics – Understand 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. Register online at www.careerservices.uwaterloo.ca 3:30-4:30 pm, TC 2218
Interview Skills: Preparing for Questions- Discuss and learn from taped excerpts of actual interviews. Register online at www.careerservices.uwaterloo.ca 4:30 – 5:30 pm, TC 2218

January 26
Co-op job postings available at 6 am
Career Services Workshops:
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 practice and improve. NOTE: Please attend only if you can stay the full two hours. Register online at www.careerservices.uwaterloo.ca 3:30 – 5:30 pm, TC 2218.

January 27
Co-op job postings close at 11:59 pm
Career Services Workshops:
Making the Job Fair Work for You: Learn the "do's" and "don'ts" of this excellent networking and work search opportunity. Register online at www.careerservices.uwaterloo.ca 3:30 - 4:30 pm, TC 2218

January 28
Career Services Workshops:
Career Decision Making: After this session you will be in a better position to assess yourself and your "fit" in the world of work. Register online at www.careerservices.uwaterloo.ca 2:30 – 4:00 pm, TC 1208.

January 31
Career Services Workshops:
Making the Job Fair Work for You: Learn the "do's" and "don'ts" of this excellent networking and work search opportunity. Register online at www.careerservices.uwaterloo.ca 3:30 - 4:30 pm, TC 1208.

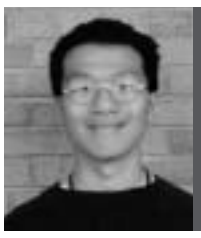
ENGINEERING SOCIETY

*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.*

Upcoming Events from EngSoc

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
16	17	18	19 EngSoc Meeting #3	20 CUTC (Jan 20–22)	21 Enginuity #1	22	*Check out up-to-the-day event postings on the EngSoc website www.engsoc.uwaterloo.ca*
23	24	25	26 Directors' Budgets Due	27	28 CSSA (Jan 28–30) Scunt (Jan 28–29)	29	

A Centenary to Annus Mirabilis



SUNG HON WU
4B COMPUTER

This year, 2005, we celebrate the centenary of a most remarkable year in science ever. The term annus mirabilis is Latin for "extraordinary year." It was first applied to Isaac Newton, who in the span of 18 months of 1665 and 1666, created the foundations of Newtonian physics by inventing calculus, the theory of optics, discovering the law of gravitation and his famous laws of motion. This was an achievement that no one thought could ever be rivaled again.

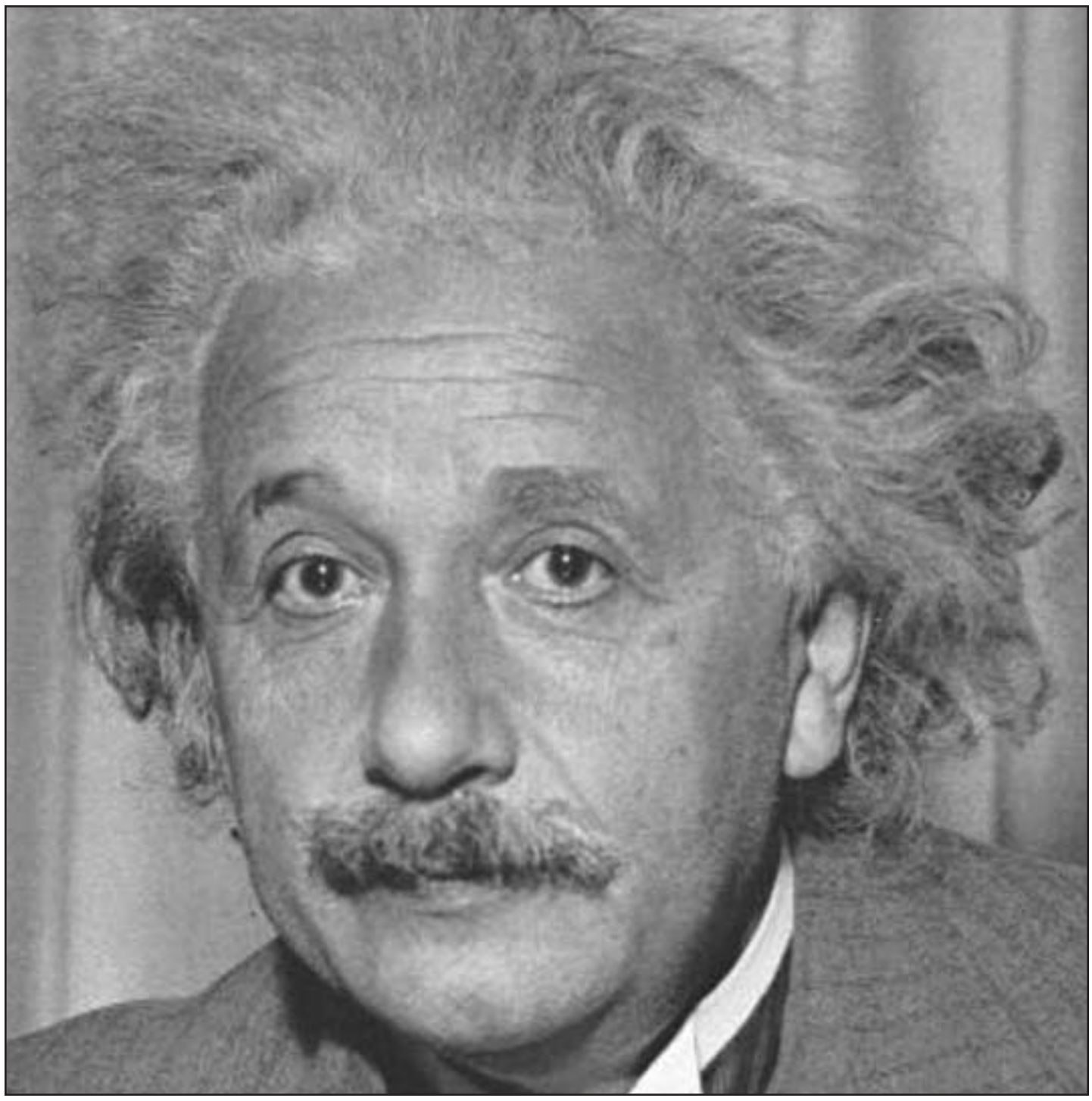
But in 1905, a young patent clerk from Switzerland achieved what no one thought was possible. Albert Einstein wrote four papers in the span of six months which were to revolutionize physics and change the way we view the universe, any one of which could have won the Nobel Prize, although only one did. In March, he published his paper which explained the photoelectric effect was the result of the particle nature of light, an idea which overthrew the classical theory of light as a wave, invented by Newton. This paper was the one that won him his Nobel Prize 16 years later. In May, he would publish a paper on "Brownian motion", conclusively proving it was caused by atoms, whose existence was controversial at the time. Then in June, he published his paper on the special theory of relativity, showing time and space was relative, while the speed of light is constant, overthrowing 200 years of Newtonian physics. Finally, in September, he published a remarkable insight to his own theory of relativity, that mass and energy were interchangeable, creating the equation forever linked to him, $E = mc^2$.

When I reflect on his achievements, some things come to mind. One is how young Einstein was when this occurred; he was only 26. Newton was only 23 when he had his extraordinary year. The image we retain of Einstein is the old, absent minded looking professor, but it was the young, neat looking Einstein who achieved so much. It seems fate has it that only the (relatively) young can truly discover new things in math and physics.

Next, I wonder what it must feel to be in Einstein's mind during those crucial months. It seems like his mind could solve any problem, no matter how hard, just simply by thinking about it. As Einstein put it later, "a storm broke loose in my mind". How strange and wonderful to be in the middle of this storm, not knowing where it leads, but knowing it is somewhere no one has seen before.

The third thought is amazement at what Einstein achieved. For example, think back to high school physics. The problems he solved, the photoelectric effect and the particle nature of light, Brownian motion, relativity, $E = mc^2$, are all taught in what used to be grade 12 and OAC physics. But just to understand the solutions can take more than 6 months in those two courses combined, so how much harder to actually come to a solution? Yet Einstein solved all these problems in 6 months. It is like many exams I have written, I can understand the solution when shown afterwards, but I have not the slightest clue about the answer when I try to solve the question myself!

So why am I writing about his centenary? Simple, because Einstein in many ways is responsible for much of the world we live in now. Whether it is in my discipline, computer and electrical engineering, where Einstein's particle theory of light made possible the field of fiber optics, or to the electricity that powers the computer I am typing, which comes from nuclear reactors using $E = mc^2$, or to relativity, which is still the best explanation for physics at large scale of the universe. May we enjoy the fruits of Einstein's annus mirabilis!



Sunshine on my Shoulders: Solar Technology Breakthrough

DAN ARNOTT
2A GEOLOGICAL

As anybody here at the U-Wat knows, it's pretty rare for anything good to come from those cannon-wielding braggarts at the University of Toronto. But this time, they've come across a development that may change the way we look at solar energy.

The visible light currently used for solar energy only accounts for a small fraction of the electromagnetic spectrum. But researchers at U of T have developed a material that is sensitive to infrared radiation, which has slightly longer wavelengths and slightly lower energy than visible light. Using this material, a significantly larger portion of the sun's sweet, bountiful energy can be turned into useful electricity.

Professor Ted Sargent of U of T's E&CE department (which also brought us the one-and-only Dean Sedra) states that the breakthrough involves combining specially-designed 'quantum dot' particles (U of T's name, not mine) three to four nanometres across with special polymers. The end result is a kind of plastic that can detect energy in the infrared range.

In addition to increasing the efficiency of existing solar applications, this technology also has some interesting potential for alternative uses. Professor Sargent has suggested that this new material could be made into solar-sensitive shirts and sweaters capable of charging cell phones and other wireless devices. Solar sweaters! That'd be a big seller in the Novelties Shop.

"This new material could be made into solar-sensitive shirts and sweaters capable of charging cell phones and other wireless devices."

The idea of solar clothing is an appealing one. This is the logical next step up from cell phone holsters and mp3-player belt clips. A solar sweater would be a status symbol, something that tells people that not only do you have a load of cool technological gadgetry, but that you can also charge it up just by stepping outside instead of having to find new batteries or a wall outlet. This is clothing that screams "I am a geek!", but in that good way that we at U-Wat are familiar with.

Of course, the effects on the world of fashion will be immense. 'Solar Fashion' will be the next big buzzword, prompting an industry shift towards practical and stylish solar clothing. Immodest and revealing summer clothing will die out, because people will be 'covering up' in order to charge their phones. Of course, this has a downside too. The kids who always got made fun of because they didn't have brand-name clothes will now get picked on because their shirt has a low electrical output.

Although new technology is usually designed with the intention of adapting to our lifestyle, it is often our lifestyle that adapts to the technology. Just look at the proliferation of cell phones, PDAs, personal music players, and the infamous BlackBerry, and the effects they've had on the way we live and work. The concept of a solar sweater will no doubt have widespread effects on the way we live. People will be getting outside more to charge up their stuff. They will be able to work more efficiently, not always having to be plugged into a power source. The closer solar energy gets to a personal level, the more appealing it becomes.

Sunshine on my shoulders makes me happy, but soon, it could charge my cell phone too.

Asset Management

The Future of Public Works Engineering?

DAN ARNOTT
2A GEOLOGICAL

Here in the beginning of the 21st Century, we are on the verge of a very crucial and exciting time for the Engineering profession. A veritable revolution, if you will. We are seeing more opportunities than ever, not just in the design and construction of new infrastructure for the benefit of society, but also in the responsible management of existing infrastructure and the prudent planning of future design and construction projects. We, as engineers, are entering into the Asset Management Age.

That's right—Asset Management. If you've worked in the public sector before, chances are you've heard the term thrown around. It's a pretty new concept to public works, although private companies have been familiar with it for decades. The idea is to look at all your infrastructure, your roads, sewers, bridges, culverts and such, as actual 'assets'. This makes sense, because they help you accomplish the objectives of your company, and if you're a Public Works department, those objectives should be ones of service to the public. It is developing into a business practice which entails engineering technology, economics, and business.

During the postwar building booms, it was common practice to look at your infrastructure as something you built and then forgot about. But lately, people are coming to the realization that all of this stuff has a limited service life. Sooner or later, it's going to crap out. And it's going to cost a lot to replace. Wouldn't it be nice if we knew how long it was going to last, what kind of condition it was in, how it behaves over its lifecycle, and how we can plan to replace it when it finally does crap out?

"During the postwar building booms, it was common practice to look at your infrastructure as something you built then forgot about"

As a result of this increased awareness of the need for asset management, we could be seeing a lot of asset-management-related jobs popping up over the next little while. I actually had an opportunity to work with the Region of Niagara on their Asset Management pilot project, and there are likely going to be a lot of similar projects cropping up all over the place. These projects often involve collecting information on infrastructure, a challenging task in itself, and then analyzing the information and making recommendations on what to do with the infrastructure. For engineering students with an interest in economics and business as well as engineering design, this kind of work will likely be very interesting.

For more information on what asset management is all about, you can visit sites like www.amqi.com (Asset Management Quarterly International) and http://irc.nrc-cnrc.gc.ca/uir/miip/ (The National Research Council's asset management project). As engineers, we all know it's fun to build new stuff, but sometimes it makes more sense to take care of what we've already got.

He's got Richard Gere's Approval

Mahmoud Abbas Becomes Next Leader of the PLO

CHUN LAM
3B CHEMICAL

After Yasser Arafat's passing in November 2004, an internationally revered/detested organization with daily news publicity, the Palestine Liberation Organization (or PLO), had become leaderless. Educated as a civil engineer, Arafat was the grassroots leader of the PLO, an organization whom he helped create in 1964, died in a French military hospital of mysterious causes, which has not been disclosed to the public even to this day. His death led to a power vacuum in the organization, which consists of a loose federation of many Palestinian political organizations, all of whom seek an autonomous state for the Palestinians. The organization also currently acts as administrators of the Palestinian territories within Israel. In a somewhat relieving move by the PLO is the call for general elections for the position of Ra'ees or chairman of the PLO, the position whom Arafat held. For the power vacuum could possibly lead to a violent power struggle within the PLO which would have been seen as anarchy by the Israelis and the world; thereby giving the Israelis justification to use unlimited military action to stabilize the situation. Elections were announced for January 9, 2005 and 7 candidates were on the ballot. On an odd side note, pretty boy actor Richard Gere appearing in a commercial doing a Palestinian get out the vote pitch. This is the only the second election the PLO has ever held since given the right of Palestinians to elect officials by the Israelis in the 1990's. The first election pitted Yasser Arafat against a social activist (who ran for the presidency just to make the event look somewhat democratic) in 1996, where Arafat won with 87% approval. In the 2005 election, 7 candidates are on the list but only one person was observed by the world and even Israel as their ideal candidate – Mahmoud Abbas.

Mahmoud Abbas, or known by his honorific title of Abu Mazen, is also a founding member of the PLO. Abbas is also a member of the largest political movement in the PLO – Fatah, the same movement Yasser Arafat was in. Abbas is regarded throughout the struggle for the Palestine state, a moderate, pragmatist. Abbas often cited that violence is not benefical to resolve the conflict between Israel and the Palestinians. In the 1970's and 1980's Abbas began a liason with Jewish left-wing, pacifist groups generating a bridge for dialogue between the Israelis and Palestinanians at a time where wounds from the Six Day, and Yom Kippur wars were still fresh. Mahmoud Abbas is also credited with being a major author of the Oslo peace accords in 1993 which gave Palestinians limited autonomy in the cities of Gaza and Jericho. Thus, his connections to Israelis groups and his long standing concnections with the PLO give Abbas a valueable asset; the view of legitimacy in the eyes of the Palestinan people and to Israel. Currently, Abbas is touted as the great Palestinan hope for peace in the region. Abbas is condonned by both the Isreali Prime Minister, Ariel Sharon, and the President of the USA George Bush in the weeks leading up to the election as the only legitimate representitive of the Palestinians in future peace talks with Israel.

In the election, Abbas did not disappoint, gardnering a majority 62.3 % of the popular vote, whom the Liberals would in vain try to get, has become the next leader of the PLO. Abbas's closest rival, Mustafa Barghouthi, gardnered only 19.8 %. The voter turnout was a paltry, Canadian style 65% which was observed by peanut magnate, former US president Jimmy Carter and his election verification crew for legitimacy.

With his win, Abbas now succeeds Yasser Arafat as leader of the PLO. The road to peace and autonomy has been paritally paved by Arafat, Yitzhak Rabin, and others. Will Mahmoud Abbas complete the raod and lead the Palestinians to a free state? Only time will tell.

Truth:

EngDating Summary

Continued from page 1

would use when you get the image of a girl drinking cup after cup of economical domestic beer and than letting the guy leave early in the morning? Score: -1 for TUE for not helping.

- There are too few female engineers to choose from: TEE basically showed the 5% rule and gave up. TUE said that guys should keep trying. Score: -1 to TEE for giving up too easily. +0.5 for TUE for the nice words. This is the fault of the educators, to not have done as successful a job to balance the gender gap in engineers. It is a serious issue. Not only is it interfering with engineers at a social level, it is also an issue at the professional level. One of the direct result from this is that most engineers lack experience in bridging gender gaps at workplaces.
- Whether explorations outside the faculty is a good thing: TEE portrayed engineering girls as one-dimensional replicas of guys. TUE hit it right on the money when it said that the relationship had to have something in common, regardless of whom it is with. +1 for TUE for insight. A relationship has to generate interest in both parties. Having too much interest in it is never a bad thing.
- The post-relationship relationship would be awkward: Assuming the girl was from the same class and seen every day, a break up would create very uncomfortable situations. This was a solid point, and it would really require effort by both parties to keep it cool and not allow what-had-beens to make their lives difficult unnecessarily. TUE, curiously, did not respond to this crucial point, but it had to be granted that if the two weren't in the same class, this would not be as large an issue. Regardless, +1 to TEE for winning this argument by default.

An extra +0.5 to TUE for making up the word Engineerette. It's catchy.

TUE wins this debate +0.5 to TEE's -0.5, which is within the margin of uncertainty, being +/-1.

The important thing to remember is that each individual is unique, and each circumstance is unique. Therefore, each situation needs to be handled differently and requires work. To deny that dating fellow engineers may pose problems is short sighted, but just as wrong is to say that doing so is completely undesirable.

Dog Burnings, Beer Towers,

and Other Selected Highlights from the History of UW

DAN ARNOTT
2A GEOLOGICAL

1957 – UW is incorporated as the Waterloo College Associate Faculties (Waterloo College will later become known as Waterloo Lutheran University, then Wilfrid Laurier University). The name was changed to University of Waterloo in 1960, with an enrollment of 75 engineering students.

1958 – The Great Beer Tower Caper. One night, three engineering students sneak up the old Lester Street water tower and paint the word "BEER" on the side, giving nationwide recognition.

1968 – The Ridgid TOOL is introduced as the official mascot of the UW Engineering Society.

1968 – The infamous Dog Burning. Students protesting the Vietnam War say they are going to 'burn a dog' in the Arts Quad. When the time comes, and hundreds of outraged, supportive, and intrigued students are watching, they pull out a single hot dog and roast it.

1974 – Current KW Liberal MP Andrew Telegdi is elected as Feds president. During his controversial term of office he gets banned from Renison and encourages student activism.

1979 – As a joke, the Gazette publishes a list of the ghosts of UW, including ones that haunt the elevators in Dana Porter Library. Staff members get so scared that a memo must be posted explaining that it was only a joke.

1982 – The University of Toronto steals the TOOL and, after much negotiation, returns it encased in a barrel of concrete. Frosh chip it out just in time for the Iron Ring ceremony.

1989 – Students gather outside Needles Hall (then the home of Co-op Services) to protest the fact that dozens of companies hiring UW students are involved in military work.

1992 – The 20-year-old Honeywell computer in MC is turned off forever. It is reputedly haunted- an exorcism is performed.

2003 – The non-existent UW Medical school is ranked highly in a Globe and Mail survey.

There's more interesting stuff to be found at www.adm.uwaterloo.ca/infoipa/history.html

This includes the peacocks that used to roam UW and presumably were eaten by foxes. And "Convolution", the ugly piece of art that got blown up. And the secret network of tunnels, which are not as non-existent as everyone thinks.

Not Worth the Fuss

CINDY BAO
3B ELECTRICAL

I picked up the Da Vinci Code for a less-than-honourable incentive: just so I can tell people the last non-textbook I managed to read wasn't Harry Potter 5. After all, an adult bestseller should sound more impressive than a children's bestseller.

The book has been the target of scrutiny, as well as criticism, among some religious organizations, biblical scholars and any individuals who feel strongly about the subplot of Dan Brown's latest novel. The controversy was largely the reason that motivated me to read the book myself; after all, I am the kind of person who just couldn't wait for Michael Moore's Fahrenheit 9/11 to be shown at the local theatres.

Brown took the readers right into the action with a murder. The victim, a curator at the Musee du Louvre, left numerous clues to a centuries-old secret. Guided by his riddles, his granddaughter enlists the help of a visiting American symbology professor, Robert Langdon, and goes on to solve the mystery with the French police force on their back.

The book kept its accelerated pace. Each chapter ended with a cliff-hanger, much like television shows do before every commercial break. There is no doubt of it being a B-list technique, but when one is not taking the book seriously for a literary triumph, you don't mind falling for the author's obvious intention.

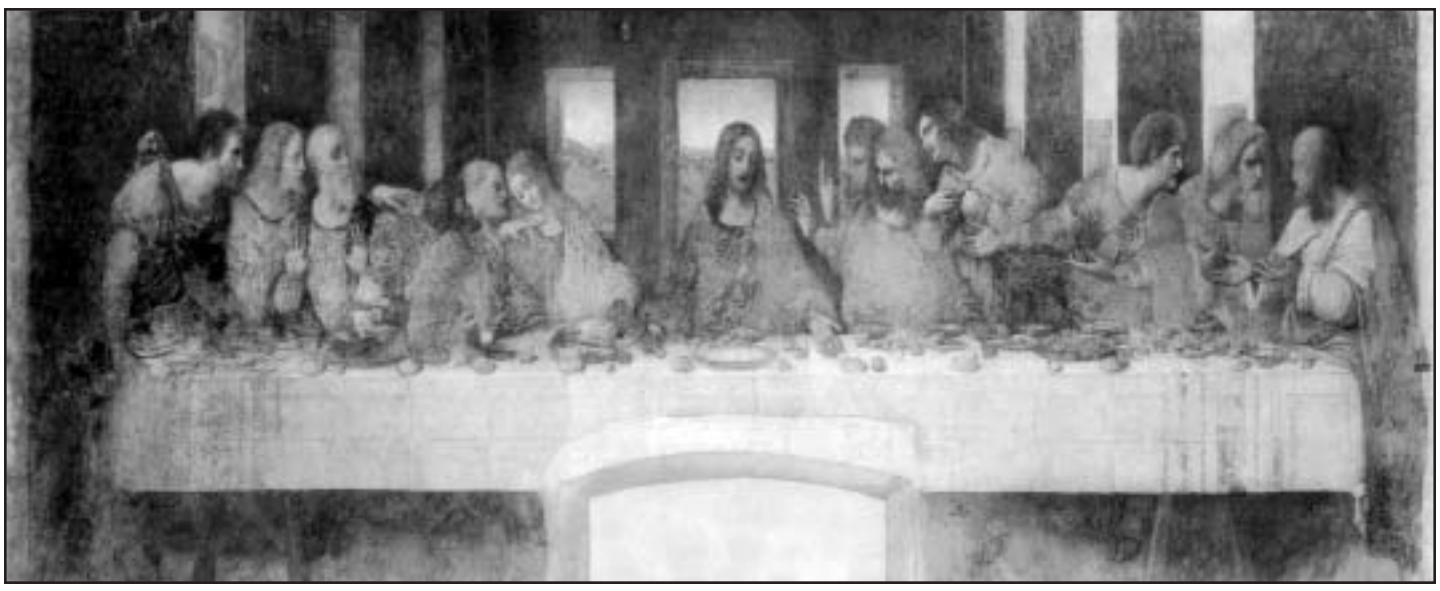
Interwoven with the breath-bating actions were frequent flashbacks, symbology and history lectures, as well as detailed descriptions of Da Vinci's artworks and the Parisian architectures. The first few breaks in the action were refreshing and welcomed; however, their too-often appearance interrupted the integrity of the storytelling, making one feel like they are stuck in traffic while rushing to the airport. Some of the later riddles, as I suspect Brown was getting exhausted, seemed no longer ingenious and hardly credible.

Judged as a mystery novel, the Da Vinci Code was entertaining and quite exciting up to the grand finale. However, when the true identity of the Teacher, the mastermind behind the murder, is revealed, the book lacks the feeling of missing puzzle pieces falling into place. The most disappointing part is the Hollywoodized ending of the hero getting the princess. No wonder Ron Howard is adapting the Da Vinci Code into a movie, which is planned to be released next year.

Unlike your average thriller genre novel, the success of Brown's work wasn't cashed on the detective plot, but the secret that is told in its background story. Belonging to a secret society whose members, according to the author, include icons such as Leonardo Da Vinci, Sir Isaac Newton and Victor Hugo, the fallen curator guarded the truth of Holy Grail.

To support his historical viewpoint, Brown included a bibliography, which some critics found impressive while others questioned its academic legitimacy. However, the countless articles that aimed to break Da Vinci's codes and the book's not-so-mainstream references, instead of achieving their own objective, only lengthened the number of weeks it topped The New York Times' best-selling book list.

For anyone who is interested the Da Vinci Code for its research work alone, I am sure there are much more serious works for that purpose. Otherwise, it can be an enjoyable read on a lazy summer day. As for Dan Brown, combining a truly great novel and significant religious historical research into one still remains a quest for the Holy Grail.



Fathers and Sons

NEIL DANGAARD
3A CIVIL

Fathers and Sons, by Ivan Turgenev, is the story of two young men's return home at the end of their year at university. As is usually the case, they come back with a philosophy or understanding of the world which is radically different from the one they were raised with. The novel explores the relationships of the two students, Bazarov and Arkady, with their families, friends, and each other, focussing on the friction between two very different generations of people and ideas, as well as the effect ideas have on the behaviour of different types of persons.

Bazarov, the leader of the two, is an intelligent but irreverent medical student. He is also philosophically revolutionary, a nihilist (from the Latin nihil, nothing) who advocates the overthrow of the entire existing intellectual, moral, and social construct. Arkady, who has just finished his degree, is swayed as much by his friend's ideas as by his dominant personality; however, he also begins to be drawn between what he believes (or wants to believe) and what he knows.

Set opposite these two are Arkady's father and uncle, both of whom are relatively conservative and wealthy minor aristocrats, and Bazarov's parents, a superstitious retired army medic and his equally superstitious wife. Also figuring into the story are Anna, an attractive, unconventional young widow who catches the eyes of both young men, and Katya, her gentler, more traditional sister.

While it seems that often books of this genre become harshly polarized cautionary tales, Fathers and Sons avoids this by treating each of the characters and his or her ideas with sympathy and sensitivity. It describes the dangers of a misconceived or misapplied philosophy, but also shows how these dangers can be mollified by human kindness and love. This softening effect makes it a satisfying, enlightening and enjoyable read.

Fathers and Sons should also be a good introduction to Russian literature, since it is shorter and more readable than most. It is typical of the genre, since there is a predominance given to ideas and personal interaction, while action or events are given a supplementary, secondary role. It also stands the test of time remarkably well; considering that it was written almost 150 years ago on the other side of the globe, many, perhaps even most, of Arkady's words, actions and reactions might seem more than a little familiar to readers.

Or you can read the Dan Brown book, an outlandish tale with a pseudo-historical tone acted out by one-dimensional characters which has managed to draw the scorn of scholars who, unlike the author, actually have some understanding of history.

Cindy's Kitchen

CINDY BAO
3B ELECTRICAL

Welcome to another term of Cindy's Kitchen. This time around, I am trying to add a little more flavour to the long and cold winter days with recipes all over the world. However, let's start from home and take the comfort in the North American food (not supersized fries from your local drive thru fast food joints).

Chocolate Chocolate Chip Cookies
Courtesy of Cathy Lowe

Chocolate chip cookies, the beloved childhood snack, can be traced back to a single maker Ruth Wakefield. She started out running a tourist lodge in Whitman, Massachusetts, and one of her favorite recipes was butter cookies, which use baker's chocolate. One day, while baking, she found herself run out of the chocolate and substituted chopped semi-sweet chocolate bar instead. However, the chopped chocolate did not melt throughout the cookies as the recipe should, and remained as softened chunks. Chocolate chip cookies were born.

To keep the Wakefield spirit alive, I used powdered green tea in the place of cocoa powder when I ran out the latter. It worked out quite well, although I suppose the color didn't look the most appealing. For those craving a slightly exotic flavor, substitute the cocoa in the recipe with half to two-thirds the equivalent amount of green tea powder (4 to 6 tablespoons), available in Japanese grocery shops

2 1/4 cups flour
1 teaspoon salt
1 teaspoon baking soda
2 sticks butter, softened
1 cup granulated sugar
1 cup packed brown sugar
2 large eggs, beaten
1 tablespoon vanilla
1/2 cup unsweetened cocoa
2 cups chocolate chips
1 cup chopped walnuts (optional)

1. In a bowl stir together flour, salt, and baking soda.
2. In another large bowl stir together butter, both sugars, eggs, vanilla and cocoa.

3. Gradually stir flour mixture into butter mixture and mix until combined.
4. Stir chocolate chips and walnuts, if using, and stir to distribute evenly.
5. Together dough into one-inch balls, place onto greased baking sheets and bake in preheat 375 degrees oven for about 10 minutes. Cool on a baking rack.

Makes about 5 dozen cookies

Stovetop Macaroni and Cheese

Post-holiday blues require comfort food, and nothing seems more suitable than good old macaroni and cheese.

This stovetop version is fast and easy. However, you can bake it too. After stirring the cheese into the milk, in a buttered baking dish, mix half of the mixture wit the cooked macaroni and sautéed ham and vegetables, and then pour the remaining cheese on top. Then top the dish with the mixture of 1/2 cup bread crumbs and 2 tablespoons of butter. Bake at 350 degrees for 30 minutes, or until the cheese is bubbly and the topping golden brown.

3 tablespoon canola oil
1 cup diced ham
1 green pepper, diced
1 medium cooking onion, diced
6 large button mushrooms, diced
1 tablespoon butter
2 teaspoon flour
1 1/2 cup milk
2 cup shredded cheddar cheese
2 cup dry elbow macaroni
Salt and pepper to taste

1. Cook macaroni according to package direction, and drain well.

2. In a large saucepan or skillet, heat the canola oil on high heat, and then add ham, green pepper, onion and mushrooms, sauté until the green pepper is tender. Set aside.
3. In a large saucepan, melt butter, and stir in the flour until well incorporated and free of lumps.
4. Add milk into the butter and flour mixture; bring to a boil, then lower the heat to keep the milk at a simmer.
5. Stir in the cheese until melted, then add the macaroni and ham and vegetables, stir well and make sure everything is heated through. Season as desired.

Makes 4 servings.

Heidi Thiessen Memorial Awards for Student Writing

Awards of $1,000 & $500 are available to 3rd and 4th year students at UW, WLU, & U of G.

Feb. 11, 2005 deadline.

For details, see www.stc-soc.org/awards/student.php.

Primer- Movie Review

CINDY BAO
3B ELECTRICAL

So what was the last movie you watched that boggled you mind? Memento? Mulholland Drive? Then you have missed out on the brainteaser du jour.

"Primer" is written and directed by and starring Shane Carruth, a former engineer and first-time filmmaker from Dallas. With this level of multitasking, you probably have guessed that it's made on a shoestring budget (reportedly $7000). What's more, it won the Grand Jury Prize at last year's Sundance Fest.

Every instinct of mine is telling me that this movie is the kind of independent effort that I would, or should, enjoy. However, it didn't turn out to be the case. No, I do not dislike it. But the whole thing has been a kind of blah experience, mildly interesting with loads of confusion at best.

It opens in a suburban house, where two engineers, Aaron (Carruth) and Abe (David Sullivan), work after-hour in the garage with techie creations that does not pay off. Then one day, they discover that their accidental invention allows them to travel through time.

They take advantage of it to gain riches. After monitoring the stock market performance, and picking the winners, they go back to beginning of the day for trading, while their doubles hide in a local motel room. But soon, they grow restless with their power and try to do more, while becoming increasingly paranoid with their surrounding, each other and themselves. (That's where the plot lost me.)

The dialogues are mostly unpretentious, save for the science jargon. I had the notion that if I could make sense of all the terminology, I would get a grip of what's going on. It didn't happen. With the exception of a few one-line gems, they are fairly natural sounding, without trying to be too witty or pointed. All the characters are fast talking and concise, as one expects the techies would. For the actors, their debut is quite promising.

The shooting locations are extremely minimalist, which is understandable, given the budget. The house and garage can belong to anyone in any city. Then there is the motel room and a U-Haul self storage. Even the major point of the time machine was only shown to be a stifling, claustrophobic darkness.

Yet, as one scene cut to another in a montage fashion, all the simple elements together have woven a complex and intricate plot. Carruth plays with the idea of causality, and has his characters taking themselves out of the equation, while their doubles or even triples loop through the screen. It doesn't trigger you emotionally, but somehow, you can put it down long after the credit rolls.

After watching the movie again with as much concentration and bated breathe as I could manage, (thanks to the theater's promotion strategy of a free second view with the original ticket stub) I was still struggling with putting the finer details among the puzzles pieces to place.

There seem to be the promises that if you watch it enough times, the epiphany will eventually strike. I wouldn't be surprised if I was told this is the distributor's promotional strategy to increase Primer's DVD sales.

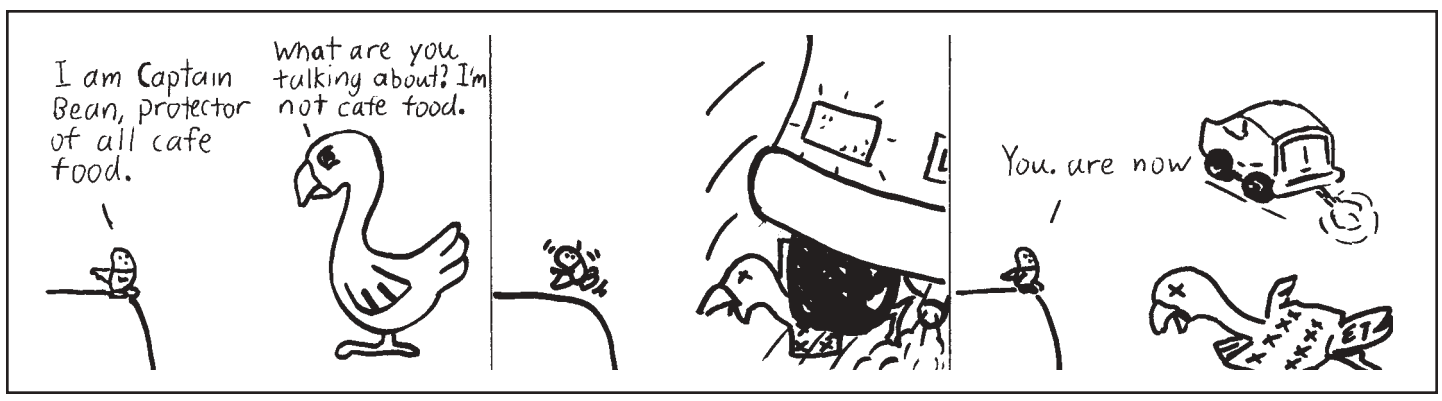
Arts Corner

Decision Deferred

By Andre Masella, 3A Computer

Captain Bean

By Edward Tan, 3A Computer



Editorial Haiku

By James Schofield

Fatal error two
Depress power button; wait
Agony ensues

Monday night arrives
Articles have been delayed
White space must be filled

Parody Paradise

By Edward Tan, 3A Computer

Second Chance

By Rahul Bhardwaj, 3B Electrical

I know you hate me,
But there's no harm in watching you,
The water is now very hard to drink,
But I love you, that's still true

Anything I own, is not mine,
Money isn't everything,
But to have you ?
I'll do anything, dear, anything

I know you're with him,
I still feel the same,
The water is very hard to drink,
And you don't even know my name

I hold a rose for a rose,
As pathetic as it may be,
Like a postman delivering a letter,
Its your eyes that stop me

Still, maybe I can get a second glance,
But you never look my way,
I know I will never be as good as him,
And now you're gone far far away

You and I have something in common,
I sit and pick the glasses pieces up all day,
Angel, you left me for him,
And I left the world for you today

Don't cry for me Mama,
I wasn't a fool put to waste,
And I'll get a second chance in Heaven mama,
She's an Angel Mama, she'll come back...
Just you wait, just you wait... just you wait

Drafting Tools

By Dan Arnott, 2A Geological

orphans of ink and graphite
within your box of black
bright siblings how you shine
your purpose never changes
your god is "the line"

Donor

By Dan Arnott, 2A Geological

there are 2 corvettes
sitting in the Grimsby dark
one comfy in the garage
one outside under the tarp
one of these lucky cars
is close to the handyman's heart
the other is assumed dead
and donating parts

Untitled

By John Olaveson, 3A Civil

The ice-edged blade
Slashes at my blushing cheek
With a relentless fury
I would have sworn was born of burning hatred.
Only a moment have I been outside
And already my shin has been sundered
How will I survive the long walk home?
The pale yellow sun casts its dispassioned gaze
Upon my mizery.
I can hear laughter on the wind,
A sinister sound echoing from an icy forge
Where the ice-edged blade was crafted
For the singulkar task of maiming me.
Why does the weather hate me so?
How could I offend an incorporal entity?
Five steps out; frozen daggers drive me on; no mercy.
Ten steps; no more, no more!
I surrender!
Let me die in peace!
No mercy.
A quiet death, slow and lonely
Ten steps out from my door.

Do *You* Have Something to Contribute?

Drop off your poetry, cartoons, drawings, and anything else artistic in the "Arts" box in the Orifice.

Submissions may be published here in *The Iron Warrior*, and earn you valuable P**5 points for your class!

Arts Corner

Biotech Accountant

By Edward Tan, 3A Computer

the Iron Inquisition

Cindy Bao, 3B Electrical

What are you doing to stay warm this winter?

You can get everywhere indoors… even my house.

— Ryan Emmett, 3B Elec

Engineer myself some hot love potion.

— Chris Olekas, 2A Comp

By drinking liquid warmth every Thursday and Friday at POETS.

— Chris Pieneman, 3A Civil

Lots of late night 'friction.'

— Elliot Powidajko, 3A Mech

This guy…

— Erica Waugh & Pedro Mottola, 1B Civil

Wearing long underwear 24/7.

— Evan Murphy, 2A Comp

Frosh.

— Geoff Milburn, 3A Civil

Spooning.

— Jae-Suk Ahn & Cameron Bruce, 3A Mech