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the IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

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Vince Week Finale: Wrapping Up the Cancer Campaign



Karim Lallani

3A Systems

John Olaveson. He'll be shaving his head at noon in the CPH Foyer, so don't miss out! Rumor has it he might even try out the mullet look first.

The grand finale of the event will be on June 3rd at 6:00 p.m. in the CPH Foyer. The finale will be a celebration of Vincent Fazari's life. The media will be invited to the event, and we will be presenting a cheque to the Canadian Cancer Society.

Prizes will be awarded to the top fundraisers and the classes with the most participation. As an extra incentive, refreshments will be served! If you have any questions about Vince Week, please contact Karim (klallani@uwaterloo.ca). Remember, on average, 1,313 Canadians die of cancer every week, so please donate generously, and let us hope that a cure for cancer is found soon.



These students celebrate a great cause in the memory of Vince. To donate money or hair, visit the CPH foyer at lunches until June 3rd.

Vince Week is coming to an end, so if you haven't contributed already, the donation table will be open everyday from 11:30 a.m. – 1:30 p.m. and 3:30 p.m. – 4:30 p.m. in the CPH foyer until June 3rd. We need your help to reach and exceed our goal of \$10,000.00. All proceeds will be going to the Canadian Cancer Society and will be flagged for research use only. Many students and professors will be shaving their heads on June 3rd including the Editor-In-Chief of the Iron Warrior,

WEEF Refunds Resume



Cindy Bao

3A Electrical

erator used Ms. Young's name without her permission and any criticisms directed towards her in this matter were misdirected.

On the uwstudent.org website, a number of individuals have voiced their thoughts on the fact that their WEEF contribution is automatically donated to the fund and that the act contradicts with the voluntary aspect of the donation. The students should be advised that including the WEEF donation as part of the fee statement is not WEEF's policy but that of the University of Waterloo.

As stated in WEEF's Constitution, its purpose is "to raise funds to be used for a Commitment to Improving Undergraduate Engineering Education at the University of Waterloo" and "[t]he Foundation shall recommend the use of the Funds for such engineering needs as teaching resources, laboratory equipment and student projects of an education nature and such other purposes as the Foundation shall consider appropriate." It does not replace fundings from the University to operate the Faculty of Engineering and it allows the students to decide on how to allocate the funds.

A copy of the Constitution, as well as past funding decisions and the current proposals, can be found on the WEEF website (www.weef.uwaterloo.ca).

For those who wish to have their voice heard, WEEF Proposals will be accepted starting Monday May 31st 9:00 am, and the proposal deadline is Friday July 2, at 4:30 pm. Please refer to the WEEF website for proposal documents and application procedures. Being a class WEEF rep or voting for the WEEF Director in the upcoming election are also ways to get involved. WEEF IS GOOD!

Same as every term, the engineering students were allowed to withdraw their \$75 donation to the Waterloo Engineering Endowment Foundation (WEEF) soon after school began. However, after a week of the WEEF office opening its door to give refunds during lunch, a number of signs with falsified information about the foundation were posted around engineering buildings.

The refunds were temporarily put on hold as these posters were removed and decisions were made by the WEEF Directors on how to deal with the situation and clarify the misinformation these signs delivered. Engineering students were able to sign up for their refund again as the WEEF volunteers resumed the lunch hour operation from Tuesday, May 25th to Friday, May 28th. The temporary suspension of operations will not result in any delay in the delivery of refunds to students.

During the period, many concerns were raised by the students and a few issues should be clarified.

During the days of delay, an email had been circulated that read, "Please be advised that your request for a WEEF refund is not approved. Refunds are suspended and may resume on Tuesday if we feel like it." Despite the fact that the email had the B-soc WEEF director Erin Young's signature attached at the bottom, it did not come from her. The email's gen-

Federal Election Affects Engineering Students



Dan Arnott

1B Environmental

actions are scrutinized more intensely than usual, especially by his opposition.

On Sunday, May 23, 2004, Canadian Prime Minister Paul Martin finally announced the date of the next federal election to be June 28, 2004. This announcement was inevitable, but it arrived much later than what many voters had hoped. Martin, who is the leader of the Liberal Party of Canada, will compete against Jack Layton of the New Democratic Party, Stephen Harper of the Progressive Conservative Party, and Gilles Duceppe of the Bloc Quebecois for the office of Prime Minister of Canada.

The delayed election is attributed to allegations surrounding Martin's involvement within the Liberal "sponsorship scandal", wherein Liberal-friendly companies received money for little or no work. Although an inquiry into these issues is currently underway, Martin's popularity and credibility plummeted. It was believed that his chances of winning the election would be severely reduced. Despite this, Conservative leader Stephen Harper criticized Martin for having called an election before the sponsorship scandal has been fully investigated, arguing that if Martin is re-elected before a conclusion is reached, any further attempts at inquiries into the scandal would "never get off the ground". However, it is the norm during election time that the current Prime Minister's

In a characteristic wave of pre-election promises, Martin revealed major health-care reforms, intended to lower waiting times, increase availability of primary care and home care, lower the cost of drugs, and better enforce the Canada Health Act. Martin also vowed to take action towards lowering the rocketing oil prices. Although the recent increase in oil prices opens the door for alternative energy investigations, many current engineering jobs rely upon the health of the petroleum industry. Whether Martin is re-elected, and whichever action, if any, he takes, engineers will be affected. The Liberals also plan to divert gas tax money to municipalities, increase funding for the Canadian Military, invest in an "eco-friendly technology fund," and use budget surplus to pay down national debts.

Conservative leader Stephen Harper has been criticized for his 'defeatist' comments regarding Atlantic Canada, but has also been drawing a lot of attention to the misdeeds of the Liberals. Harper says that he hopes to make Canada's taxes the "lowest in the world", by cutting up to 25% of taxes for the middle-income group. The Conservatives promise to consider privatizing some health care services, to increase funding for the Canadian military, eliminate surplus in the Employment Insurance fund, transfer gas tax money to provinces for road repair, and take a firmer stance against violent criminals.

Continued on page 7. Please see Election Race Heats Up.

"You don't want to permanent marker the white board. You get fired for stuff like that. That's what happened to me at U of T" - Dean Sedra

Letter from the Editor

John Olaveson

2B Civil

Editor-in-Chief



I follow the calling of the Civil Engineer, and as such, my interest is piqued at the mention of engineering disasters. Not because I enjoy hearing about such things; each event is a tragedy. No, I'm interested in why the disaster happened, what will be done to prevent it in the future, and how it came to happen in the first place.

Some of you I'm sure have figured out that this editorial deals with the responsibility of every engineer to the safety of the community. Well, you're partly right. But that topic has been (hopefully) drilled into your heads so often now that the words fly right through your ears. I'm also going to talk about why we're stuck with such a burden, why we're put into such positions as we are. And I will be taking a Civil's stance on this, and using an example out of recent news, the collapse of Charles de Gaulle Airport's terminal 2E.

The new terminal was an aggressive and expensive engineering endeavour. It only cost the Paris Airport Authority about \$1,250,000,000 CAD, which is almost 2.5 times the cost of Pearson Airport's New Terminal 1 building. The architectural design of terminal 2E was viewed as one of the most innovative and ambitious ever attempted. The architect, Paul Andreu, had worked on many airports and other projects across the world in the past, being hailed by many as one of the best architects in the business. He designed everything at Paris's main airport after 1974. When he began on terminal 2E, it was just another piece in his puzzle.

The design took ideas from tunnel construction principles. The Paris Airport Authority wanted something big and open to facilitate passenger movement. Andreu met these requirements with a pair of tube-like corridors extending from a central building. The tube shells were constructed from reinforced concrete and perforated with windows.

On the morning of May 23, 2004, a piece of the curved roof, approximately 50 by 30 meters, collapsed. Five people were trapped and killed under the falling material. Further fatalities and injuries were avoided as police forces had been clearing the corridor after reports of creaks and falling concrete chips. The investigation into the cause of the collapse is still underway. And no, it wasn't a terrorist attack.

As the investigation continues, many people will feel the heat of the microscope's lens. Paul Andreu flew back to Paris from another project to assist with the investigation. Officially, he is not under suspicion. After the disaster, Andreu claimed his design was sound, but said he would go over his numbers again to be sure. He also deflected the blame to the engineers. After all, the engineers are the ones responsible for making his designs work. They are the ones with the stamps, after all.

Which brings me to my first point. As a future civil engineer, I could find myself in a position where I'm asked to make a nearly impossible architectural design come to life. I may be called upon to turn a crazy artistic vision into a set of stress calculations and bending moment diagrams. We all know how ambitious architects can be; they all want to design something by which to be remembered. No matter if that costs a civil engineer his job or his sanity. Architects get paid more than civil engineers, but all architects do is make our job harder. No where in my research did I ever see mention of the name of the engineer responsible for the terminal's design.

There must be limits. The collapse of the terminal is bringing to light, again, the need for design boundaries. As technology improves and the list of methods and materials available for design and construction grows beyond epic proportions, the ideas about how to use those new innovations likewise inflate. We have already seen some incredible innovations: buildings with massive concrete roofs that can be rotated in and out of place to let natural light shine onto a baseball game; towers that reach up to the stars; spherical domes made of interconnected triangles. Where will it end? How many more mistakes must be made?

To look into the past, I can say for certain that mistakes will always be made. Every time something new is attempted, there is a chance that a never-before-encountered problem will rear up and knock something down. Tacoma Narrows (I'm sure everyone has seen the video at one point in their lives; if not, look to the nearest Civil professor), the Dana Porter library that is slowly sinking into the ground, and let's not forget that old bridge in Quebec that started the Iron Ring Ceremony (according to popular myth).

We can't place the blame on the architect for making the job too hard. It is our duty to refuse to place our stamp on a drawing if that design is not safe.

Once the drawing is stamped and sent

out for construction, we the engineer lose control. The job enters the hands of the dreaded contractor. In my very limited work term experience, I have already learned that there are good contractors and bad ones. Most will try to get away with whatever cost-saving practices they can pass by the inspector. Sub-code materials, insufficient setting time on concrete (and other materials), this list could fill more space than I have left. All of these things can happen to a project in the field, but if a structure falls down, in the end, the blame comes back around to the engineer, because the investigation team sees the stamp on the drawing.

Does this mean that the engineer should be in the field to supervise every moment of the construction? Should the engineer test every batch of concrete that is delivered to a site? No, that's plain impossible. Such project costs and construction times would break anyone's bank. Another thing I learned during my work terms is that we have laws to ensure quality control. Not every material shipment is tested, only a small percentage. Based on my second year statistics course, that should be enough to catch any glaring material deficiencies. In the end, the engineer cannot really blame the contractor for such catastrophes as a building failure. That leaves the engineer, and my closing thoughts.

We all know that we're here in this university to be armed with the knowledge to make sure that every structure we work on, every car we build, every gene we splice, is done safely, first and foremost. But we're also humans. We are capable of forgetting minor details sometimes, of forgetting to carry the one in our calculations. Humans can also be lazy at times. Laziness has cost me many errors on assignments and tests that a little more time would have prevented. In the end, mistakes will be made that no safety factor can cover.

Referenced from "Tragedy puts avant-garde architect in limelight," written for the ChinaDaily News.

Article available online at: http://www.chinadaily.com.cn/english/doc/2004-05/28/content_334649.htm.

Questions? Comments?

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Re: 38 Years and Counting

Congratulations! You successfully managed to regurgitate everything the general (mostly, Toronto) media had to say about the Leafs' loss.

Let's get this out of the way because it isn't a common occurrence in this response! I agree with you on only one point, Nik Antropov played too much! However, it is the GM's job to dump no-talent-ass-clowns like Antro, not Quinn's, and he is forced to play the few young legs he does have.

As far as motivation goes, a coach can only do so much! As the New York Rangers have proven year-in and year-out, money does not buy championships. Money, typically associated with high-talent/performance level does not account for heart.

It was lack of heart that lost the Leafs the series . . . nothing else. Gary Roberts, (God bless him) is the definition of determination and a playoff winner. [He has] a surgically-repaired body and will still hit anything on skates (including that 7-foot Sasquatch from Ottawa, Chara), will still block shots, and score goals when asked to.

As Calgary has proven this year, as Anaheim did last year, heart/determination wins games above all else! So I ask that in the future if you choose to write about our beloved Blue & White again, you produce some original thought if you're going to put your name on an article!

- Justin Armstrong

Thank you for reading the article, and taking the time to give your opinion on why the Leafs lost in the playoffs.

However, after reading your letter, I have to say I disagree with you on all facets of your argument. John Ferguson's job is to hire and trade players so that his team can win the Stanley Cup. He did that this year. He hired great players like Brian Leetch, Ron Francis, and Chad Kilger at the trade deadline, and they proved to be valuable assets to the team. It is Quinn's responsibility as coach to motivate and play the correct players, on lines that would work. He did not do that during this year's playoffs. Let us look at one two-men-down penalty kill. Quinn played Robert Reichel, Nik Antropov, and Alexei Ponikarovsky. According to you and me, we have a guy that sucks flat out and a "no-talent-ass-clown" playing against a two-man advantage. How is that good coaching?

Here is a little stat for you, Gary Roberts did not kill one penalty this year in the playoffs or the regular season. If he plays with such heart and determination, should he not be out there killing penalties? I think he should, along with Tie Domi and Tom Fitzgerald and Darcy Tucker. These are the guys who grind out the puck, and play physically in every aspect of the game, and this is the amount of depth that the team has. Quinn had so much talent at his disposal and wasted it.

The team had heart and determination; they wanted the Cup badly. But with bad coaching, that dream is now a memory. My unoriginal opinions are shared amongst all of Leaf Nation and is that my fault? I just call it like I see it.

Michael Simoes,
Writer

Opinion

Techbytes

Software patents

Sizable crowds gathered across Europe in the weeks leading up to the May 18th decision by the European Council, a body with representatives from all European Union member countries, on whether to agree to the amendments proposed by the European Parliament with regard to patent laws. Technology observers were left disappointed as the European Council decided to roll back many progressive amendments proposed by the Parliament. In particular, analysts are worried that the new European patent laws will allow software patents. Software patents are contentious issues because developments in software happen universally and rapidly. It gives the organization that can afford to invest in filing patents and can do so first an unfair advantage over smaller players, who may have an equal claim to the technology, but cannot afford the legal process of applying, enforcing, or disputing patents. In particular, people are worried that once these changes become law, there will be a flurry of applications for the most basic components of the Internet, such as one-click shopping (as Amazon did in 1997 in the U.S.), shopping carts implemented with cookies, credit card payment processing systems, order tracking systems, and so on. While debate continues in Europe, corporations are happily patenting away every inch of technology in the United States, with Apple recently filing patents for translucent windows that fade.

Pay attention

Followers of the "Who invented Linux" debate would surely know that Professor Andy Tanenbaum, one of the most influential researchers in computer science, recently posted some responses refuting the claim that Linus Torvalds could not possibly have written Linux by himself. In a humorous way, Tanenbaum described Linux as "a time machine. It went back to a system worse than what [Linus] already had on his desk. Of course, he was just a kid and didn't know better (although if he had paid better attention in class he should have), but producing a system that was fundamentally different from the base he started with seems pretty good proof that it was a redesign." If you are craving for fame and fortune one day, make sure you know your fundamentals, because otherwise it will come back to haunt you in a very public way by someone older and wiser. The discussion also mentioned an operating system designed by University of Waterloo alumni, to which Tanenbaum notes: "Waterloo is in Canada, where they also play baseball I am told, but only after the ice melts and they can't play hockey."

So I say shame on you selfish bastards who have forgotten the point of this event, in your own egos and self-righteousness -- because if there is one thing I know about cancer patients they wish they didn't have cancer but under no circumstances do they want to be felt sorry for or made to be a source of guilt for others!

Think about it!

- Justin Armstrong

Just what exactly are you high on?

-Hung Lo

...and what exactly are you riding?

-Long Wang

My most esteemed imbeciles,

A reply of the profoundest truth would fail to render intelligible the blaring absurdity of your inquiry.

-High Rider

Dear High Rider

I want to be sophisticated and intelligent just like you. What shall i do? Oh, will you share with me some of your pearls of wisdom?

Witless but Hopeful

Dear Witless

I would counsel you to abandon hope. Throughout my life I have been hampered by a sense of loneliness due to the lack of anyone remotely close to me in intelligence, talent, or charisma. How could you even dream to aspire to the eagle heights of my abilities?

I assume, however, that like most uneducated laymen that wish to be thought of as "sophisticated" you are only interested in impressing your moronic friends. Let me assure you, this task is simplicity itself. Merely use one of the following words in every sentence: "facetious", "indubitably", "puerile", and "mellifluous". For added effect, use more of these words per sentence. For example, armed with these words, even one as obtuse as yourself should be capable of producing the following: "Your facetious car has the most

puerile seats, and they're so indubitably mellifluous, man." Finally, you should routinely stare out into space as if in deep contemplation of cosmic truths. With these tools at your disposal, I am certain your friends will be dazzled by your newfound brilliance.

-High Rider

Over-zealous campaigners,

Somewhere in the small puppy minds of the few asshole campaigners who gathered outside of (and eventually cycled inside) of POETS during Vince Week, the bottom line of volunteering was forgotten.

Let me start by saying that Vince Week is a fantastic idea and should be an annual event during the week of March 25.

Now, as someone who has long hair (which I sincerely believe was the only criteria for some of these cretins to approach people), I was told I "should cut my hair, because it was for cancer" which was followed by receiving a "useful cancer facts" sheet and muffled mullet jokes being snickered about as I walked away.

First of all, volunteering and donations are generous acts of kindness/sacrifices of time . . . never have they been, or will they be mandatory acts! Those who participate in these acts should never feel pressured into doing them if the voluntary aspect and feeling of self-pride that goes along with these acts has been robbed from them!

Secondly, I have lost three family members to cancer within the last 3 years; as well as my father having skin cancer in the same period of time. I am an annual volunteer for the Cambridge Branch of the Canadian Cancer Society Great Ride 'N' Stride, and typically donate every time I'm asked for this worthy cause.

Could I do more for cancer? Most definitely, everybody could! However, I don't need to be told to cut my hair by someone who likely hasn't spent countless hours at a bedside with some of your favourite, most loved and respected family members who are so close to death and pumped full of so many pain killers that you can only hear them tell you they "love you, too" from the look of disgust in their eyes at their inability to say the words!

08SYS In Wonderland

Summer Scunt Gods

For twenty-four hours last weekend, Waterloo was visited by the likes of the Queen of Hearts, the Cheshire Cat, the Mad Hatter and a host of other residents of Lewis Carroll's Wonderland. *Alice in Wonderland* was the theme of this term's Engineering Scavenger Hunt event - the "Havenger of Hearts."

The event ran from noon on Friday, May 28 and ended at noon on Saturday, May 29. After 24 hours of acquisitions, trivia, road trips and more, the winners were announced - the 1B Systems Design team (08SYS). They were the best of the six participating teams and following tradition, they will be the team to run the Winter 2005 Scavenger Hunt. It was not an easy victory, as the competition was intense - in an extremely close second was the team of "Omni Engineering," a team of 1B students from different engineering disciplines; Mechatronics, Chemical, Environmental and Geological.

The Scavenger Hunt featured both old standbys such as *Name That Tune*, *Duct Tape to the Wall* and the *Egg Drop*, as well as a number of new events inspired by the

theme. Hunters challenged the Queen of Hearts in a croquet match and lost - which was probably a good thing, given the queen's penchant for beheadings. In the *Painting of the White Roses* event, teams equipped with brushes and paint attempted to change the colour of the opposing team's rose - while trying to simultaneously protect their own rose. *Trial of the Tarts* was a variation of the game *Mafia*, in which hunters tried to discover who stole the queen's tarts.

For a middle-of-the-night energy boost, hunters could go to the *Tea Party*, which was basically a dance party in POETS. Early morning featured the *Caucus Race*, in which teams chased the white rabbit around Ring Road and attempted to hit him with a beach ball. *The Quest*, a key component of any Scavenger Hunt, sent teams on a hunt for a Snark.

The Scavenger Hunt was brought to a close by a chariot race. Teams constructed their own chariots, and took them on a course around campus. Perhaps the most impressive chariot was that of the 1B Systems team - it even featured its own sound system. If the energy and spirit displayed by this team is any indication, then the Winter 2005 hunt will be spectacular.

Your Campus

Why My Body Is Plotting To Kill Me

A Review of the CIF Gym

Alicia Liu



2B Computer

I awake with a start to blaring country music, and my first thought is that I'm in a line-dance marathon, and being completely disoriented. My second thought is that I have no cowboy boots. After fully waking up, my third thought is to change the radio station to something less heart attack inducing. I looked at the clock and I nearly did have a heart attack when I saw that the hour was still in the single digits (I don't start class until 1:30 p.m. and thus live in the Pacific time zone). Then I remembered that I had planned to go to the gym today. Ah yes, that exalted place where buff and beautiful people find many different ways to maximize sweat production while wearing scanty, tight clothing and flexing their muscles for no apparent reason. I wearily got up and biked my still-half-slumbering body over to the CIF gym.

That would be the brand spanking new Columbia Ice Fields gym just north of Columbia Street beside Optometry. The building is glass and concrete, and designed on the same principles as everything new being built on campus these days. Not terribly attractive, but passably good-looking. The staff is friendly. Towel service is the same as the PAC. The girls' locker room (I can't vouch for the boys) is plenty spacious, with two changing areas, and separate area for washrooms and showers. There are lots of half-size lockers, just bring a regular combination lock to secure your stuff. There are three full sized gymnasiums for basketball, volleyball, badminton, etc., and an ice rink in addition to the fitness centre. The fitness centre is filled with brand new equipment. CIF is great for cardiovascular workout, because it has more than double the number of treadmills, ellipticals, bikes, and rowers than at the PAC. Weight machines are comprehensive as well, though there's only one set of free weights. CIF is new,

spacious, and overall, well-appointed, and I've never seen CIF really busy. The only complaint is perhaps that it's a bit far, but it's worth it if you want to get away from the PAC, which is often packed to the rafters. Information about hours of operation, ice time, and types of equipment available for rent can be obtained at <http://www.athletics.uwaterloo.ca/>.

I limber myself up with stretches and get myself on a treadmill. I set the pace to 6.0 though I have no idea what that means. Now I will relay the ensuing conversation between my brain and my body.

Body: Hey, this isn't so bad.

Brain: See? Wasn't it worth getting up for? Think of all the benefits.

(6 minutes later)

Body: Starting to feel it now, huff, puff, huff, puff.

Brain: Repeat the mantra: sculpted calves, flat stomach, sculpted calves, flat stomach...

(4 minutes later)

Body: Wow, something's hurting, and I didn't even know I had a muscle there.

(5 minutes later)

Body: Ok, now I can't feel anything but my legs, why are you doing this to me?

Brain: Suck it up. This is good for you. You're reducing the risk of heart failure, getting healthier lungs, and creating more DHL's which kills fat.

Body: You're just reading that off the poster over there! And it's HDL's that kill fat. You're just a sadist who wants to see me suffer.

(2 minutes later)

Body: Ow.

(1 minute later)

Body: Seriously now, Ow.

(1 more minute later)

Body: OWWWW...Hey, are you listening to me? Stop this torture, I'm not a hamster!

Brain: *mutters* Weakling.

(Gets off treadmill)

Body: I can't feel my legs.

Brain: Who cares, as long as they look good.

So that concludes my gym odyssey. I think I'll go tomorrow too, if my body doesn't assassinate me while I sleep.

Introduction of Bill 124 Will Have Large Effect On Construction Industry

Francis Hope



3A Electrical

Queen's park passed Bill 124 on July 25, which modifies the Building Code Statute Law Amendment Act of 2002. However, not all the provisions to enforce this law are intended to be in effect until July 1, 2005. This Bill makes many modifications to building laws that affect civil/construction engineers both directly and indirectly. It will impact professional engineers in two major ways.

The first is that certain classes of engineers/designers will have to take extra exams on the Ontario Building Code (OBC) and the specific areas in which they intend to practice. Engineering firms will also have to hire certified engineers for their company that have taken the exams and are registered with the Professional Engineers Ontario (PEO). To speed up the process of certifying engineers, credit will also be granted to engineers who have successfully completed past Ministry Building Code training and assessments.

Secondly, engineers and engineering firms responsible for design will also have to take out more insurance for their company. Engineering firms that wish to be registered under the OBC will also now require indemnity insurance, in addition to an errors and omissions policy. The required insurance will be at three levels, based on a firm's annual billing history: under \$50,000, \$50-100,000 and over \$100,000.¹ Indemnity insurance is insurance that compensates for damage, loss, or injury suffered during construction.

Other smaller changes related to construction are that construction sites are to be visited at various stages of construction, to have qualified inspectors (Registered Code Agencies) inspect the site, to set time frames in which decisions must be made on issuing a building permit, to make new rules governing building

permit fees to enhance transparency, to institute mandatory time limits on building permit decisions in construction of 10 to 30 days, and to establish an expedited route to the Ontario Municipal Board in the case of site plan disputes.

Bill 124 was introduced to address long-standing issues and concerns for builders, municipalities, building inspectors and citizens about existing construction laws. It is designed to update and improve Ontario's building regulatory system so that safety and quality of construction will be improved and construction inspection will be streamlined. It is also designed to make engineers and other construction companies more accountable.

To handle the registry and certification of engineers, the PEO is planning to set up online registry for the exams through the Municipal Affairs and Housing exam site and the ability to take the exams at locations that are used for current professional engineering exams.

These new by-laws could have a large impact on the manner in which engineering firms and consultants function. The extra tests for engineers will help to ensure that they are qualified for the tasks that they are working on. However, it may have an adverse affect of making construction more bureaucratic, slowing down construction and hence, potentially increasing costs. There will be additional costs for engineers and engineering firms because they must carry indemnity insurance. These extra costs could put smaller businesses and engineering consultants out of business. The PEO has tried to resolve some of these issues by relating the insurance costs to the company's prior billing history. Only time will tell how these additional costs will be offset by construction or if new amendments to the bill will be needed.

For more information go to: http://www.peo.on.ca/registration/Bill%20124/bill124_septoct2003EngDim_article.html

¹ PEO, http://www.peo.on.ca/registration/Bill%20124/bill124_septoct2003EngDim_article.htm, 2004

Formula SAE Team Drives for Success

Joey Ranger

2004 Team Co-Captain

For 18 years, the University of Waterloo has competed in the annual Formula SAE competition. The objective of the competition is to design, fabricate, and race a formula-style open wheeled race car each year. It is our goal to create a world-class race car that is second-to-none, and to give all of our members the experiences, knowledge, and skills that cannot be obtained elsewhere.

After a long year, the team has completed a very well integrated and dynamically sound Formula SAE race car. The car progressed from the design stage, through the manufacturing process, and materialized into something the entire team can be proud of. The new design of the front chassis brought about many changes and fresh approaches, which have together produced a car that is unlike any other.

The car has a mild steel tube-frame chassis throughout. This has allowed

many of the forward systems to be integrated in ways that were not possible with the previous carbon composite monocoque, including the steering, front anti-roll, bell-cranks, and dampers.

The car uses a Honda F4i CBR 600 motorcycle engine, and many modifications have been made to the stock engine to better suit the Formula application, putting the torque in a usable RPM range. Intake ports were reduced in size to increase air velocity into the cylinders, and the valve seating was adjusted. The engine has a custom carbon-fibre intake, which curves and faces rearward in an attempt to keep the weight as low as possible.

The team returned from Michigan with a 19th place finish at this year's competition. A record total of 129 teams brought working cars. The competition was very stiff, and many teams had very well designed and executed cars. The University of Waterloo team completed all events, an accomplishment in itself, as only 40 teams completed the endurance event.

Besides its 19th place overall finish, the team won second place in the Visteon engine cooling system award and placed third in the Society of Plastics Engineers composites award. Here is a summary of UW's results in the various events of the SAE competition:

Autocross: 17th. "This is a short 60 second time trial course. It started to rain after the first 20 cars had competed, and Waterloo made the 2nd fastest time on the wet course."

Endurance: 28th. "This event consists of 22 laps around a 1 km course (approximately 60 seconds), and is used to determine the reliability of the cars. Only 37 cars completed and Waterloo finished with the 8th fastest time. A four minute penalty for poor fuel economy pushed us into 28th place."

Acceleration: 18th. "This event has each car accelerate as quickly as possible through 75 m. Waterloo completed this in 4.38 seconds, approximately 0.2 seconds behind the fastest car."

Skidpad: 37th. "The skidpad consists

of a figure 8 track used to determine the maximum lateral acceleration that each car can achieve."

Design: 21st. "The design placing is based on a short (20 minutes) presentation before four to six design judges, explaining the features of our car."

Cost: 45th. "This score is based on a report and presentation outlining the manufacturing steps and total cost of the car. The report details the manufacture of each component, and all of the costs associated with the car."

Marketing: 34th. "This consists of a 20 to 30 minute presentation in which we sell the car to two or three judges."

To learn more about the team, please visit our website, <http://www.eng.uwaterloo.ca/~fsae/2004/>, send us an e-mail at fsae@engmail.uwaterloo.ca, or stop by our room E3-2107. We are always looking for help. The 2005 team has already started work on the next car, and we are looking to recruit people from all faculties and departments. You do not need to have an engineering background to help out.

POINT VS. COUNTERPOINT

Should The Red Cross Stay Silent?



Alicia Liu

2B Computer



Quoc Huy T. Le

4A Electrical

To start, a disclaimer. Yes, I've seen the pictures. Yes, they are highly disturbing. Yes, the events at Abu Ghraib are atrocious and should be stopped. Now that we have that out of the way, onto the debate.

The Red Cross should maintain its current policy of not making public human rights violations. While it may sound at first inhumane to keep silent about such obvious breaches of the Geneva Convention, it is with good reason that the Red Cross maintains this difficult policy. If the Red Cross publicizes all the appalling incidents it encounters, the organization will have its privileged access to most prisons cut off.

It is also not the Red Cross' job to report on human rights violations. The Red Cross' mandate is to "protect the lives and dignity of victims of war and internal violence and to provide them with assistance." If it cannot even access the prisons, it obviously cannot deliver crucial aid to the prisoners-of-war, which would effectively render the Red Cross useless and irrelevant. As the only humanitarian group allowed inside many prisons to examine the prisoners, the Red Cross should not be doing anything to jeopardize this position, because otherwise there will be no one at all to alleviate the brutalities these prisoners of war suffer.

Additionally, it is not as if the Red Cross just stands by watching international human rights treaties being violated. The Red Cross makes recommendations to governments on a confidential basis, because, in the end, it is up to the government to change or clean up their mistreatment of prisoners of war. Governments do not want to lose face, either.

Say you were a government and you had a crazy general who has taken to heart a chapter of 1984 and had been torturing prisoners unmercifully. Would you rather get a quiet recommendation from the Red Cross about this situation and set about rectifying it, or have pictures of the atrocities splashed over national newspapers and promptly get the Red Cross banned from ever setting foot in your prisons again? In short, if the Red Cross did not maintain the confidentiality that they currently do, I doubt it would have lasted a fraction of the 140-odd years this venerable organization has been in existence.

Boggan Burgers!

Sarah Sirega
4A Civil

The '04 Civils will be selling Boggan Burgers as a fundraiser for the Great Northern Concrete Toboggan Competition team from the University of Waterloo. Burgers and susaages will be sold outside of CPH every Tuesday. Vegetarian options are available. Come on out and have a burger for the team!

Mission: "The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of war and internal violence and to provide them with assistance." This quote is taken directly from the ICRC's mandate. Some key elements that I wish to point out here is that the ICRC is "impartial, neutral and independent" and that they "protect the lives and dignity..." The operative words here are "impartial," "independent" and "dignity."

The latest news to be in the spotlight of the media pertaining to the Iraq War sequel is the gross mistreatment of Iraqi Prisoners of War in Abu Ghraib. The details of the mistreatment need not be expounded here. It is taken for granted that members of the US Army severely violated the Geneva Conventions (the charter governing the treatment of prisoners of war among other things). Much to the dismay of the general public, there is still lingering doubt as to whether the Red Cross took appropriate measures to help these Iraqi prisoners. It is unfortunate in this situation that the ICRC fell short of upholding their mandate as well as failing to display the positive reinforcement of human rights upon which the philosophy of the Red Cross is based.

The ICRC is well known for its full respect of humanitarian law (including the Geneva Conventions). Consequently, due to the nature of their work, they are also charged with the responsibility of ensuring that these laws are observed. After all, how can they claim to support the law while permitting those who are supposed

to follow humanitarian law to discard it? Those who stand by while human rights are being trampled are not supporters of these ideologies. It's a classic case where if you're not part of the solution, you're part of the problem. Their knowledge of what was going on in the prison at Abu Ghraib should have been enough to cause the ICRC to blow the whistle. By that, I do not mean immediate full public disclosure. But the ICRC should have voiced concerns to successive levels of authority until either the situation was rectified or a public outcry forced an investigation. Indeed, the ICRC can be credited with the authorship of several letters and reports sent to certain officials regarding the treatment of Abu Ghraib prisoners. But since it was one of the army's own that exposed the crimes, it is clear that the ICRC did not do enough to "protect the lives and dignity" of those Iraqi prisoners.

Usually, ICRC delegates must negotiate access to persons detained in times of war and conflict in order to evaluate the conditions of the prisons in addition to the well-being of the prisoners. An argument can be made that the ICRC's silence, or at the very least, their unwillingness to go public with this information, was a calculated move aimed at ensuring access to future prisoners of war. However, this argument is put forth under the guise of respect of confidentiality inherent in all dealings with the armed forces. This is just a noble way of saying, "we'll make a difference later." Too bad that this "later," if it comes at all, will come at a time long after explicit photos of Iraqi prisoners of war in self-demeaning positions are released worldwide.

The other problem with this argument is that it is in conflict with the ICRC's own mandate. To be an "impartial, neutral and independent" organization means not to be swayed by pressure, political or otherwise. The ICRC's refusal to go public for fear that they will be hindered in future POW visits is nothing short of being influenced

by the armed forces. This lack of impartiality, or display of preference if you will, for army self-interests comes at the cost of Iraqi dignity, not to mention the integrity of the Geneva Conventions. It is clear that the ICRC made the wrong choice when they decided not to push this matter any further.

Should the ICRC make international broadcast announcements every time an infraction of the Geneva Conventions has been committed? By no means. Regular reports to authorities are often sufficient to correct any injustices that may have occurred. However, the ICRC has in the past made public their concerns when a state authority has failed to take any action after a long period of time. For example, the ICRC expressed concerns about the detainees at the navel base in Guantanamo Bay, Cuba. When images of army soldiers urinating on naked Iraqis are being taken then it should be clear that the severity of the crimes is high and that the ICRC did not act fast enough.

Being impartial and independent is what the ICRC must be. Protecting the lives and the dignity of prisoners of war in any armed conflict is what the ICRC has promised the world through their mandate and past actions. Their responsibilities to people's lives is paramount and supersedes all other issues. As such, they are required and expected to do what it takes to ensure that the human treatment of all prisoners be carried out. The ICRC does not have the luxury to subscribe to "the ends justify the means" way of thinking. The assurance of future prison visits does not justify a means which denigrates the lives of those whom the ICRC is to protect.

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

**Playing With Fire:
Issues Faced By a Biomedical Engineer**

Taneem Talukdar
1B System

Biotechnology and biomedical engineering are careers many high school and university students are considering today. Numerous areas, from computer systems to agriculture, are on the verge of being revolutionized by the application of biotechnology. University programs related to biotechnology are in heavy demand as more top students aim their careers towards this field.

There is no denying that this field harbours enthralling potential for our society. The cure for cancer, reduced aging, disability rehabilitation, industrial waste clean-up, food for developing countries; these are all marvels promised by the research and development conducted in this field today. However, along with these potential benefits come enormous ethical responsibilities, which is something budding bioengineers should consider before plunging into this field.

For example, Peter Schultz of the Scripps Research Institute in California recently created the world's first truly syn-

thetic life form. He developed a bacterium which utilized and produced proteins made from 21 amino acids, as opposed to the 20 used by all living things in nature. Consider the implications of this work: Schultz was responsible for generating a completely new form of life. What would be next? He has mentioned making more complex living things like mice. Will this lead to progressively more complex organisms, until we achieve a being that is as sentient and intelligent as humans? What if these new organisms turn out to be biologically hostile to natural life, resulting in their destroying us and taking over our living spaces? This is not a completely unlikely scenario, given how dangerous a natural virus like SARS can be today.

Similarly, while the debate over abortion rages on, scientists are doing work which makes this procedure look tame by comparison. Norbert Gleicher, a scientist at The Center for Reproduction in New York City, recently reported mixing the genetic information of two human embryos together. This comes uncomfortably close to the idea of merging two different people into one. Another scientist, Tal Biron-Shental of Meir Hospital in

Israel, recently reported her attempts to develop embryos from aborted fetuses – essentially bringing a fetus back to life after having been aborted. Jose Cibelli of Michigan State University has created artificial egg cells. Among other things, this could lead to same-sex couples creating a child by combining their genetic information into an artificial egg cell.

Research like this presents an ethical minefield, and some serious questions need to be addressed. Work done by scientists, like that mentioned above, is fairly unregulated because public administrators and lawmakers simply do not know where to place this kind of work on the ethical and safety spectrum.

A significant amount of this cutting edge research is being conducted here in Canada. At the University of Waterloo, the University of Toronto, and McMaster University. Hence, if you are a student who has entered a biotech-related program at one of these schools, you will receive the opportunity to become involved in this type of work. It is then a good idea to discover where you stand concerning the implications of this research before plunging in.

Engineering Society Executive Reports

Loving Fourth Year

Josh Levitz

President



Hey Everyone,

I hope the school term has settled in nicely, and everyone is ready for some good times with midterms! The first month has been great, and the state of the Engineering Society looks fantastic right now, so thanks to everyone who has participated in events so far.

The one thing I'd like to bring to everyone's attention is the upcoming election for new EngSoc executive positions. Yes you get rid of me soon! Nominations

start on June 7th, and I just want to make sure you are aware of it. Having been on exec first as VP Internal and now as President, I can honestly say it was an amazing experience. I strongly encourage people to run for positions, as it's a great chance to better EngSoc, meet new people, and just have some fun! Let me know if there are any questions about any positions, as you should be fully aware of all aspects of the exec positions before you make your decision.

To be honest with you, that's all I can think of at the moment. Everything has been running smoothly this term so thanks again to all the planners and directors. Good luck with midterms, interviews, and staying sane, and let me know anything you think I need to know by emailing me at bsoc_prez@engmail. Take care and see you around.

PEO And ESSCO

Jeff Alfonsi

Vice President, External



Bonjour.

Here's what's cooking on the VPX stove...Do you smell what the Rock...I mean, the VPX, is cooking?

Just a reminder, the Professional Engineers Ontario are no longer mailing Engineering Dimensions to your house but rather to the Orifice. Pick up your copy now. For those students who are not members, feel free to nick a copy and take a gander. Registration is online and free at <http://www.engineeringstudents.peo.on.ca/students/register>. PEO has also set up an advisor at our school in case you have any questions about why you should become a professional engineer, besides being able to endorse passport applications. Dr. Roydon Fraser in Mechanical Engineering is our advisor. Look him up and make him work for his title.

The ESSCO Annual General Meeting is taking place June 25-27. Thank you to everyone who applied. The delegates will be Joshua Levitz, Sharon Attwood, Rahul Bhardwaj, and myself, Captain Jack Sparrow. ESSCO is actively involved in Physics day at Canada's Wonderland, the PEO, First year Integration Conference (FYIC), and the Council of Ontario Deans of Engineering (CODE). If you have any concerns or suggestions about these issues please voice them to the aforementioned delegates.

I wanted to make a shout out to all those interested in helping out with the Ontario Engineering Competition, which is hosted by none other than the wicked Waterloo, U of. Volunteers are needed to organize all the cool and sexy delegates from across Ontario and plan events and logistics. Meetings are Sunday at 2:30 in POETS.

Lastly, I would like to encourage ANYONE to join the Women in Engineering mailing list at [uw_wie-subscribe@yahoo.com].

EWB Events

Mike Spendlove

1B Systems



Walmart, the world's largest retailer and private employer, is not easy to love. While its regular low prices bring substantial savings to consumers and while it employs over 1.4 million people in countries all over the world, it doesn't take more than a Google to see why communities such as Inglewood, California vote overwhelmingly against a Walmart superstore in their area. (Try www.walmart-watch.com for starters.) The reasons for such controversy range from the aesthetic (big-box stores do little for a small town's ambience) to the economic (Walmart's policies force other retailers to outsource manufacturing jobs) and from legal issues (Walmart is currently involved in over 8 000 lawsuits) to labour issues (one estimate suggested that three community jobs are destroyed for every two created at Walmart.) Even so, Walmart's lure is so enticing that it can still exert enough political pressure to circumvent municipal regulations and bypass mandatory environmental or traffic studies in the name of corporate growth.

With the goal of exploring the issues surrounding Walmart, Engineers Without Borders organized a discussion group last Wednesday on the grassy knoll beside the Grad House. In preparation for the discussion, two articles concerning Walmart and its controversial expansion were posted on the EWB website to give participants a good background. Although it only lasted an hour, some interesting questions were raised:

If Walmart's low prices supposedly benefit low-income people, then why do so many of their locations have poor public transportation access?

While many Walmart employees are from the community, foreign-owned retailers often remove wealth from small towns. How can we ensure that the community is not impoverished by an international corporation such as Walmart?

Kate Quarrie, the mayor of Guelph who came into office last November,

GeniusBowl

Matt Strickland

Vice President, Internal



I'm going to make this short and sweet this week. The halls of the engineering buildings have been busy with Vince Week, the EngPlay auditions, and the term's Scunt, but this column is going to concentrate on two events coming up in the not-so-distant future.

The first cause I'd like to advocate is the upcoming elections for the Engineering Society executive. The nominations are opening next week and there's absolutely no better way to get involved in EngSoc than by running to be one of its leaders. If you're into social functions, meeting a ton of other wicked-cool engineering students, and are a fan of organizing events and promoting them, then Vice President Internal might just be for you. If you're interested in finding out more about the position I've been filling for the past two school terms, feel free to e-mail me at bsoc_vpint@engmail.uwaterloo.ca.

Next subject I'd like to pump has to do with a lot of underlying tension in the engineering buildings. Yes, there exists in the world of UW Engineering a certain unspoken debate as to which brand of engineers is the smartest. Who hasn't flipped through the Waterloo admissions book just to check out just how high the admission averages were for their particular program? Who hasn't heard stereotypes about the electricals being little more than a bunch of calculus geeks or about the mechanicals being crazy about fan belts and carburetors?

Well now there's a chance to set all disputes to rest! On July 8th, the first ever Engineering Genius Bowl will once-and-for-all determine which department has the smartest students. The contest will test teams on knowledge and trivia that is completely unrelated to engineering. How do you participate? Find yourself five other clever classmates and register in the Orifice. Try finding out who in your class plays Trivial Pursuit late into the night or watches Jeopardy each evening at 7:30 p.m. The competition will test budding engineering students in — among other subjects — history, science, sports, art, and geography.

So spread the word, start trash-talking your pals in other engineering disciplines, and register your team soon. There's promise of great prizes, cutthroat competition, and unparalleled glory, so talk to your classmates and start looking for posters with more details!

based her election platform on opening up Guelph to big retailers such as Walmart. If the demand for stores like Walmart is so great, how can we ensure that these big firms comply with municipal regulations and town plans?

While addressing such a complex and controversial issue can be difficult in such a short amount of time, it seemed like everyone who attended enjoyed the chance to express themselves as well as learn something from the discussion. Hopefully we'll see you all back next time!

Free Money

Emma Bardon

Vice President, Education



There's still time to get free money! Bursary forms are due on June 15th. Student Awards has a ton of money they have to give away, but if not enough people apply for it they have a hard time doing so. You put a lot of money into student awards every term (30% of each tuition increase has to go there), so go get your money back!

On the co-op front, as of May 25, approximately 88.8% of Engineering students scheduled to work in the spring term were employed. This is a very slight decrease from last year's numbers. The combined employment rate for all faculties is 91.6% employed. Percentage-wise, the numbers show that Engineering has the second lowest employment rate, second only to Teaching (and they only have 6 students in the process, so they don't really count). Typically Math has similar (or worse) unemployment rates, but due to some streaming changes they have fewer students in the process this term.

If you are having difficulties with Jobmine, let CECS know. Without feedback, they can't do anything. If enough people provide feedback on how to make the system better, they can actually do something about it.

Donations

Grant Holohan

Vice President, Finance



I'll make this quick. First, the EngSoc budget was not passed at the second meeting due to some directors' proposals being placed in the wrong mailboxes. All has been resolved, and hopefully the budget will be passed at the third meeting which is tonight.

EngSoc donations are to be proposed at the third council meeting. There were twelve groups asking for money totalling over \$5700. EngSoc budgeted for \$2000 in donations this term. The decisions will hopefully be made tonight at the EngSoc meeting.

Coming up this term: B*5 bowling, and other fun financial events.

Engineers Without Borders encourages all to come and check out our next discussion group from 12:30-1:30 pm on Wednesday, June 16, on the grassy knoll beside the Grad House. The topic this time is perhaps even more controversial: considering the scarcity of oil, should we not keep gas prices high to encourage conservation? Background articles will be posted on uwaterloo.ewb.ca.

Co-op Ranking: A New Community for Co-op



Arguably, the strongest draw of admissions into engineering at the University of Waterloo is its co-op program. Over the last few years, the coop program has undergone many changes in order to prepare for the future, including the recent move to a web based system and HTML resumes. However, most of the changes seen by the students affect how we apply to jobs rather than how students approach co-op. This is where a new site called Co-op Rankings is trying to change things.

Over the past few years, co-op has been the hot topic in post-secondary education. Many universities across Canada have started adding or increasing the co-op component of trade programs. This will lead to more competition and less of an advantage for those that went through co-op. It means that in order for you and I to make the best use of our co-op terms, we have to find a placement that will give us opportunities to develop new skills, contacts and experiences while avoiding the ones that you've heard horror stories from.

For those of us who are motivated and have the time, there are services offered by CECS that provide this sort of information about companies. However, for a lot of students, it is inconvenient to head down to the Co-op building and research every company they apply for. So why not do it quickly over the web at Co-op Rankings (<http://www.coopranks.com/>)?

Co-op Rankings was created by a

group of 4A Electricals (of which I am one) who have gone through the same problems that you have. What Co-op Rankings wants to do is to provide the students in co-op an opportunity to make informed decisions throughout the co-op process. That means providing them with information before they apply for jobs, when companies have interviews and even when they do their rankings. Ever had that anxious feeling before an interview because you didn't know what you were going to be asked? The interview notes section of Co-op Rankings will let you know beforehand.

“Many universities... have started adding or increasing the coop component of trade programs.”

Perhaps the most ingenious feature of Co-op Rankings, and most welcome, is its rankings section. For many people, the ranking and matching cycle is the most stressful of all the stages in co-op. No

matter how well you prepare your cover letters, resumes or interviews, your co-op fate lies in the virtual arms of a ranking algorithm. The rankings section of Co-op Rankings allow students to enter what offers they have received, and to look up who received offers for companies on their ranking sheet. That means we can rank our jobs accordingly with full knowledge of where we stand in comparison to others.

It would be great if we can all have a more clear picture of what happens in co-op, but unfortunately that comes at a price. Co-op Rankings is a student-run site supported by students. Without students entering information about past work-terms, interviews and their ranking information, Co-op Rankings cannot provide the information you need to make an informed decision. So go and check out Co-op Rankings at <http://www.coopranks.com/>, enter your information, and find that perfect coop placement you've always wanted.

Why We Won't Vote (and How to Fix that Problem)



One of the major issues in the coming election is the vanishing youth vote, a phenomenon where in recent elections fewer and fewer youth (ages 18-24) are voting.

In the last election, only 25% of eligible 18-24 year olds exercised their right to vote. To hear professionals explain it, they blame it on young people finding it boring, irrelevant to their lives or not understanding what is going on. As one person wrote to the Toronto Star, "I really just don't take much interest in politics". In this article and others, the solution is to make elections and politics "relevant to young people." One tactic employs text messaging on mobile phones to allow young people to interact with the various political parties. Another is to use pop star appeal by campaign for candidates. Finally, there is an education campaign, in which public schools hold mock elections.

I think the reasons given and the solutions are silly, or at least exemplify the type of lazy reasoning that occurs all too often. The reasoning reflects a blind adherence to polling where young people, asked on the spot why they don't vote, give an empty answer to the wrong question. In effect, the experts are mixing up cause and effect, where various causes make young people feel politics is confusing and irrelevant, hence they not vote. For example, it makes no sense to suggest that young people will not vote because they do not understand politics, these being the very same people who are pursuing careers in genetics, quantum theory or engineering. Meanwhile, their grandparents, who are more comfortable with typewriters than computers, have no such problem. This might make sense to those who only read polls to guide their actions, but this is lazy thinking.

Abandoning easy poll answers, then what are the reasons for voter apathy among the young? First and foremost must be the ever lengthening of adolescence. After all, 50 years ago a 20 year old was real adult. Most 20 year olds were married or just about to be, finished high school and had started working full-time, whether it was raising a family or at a factory. Flash forward to today; most 20 year olds are in University or College, and probably very dependent on their families to help them finance their education. Most will not get their first real full time job until they are 23. It is true yesteryear's 18 is today's 30 year old. This makes it very difficult to attract young voters to politics, because politics is essentially an adult interest,

involving money and especially power. Most young voters today cannot grasp either since they are very poor and have no power; after all, they probably live with their parents when they are not at school.

A second problem is language. Young people just do not speak the language that most party leaders speak. For example, listen to three different people speak: Paul Martin, Homer Simpson, and the typical engineering student. It is not a coincidence that Homer and the typical student sound very similar while Paul Martin is the odd man out. Honestly, young people would feel much more at ease if politicians would say the words "cool...", or "its so like what he said", or "voting for the other guy is like d'oh!". Instead politicians like to speak very grammatically correct words, even if it sounds like Shakespearean English to many young people.

The third problem with voter apathy among the young is taxes. The problem is not they pay too much, but rather they pay too little. Unless you are the smartest 18 year old stock trader alive who bought RIM stock when they were \$10 last year, that part time or co-op job will not pay enough to stick you with a tax bill. This is a problem since ironically, taxes are what make people want to participate in government and vote. If a person pays a lot of taxes, they want a say in how that money is spent. After all, "no taxation without representation" was the rallying cry for Americans and others in creating democratic representative governments. Without the taxation part, it is likely people would not care who runs their government or how it is run. Again, this combines with the first problem; 50 years ago, few young people went to university so they all had jobs and paid taxes, creating a desire to participate in politics.

This columnist has identified two solutions to the above issues. One is to tax young people, since taxing them would likely drive young people to want a say in their government. Taxing young people's money would be useless, since they are poor and would just ask their parents to foot the bill. Instead, tax young people's time, like conscript them to one year's worth of volunteer or military service. Just thinking, this would be a very unpopular proposal. The second solution is to raise the minimum voting age. The lengthening of adolescence will not change in the foreseeable future, so it makes sense to only let those people who have truly reached adulthood vote. When society permitted 18 year olds to vote, it was because 18 year olds were thought to be mature. These days, this might mean raising the voting age from 18 to 30. Whatever the solutions are, they aren't because politics is irrelevant or confusing to young people; instead they lie in realities or our culture and how it has changed over the last 20 years.

Election Race Heats Up

...continued from Page 1.

The New Democratic Party, led by Jack Layton, is expected to challenge Canada's current two-party domination in the upcoming election. Layton has already unleashed a balanced budget for the next five years, accomplished through tax increases to the wealthy, and an estate tax which may annoy the aging population. However, The NDP plans to cut tuition by 10%, create national homecare and pharmacare programs, and immediately reverse privatization of healthcare. The NDP will refuse to join the United States in a North American missile defence system, and will improve salaries, benefits, and working

conditions for Canada's military. Layton will also focus on improving environmental conditions, for example by providing GST rebates for 'clean cars'. If Layton is elected, engineering opportunities in the fields of efficient 'green energy' and automotive engineering may increase.

The Bloc Quebecois, although committed to the sovereignty of Quebec, has promised an elimination of gasoline surtax, a refusal to participate in the North American missile defence system, and federal funding transferred to the provinces with no strings attached. Due to the party's limited popularity outside of Quebec, Duceppe may find it difficult to compete with the Liberals, Conservatives, and NDP.

Upcoming Events from EngSoc

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	Check out up-to-the-day event postings on the EngSoc website www.engsoc.uwaterloo.ca
30	31	1	2	3	4	5	
WEEF Proposals Start			EngSoc Meeting #3	Vince Week Finale		Athletics Event	
6	7	8	9	10	11	12	
Exec Nominations Start							

Columns

Continuing Coverage of the 2004 Stanley Cup Playoffs

Michael Simoes

1B Chemical



In recent years, the Stanley Cup Finals have always been the focus of hockey fans in Canada. These games have been played by veteran teams and dominated by experience. Since 1994, a Canadian team has not played in the Stanley Cup Finals. The last Canadian team to play for the Cup was the Vancouver Canucks, coached by none other than Pat Quinn, and still they did not bring home the Cup. A year before them, the Montreal Canadiens got the job done, and won the Cup, and were the pride of Canada.

The drought of not having a Canadian team in the Stanley Cup finals came to an end this year with the Calgary Flames, coached and managed by Darryl Sutter, against the top in the Eastern Conference, the Tampa Bay Lightning. Both teams have Canadian captains, Jerome Iginla, and Dave Andreychuk who have led their teams to victories and overcome losses. It is these two players who play with heart and character that make their teammates want to play with greater intensity and courage so that they can win each and every night they step on the ice.

For these two teams to even make it this far into the playoffs, they required great goaltending. For the Flames, Miikka Kiprusoff has been outstanding. With an overall GAA of 1.95 to date, and .928 save percentage, he has saved the Flames from elimination, especially against Detroit. For the Lightning, Nikolai Khabibulin has been nothing less than stellar. With three shutouts in the opening series against the New York Islanders, a GAA of 1.75 to date and a save percentage of .931, he has bailed the Lightning out of many holes.

With two hot goalies, these two teams were destined to play in the Cup final.

To date, the series has been split, with the Flames winning decisively 4-1 in the opening game in Tampa Bay, and the Bolts returning the favour in game two, winning 4-1. Both games were very fast paced, with lots of hitting and beautiful saves made by "Kipper" and the "Boulin Wall". With games 3 and 4 being played in the Saddle Dome in Calgary, the sea of red and

a nation will be behind the Flames to win two straight, and return to Tampa putting the Lightning in a must-win situation.

With amazing game play must also come fair refereeing. In game 1, this was the case, with not too many penalties being called, and little stoppage in play. This makes great hockey, and allows the players to decide who will win, not the referees. In game two, the refereeing was awful with penalties being called on legal hits,

and inconsistent refereeing. For any fan, it can be very frustrating to see their team lose because of lousy refereeing.

In any case, the next few games should be a lot more physical, with game 2 ending in brawls, and players being handed out game misconducts. With this type of hockey, Canadians everywhere should be proud, and should be cheering on the Flames to bring the Cup back home to Canada, where it belongs.

Cindy's Kitchen: Summerfresh Salads

Cindy Bao

3A Electrical



Summer is the best time for salads, since most of them don't require you to turn on the stove. That's not the case with the first salad on today's column, unfortunately, but I enjoyed it so much that I'd like to pass the recipe on.

Warm Mushroom Greens Salad

Adapted from Canadian Living Cooks

When I served this salad at our Christmas dinner last year, it was well received. The meaty texture of the mushrooms makes a nice contrast with the crunchiness of the lettuce.

The original recipe uses arugula and radicchio for a more colourful presentation. However, taste-wise, the dressing goes well with any kind of lettuce with a slightly bitter taste, endive, escarole, etc. As for the mushroom, use any of or combine button, oyster and portabella.

2 tsp olive oil
4 cup mushrooms, sliced
2 tsp chopped fresh thyme, (or 1 tsp dried)
1/4 tsp salt
1/4 tsp pepper
5 cup lettuce, your favourite kind
1/4 cup shaved parmesan cheese

1. In a large skillet or shallow Dutch oven, heat oil over medium-high heat; cook mushrooms, thyme, salt and pepper, stirring often, for 10 to 15 minutes or until browned.
2. Remove from heat to let cool slightly
3. Prepare dressing.
4. In salad bowl, toss together arugula, radicchio, mushroom mixture and Parmesan cheese.
5. Top with mushrooms and pour in dressing.

Dressing:

4 tbsp balsamic vinegar
2 tbsp olive oil
1 tsp Dijon mustard
1/4 tsp granulated sugar
1/4 tsp salt

Whisk together all ingredients

Make 4 servings

Chinese Bean Noodle Salad

For the low-fat dieters out there, this is what I have to offer. Both the bean noodles (also called glass noodle or vermicelli) and Enoki mushrooms (see picture) can be found in an Asian food market. I have seen the mushrooms come in cans or vacuumed packages, but the latter has to be soaked in water, but still tends to be a bit dry

2 pkg of bean noodles (about 100g)
1/2 English cucumber, cut into match stick size
1/2 cup Enoki mushroom, drained
Soy sauce, rice vinegar, chili flake and sesame oil to taste

1. Soak bean noodles in hot water, until soft
2. Stir together all ingredients and serve

Makes about 4 servings



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

WELCOME BACK

Technical Speaker Competition

The Faculty-Level Competition will take place on **Thursday, June 3** at 10 a.m. in DWE 2534. The winner of the Faculty Competition will receive \$300 while all other participants receive \$50. Please contact your undergraduate office if you are interested in participating in the Competition.

Refreshments will be served
Everyone is welcome

Debates

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

DATE July 5, 6, 7
TIME 11:30 - 1:00
PLACE E2 - 3324

Finals: Friday, July 9
Noon
Outside POETS (CPH)

Refreshments will be served at the finals
Everyone is welcome

Tips to Avoid the Doom of Those Impending Midterms



Fransic Hope

3A Electrical

Midterms are rapidly approaching in a few weeks and like many of you, I find myself in the predicament of having not done any or very little work in any of my subjects that are not either: A) projects that are to be marked and have to be handed in at a specific deadline or B) labs that have to be completed by a certain date. Although I should have spent the long weekend catching up on my work, instead I was engaged in activities that had nothing at all to do with work. So, for those of you that have done no work, there are a number of alternatives: do no work, party and pray for the best; do a huge amount of work catching up; try to study smart and only study the material that is needed for the midterm.

For those that choose the first option, if you have a photographic memory (lucky son of a gun) you can do all the work the night before and memorize the rest. For everyone else there are some key theorems that will become useful for you during your midterms. The first theorem is used in proof or questions where you need to go from one step to another but do not know how to express the steps involved in the question or when you want to go straight to the solution. When this happens use the P.F.B. (Pull from bum) theorem. If you wish to go with a more rigorous proof you can use Q.E.D. (latin abbreviation for "proven as given") but this may not always be the most appropriate solution. Another point to consider is that if you are not sure what to write for a question then write anything. Brevity many be the soul of whit, but excessive bull-excrement will get you extra marks. If you write nothing

for a question you will get no marks, however if you write any solution to the question, you may get part marks. Hey, buddy, you're desperate.

For those that choose the second option, study study study, you'll be living in your room for the next two weeks, eating a strict diet of micro-waved food, and involved in no extra-curricular activities such as drinking, partying and enjoying the sun. Harsh.

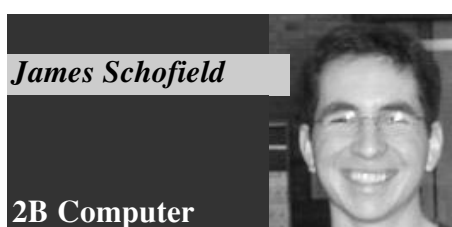
For those that choose the third option, study key concepts, I can help you. I find that the best way to study for a course and although this may seem trite, is to know the common types of questions for the course and know them inside and out. The best way to do this is to study previous midterms and finals that a professor writes and look for the common questions in those midterms. Also, know the core material that is presented on the course and don't obsess about small questions that will never be asked. Also, work efficiently, don't fixate on only one course if you get stuck on one subject, go to another subject and come back to the subject you were having problems with later. You can also work in groups, which gives you perspective on which parts of the course are most important. Furthermore, if there are any questions, groups can help find the answers. But when all is said and done; you're as screwed as everyone else.

Here are some rules that apply in any situation. If you feel you are screwed in a midterm, chances are everyone else is screwed, too. Get lots of sleep just before midterms and exams. Wherever you can find the time, sleep at home, in class, in labs or anywhere else. In other words, sleep around.

Beyond these tidbits of knowledge there's not much I can do for you. But then again, maybe you shouldn't be taking my advice; I wasted my time writing this article instead of studying as my roommate so candidly pointed out.



WOMBAT Off to the Races



James Schofield

2B Computer

Waterloo's Off-road Mini-Baja Team held a meet-and-greet last Friday to showcase their 2004 vehicles. The team is off to compete in Milwaukee this week in Mid-West SAE Mini-Baja Competition,

where they will take part in acceleration / top speed, manoeuvrability, endurance and design events, among others.

The team will be using the new engineering motor sports trailer, which was recently purchased with funding from WEEF, the Dean of Engineering, and the Mechanical Engineering Department, for use by the Formula SAE, Clean Snowmobile and WOMBAT teams.

To get involved with the 2005 team, see the WOMBAT web site at [http://www.eng.uwaterloo.ca/~baja/].

Rain Everywhere, and Plenty of Stuff to Drink



Alicia Liu

2B Computer

It's May 2-4, the long-awaited holiday weekend that Canadians have been waiting for since January 5th, to mark the beginning of summer with lots of, umm, barley. As you all know by now, this year's holiday sucked, since it rained torrentially from Saturday to Monday. Maybe Queen Victoria doesn't like how her birthday is now being used to propel alcohol consumption, and decided to make it rain a lot. Well, what does one do when stuck inside a small cottage in Muskoka with a dozen delirious university students in various stages of drunkenness, who have just found out they passed the previous term? Write an article for the Iron Warrior of course.

So here I am, amidst blaring old-school Green Day and the Kill Bill soundtrack, various unidentified stains in the carpet, wafting smoke and heaping piles of grilled meat from at least four different animal species, attempting to write a semi-coherent article. Maybe it's the lack of sleep, oxygen, and vegetables, but instead of writing about the topics I was assigned, I feel compelled to write about, well, this, the weather.

Friday afternoon was beautiful blue

skies, rosy sunshine, a perfect 23.5 degrees with a slight breeze. Simply Perfect. Sitting on the patio in a Muskoka chair, overlooking tranquil waters and picturesque trees, is the perfect way to forget the cares and stress of a Waterloo week,...well, after tuning out the shotgun blast-like potato cannon going off behind me. But the pregnant clouds with dark grey bellies held an ominous sign.

And then the rain began.

And it rained for 40 days and 40 nights...well, no, but it did rain an awful lot. Sitting through a three-hour butt-numbing car ride and sacrificing my Friday lectures for endless bleak slate-coloured skies and incessant hammering of this accursed rain. What is it about the weather that can affect our moods so directly? Call it seasonal affective disorder or whatever you like, but the truth is weather has a profound effect on emotions. What else can explain the higher suicide rates in countries that receive less sunlight? And I'm sure you've noticed how much happier everyone is in the summer term, even when there is more work than the previous term.

Weather is one of Nature's last strongholds that humans haven't conquered. Yeah, we can seed some clouds, but weather can still destroy everything you have, including you, in a variety of creative ways. Wouldn't it be great if it only rained between 3 and 5 a.m. and was a perfect 23.5 degrees with a slight breeze every day? Well, until then, there's more barley to be consumed.

The Great Outdoors of the Waterloo Campus



Edward Tan

2B Computer

As spring approaches the beautiful weather draws crowds of students outdoors. Couples relax under the cool shade of large trees. Friends rest along the walls outside MC and discuss the latest episode of American Idol. Oh wait, these are mathies. Friends outside MC discuss the thrills of Laplace transforms with orgasmic enthusiasm. People may even just find a rock to sit on to enjoy the great outdoors while having their lunch. It's nice to bask in the warmth of the sun, admiring the gorgeous greener and fragrant scent of the blossoming flowers. Such a wonderful moment is made priceless when you realize just how many people have urinated on that rock you're sitting on. What about that bench you're placing your lunch on? Yes, it has an equal amount of urine on it.

If there's a club, kegger, or any other alcohol-related event, just walk around campus after 9:00 pm. You will notice an amazingly large number of people relieving themselves across campus. The first question that comes to mind is why? Why not just use a washroom. The answer is time. Drunk people normally travel in groups. If everyone had to wait for someone to find a washroom everytime he had to take a leak, then the group will never make it to its destination. This is because drunk people need to pee a lot. Alcohol also creates a temporal distortion. As soon

as you're done pissing, time speeds up and you have to go again. While you're looking for a place to go, time slows down to a crawl making it impossible to reach a washroom. This is the theory of relativity, and no, peeing faster does not make your member appear shorter. The shrinkage is due to alcohol.

So what objects do people urinate on? The answer is pretty much everything. Common objects include signs, trees, bushes, walls, fences, and large rocks. So why do people have to pee on objects? Why not just use the grass? This is due to our animalistic desire to mark objects and territory as our own. In my opinion, walls and fences are bad targets since you get splashback from them. Rocks are even worse since their irregular shapes make the splashback even more unpredictable. Large bushes seem to be the best candidate. On the bright side, you're even killing off some of the weeds around the bush.

One thing I definitely wanted to discuss in this article is urinary etiquette. If you're sober and you see people standing up against any object, they are in fact urinating. Walk slowly to give them time to finish, else they will make a mess. On the other hand, if you're the one urinating and you see someone approaching, don't pretend you're looking for something. Everyone knows that's not true, not unless the alcohol caused some serious shrinkage. To wrap up this article, I would like to say please don't send me hate mail on how distasteful you find this urine article. Not unless you know how to make anything about urine tasteful. I don't make the news, I just report it. Actually, there might be an exception in this case...

Arts & Entertainment

The Monster Mash: Van Helsing Review

Phoebe Su

3A Electrical



Last weekend I desired to watch something trivial. And Van Helsing peaked my interest. Acknowledged as one of summer's first blockbusters; this movie dominated the box office on its opening weekend, earning an estimated \$58 million gross. But personally, the true attraction of this movie lay in those heavy, delectable Transylvannian accents: "He eez ze firrst perrson to keela vampire een overrarrundred earrs. I'd say zats earn dim a drrrinkk!". It was curious then, that after having departed the cinema, I had no earnest opinion to report.

As a trivial thrill, the film fulfilled my expectations. However, the film simply failed to reach any memorable heights, both in story-telling and in the kind of artistry achievable in an action movie. In my opinion, the movie's demise originates in overloading on plot elements and creative themes. This effectively befuddles the story line, scatters momentum and destroys flow. Ironically, I think the

movie's box-office lead owes mainly to promising so much content.

To its credit, it is not difficult to understand the film's fiscal success. It is the love child of the director and writer Stephen Sommers, who discernibly infused his ardour for horror film heritage into this movie. For instance, if you love the eerie and fantastical black and white horror flicks of old, you'll appreciate the opening scene, which reminisces this style.

Basically, the film consists of a plethora of visually-pleasing shots coupled with sensationalized action sequences, all strung together within a plot which manages to cram the original three horror icons into one havoc-filled world. Behold Dr. Jekyll & Mr. Hyde, plus Frankenstein's Monster, plus our main antagonist Dracula, and his three brides, plus the Wolf-Man, all actualized in one movie. Naturally, any healthy disposition would propose pitting them against each other. Ever contemplated a match-up between Frankenstein's Monster and a vampire? This is played out with ample technical effects: action shots were accentuated, settings were exotic, and monster mutations were gruesome. As for romance, there is the spirited gypsy princess, Anna Valorous, to whom our hero develops a

tasteful attachment. Finally, significant mystery also blends into the genre, with the building up and climaxing of suspense, surrounding the key to Van Helsing's shrouded past.

Kate Beckinsale's delicate presence detracted from the gung-ho character she played as Anna, but Hugh Jackman's role fit snugly. The eccentricity in Dracula's eyes produced shivers. However it was Shuler Hensley, as Frankenstein's Monster, who stole the show - he delivered the most memorable lines in the movie. Being considered evil and worthy of death, the Monster declares that he merely wants to live and exist with touching honesty. He portrays an intellectual and elegant soul trapped within the label of a heinous freak of science.

I particularly recall that hokey "dribble-music" played against Van's traverse across snowy mountain ranges. It brought me an impression of the American heroic adventure, and I feel this embodies the movie. That being said, I recommend the movie if you relish a puerile monster smack down. But please don't come knocking on my door if you find yourself standing outside the cinema in the tepid evening breeze with no feeling in your brain except the peculiar sensation of inscrutable stupefaction.

Shrek 2: Happily Ever After... Again?

Quoc Huy T. Le

4A Whale Hunting

Mike Meyers, Eddie Murphy and Cameron Diaz are back for the much anticipated sequel of the summer which debuted at number one at the box office grossing over \$108 million last week. Three years ago, we were introduced to an ogre hermit, a talkative donkey and a beautiful princess who eventually learn the timeless lesson that true love comes from within. Here the happily married couple just get back from their honeymoon and find out that Fiona's parents, rulers of the kingdom of Far Far Away (in the land Far Far Away...get it?) have organized a wedding ball for their long-lost daughter. Things start to get interesting when the nobility comes into contact with the swamp couple.

You might recognize some old voices on some new faces. The film is enhanced with vocal talent by the likes of John Cleese, Julie Andrews, Antonio Banderas, Rupert Everett and Jennifer Saunders. The new kingdom setting introduces familiar Mother Goose characters. Much like the original, the storyline is like a twisted fairy tale with a very fitting ending. What else do you expect from a G-rated movie? Fortunately, for those who have not seen the first Shrek, Shrek 2 is independent of the first one so there is nothing lost from watching this one first.

The visuals are slightly better than the first movie, not that the first Shrek was anything at which to frown. You could tell that meticulous work went into the animated realism when you see the sparkling flowing hair tossed around in a seductive way and the growing foam on top of a

giant vat of heated milk. The visuals fittingly complement the vast array of timed jokes and obvious movie spoofs.

What truly makes this movie enjoyable to sit through is the well thought-out soundtrack consisting of familiar standards that span from The Sound of Music-style to pop to hard rock. And, of course, you get to hear the actors (namely Eddie Murphy, Antonio Banderas and Jennifer Saunders) show off their singing talents throughout the movie.

It is impressive to see so many jokes and spoofs intertwined in about an hour and a half. Hilarious incidents involving Pinocchio and the Gingerbread Man's big brother are unforgettable. There are laughs to spare in this comedic animated sequel. Oh, and if you do decide to see it, take some advice: stay until the first part of the credits is done.

The Corporation

The documentary by a trio of Canadians that was released on the big screen not too long ago, simply called The Corporation, is one of those gem movies that change minds. As a strong believer in the free market and all the glories of capitalism, I went into the theatre with a high degree of skepticism.

The movie started off with all the clichés of anti-corporate propagandas. There was the McDonald's clown doing his usual dance. There was talk about pollution and child labour in developing countries. There seems to be nothing new. Economists have had answers to these questions for years. Pollution is solved by commercial carbon credit trading. Exploitative labour is better than no income for the workers at all, and at least this feeds them somehow.

The mood changes quickly though. Very soon, it starts to pour out fact after fact and it hits the viewer that this is not just a simple minded documentary with an agenda. This is an accessible one with a purpose.

The biggest accomplishment of the

documentary is to have brought many influential members of the business community on board. There was the former Chairman of Shell, the CEO of Interface (the largest carpet maker in the world), the CEO of Goodyear, the director of the Fraser Institute (there is a lot of Canadian content in the documentary), and so on. These are influential players in the corporate world. Yet, to have them sit down and talk about the problems and solutions to the problems corporations have created, such as pollution, discrimination, and public deceit, they have no answers. It indeed reveals the human side of the corporate behemoths, and that side is flawed. Behind all the superficial façade of creative marketing and psychological manipulation of consumers, the top of the business world is clueless about how to profit and at the same time be conscientious about their actions toward making profits.

The question the documentary ultimately poses and answers is: Since corporations have the same legal rights as an individual, if a corporation were an individual, what kind of person would this cor-

poration be? Not very nice, to be sure, but there is much more beyond that. When the movie starts to ask questions to investigate, nothing but the image of an aggressor with oblivion to the society in which it operates emerges. It was ironic to see the CEO of Shell treating a group of protesters who gathered at his house in England for tea and discussing how they all care about the environment and the way they live. Yet at the same time, Shell was creating the largest environmental disruption in Africa where it is drilling oil relentlessly.

The documentary quite simply changes the perspective of the audience. Overall, it is objective enough to make a convincing case. It really does present both sides of the stories, from the CEOs, to researchers, to stockbrokers, advertisers, activists, and Michael Moore. This movie is a must see, especially if your faith in the market economy is more solid than a rock. This movie provides a true representation of all that is questionable about the way we are operating our society.

The Corporation is playing at the Princess Cinema through June.

Life of Pi

Elisa Zhang

Co-op student

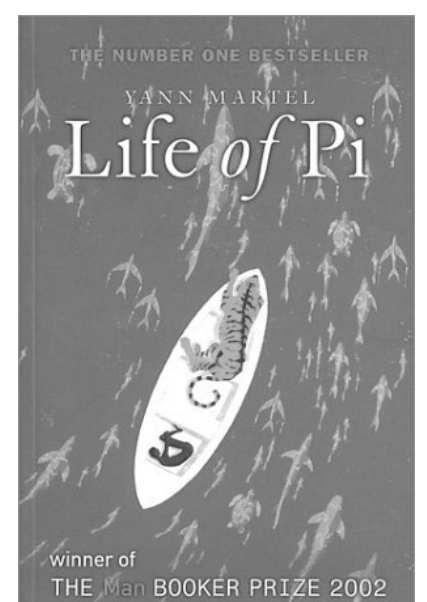


As I finished reading Life of Pi, by Yann Matel, I was drawn deeply into my own thought about life and fiction. It is a book that makes me wonder the purpose, the strength and the meaning of truth in life. It is not just simply a book, but rather an unfinished story for everyone.

The story was told by a young Indian boy, named Pi. After the sinking of a cargo ship with his entire family aboard, he found himself being left alone in a lifeboat with a 450-pound Royal Bengal tiger in the middle of the Pacific sea. Worn and scared, oscillating between hope and despair, Pi is witness to the playing out of the food chain, quite aware of his situation. He eventually realized that his survival depends on his ability to assert his own will and sets upon a grand and ordered scheme to keep from being the tiger's next meal. Thus, he concluded that in order to live he has to become the master of the tiger. The focus devoted on feeding and care-taking of the tiger has given Pi the strength and faith to keep on surviving. During the period, strange things had happened to them. In the end, the little boy had turned impossible to possible and survived 227 days in the Sea. As the story was told to the ship company, doubts are castled over his story. The story explored the question: what is life? Is it the story we want to believe or is it the cruel reality that we would rather be spared from?

Maybe there is a tiger living in everybody's heart. Maybe you can only find them when you are on the edge of losing life and reality in the tragedies. As Yann Martel has said in one interview, "The theme of this novel can be summarized in three lines. Life is a story. You can choose your story. And a story with an imaginative overlay is the better story." Maybe the story that is most impossible contains the truth. It would be an ending that we will never know.

If the first couple chapter have bored you, do not give up. I can almost guarantee you that when you finished the story, you will not only be amazed by the strong thirst for survival in the young boy, but most importantly, you will be amazed by the definition of life. When I finished this book, I was so dispersed to discussing it with other readers about this book and about what it has done on my perspective of life. I always believed that a book that makes me think is a masterpiece, and this book qualifies as one.



ARTS CORNER

**A Touch of Simplicity
Haiku for the Engineer**

Michele Heng
3A Systems Design

Some say that creativity is the ability to make that which is simple, complex and that which is complex, simple. Haiku aspires to accomplish the latter. In composing Haiku poetry, one must take a concept and express it in its most simple form to effectively evoke exact emotions and thoughts in a reader. Nature or the seasons are traditional topics for Haiku, but what better topic than engineering exists for such an art form?

Most engineering concepts are inherently complex. To understand and impart such understanding to others is a great challenge. Through lectures, exercise problems and lab experiments we learn. Yet another device is Haiku. Try to explain partial derivatives, isotropic processes, or the user-centered design process in 17 syllables or less. It takes true creativity, for the essence of understanding lies in simplicity.

How to write a Haiku Poem: In Japanese, the structure of a Haiku poem follows a 5-7-5 syllable pattern. However, as this form transcends other languages, the form is generally three lines wherein the middle line is longer than the first and third. There are no other rules.

- (1)
all constraints
less than non-negative constants
feasible solution
- (2)
sinusoidal in
system scales shifts signal
sinusoidal out
- (3)
unstable song makes
inner longing for destruction
harmonic resonance
- (4)
design process
learn lesson of the past
reiterate
- (5)
heat transfer
futile escape to outside -
adiabatic

Four days of the iron maiden

Rahul Bhardwaj, 3A Electrical

Deep are these thoughts that wield the sword of delight,
Deep are the depths of time, time of journey and my fight,
Drink up, drink up,
It's time I make a decision,
Through blood-shot eyes, clearer vision

I once made a mistake ,
I made a mistake to question, all that I was given,
And I ran over water,
No ship would sink, not over my ocean

Falling out of control,
I cannot leave this wretched soul,
If there is anyone to blame, it's me,
Despite my field of roses,
I surround myself with misery,

One glass of water, one drink I could not take,
I've committed murder, and I think I got away,
When there is nothing left to seal the thirst,
Nothing left to drink, nothing but the poison, then I did, 'cause I must

Now there is no water, but the world will always drain,
And I wanted to leave, I wanted to go,
Nein !, but a voice kept calling, calling for me to stay,
Stay for the next show

On the plains of marathon, I stood the charge,
Fought myself, a splinter in my heart,
Trapped, trapped, in transition,
Through blood-shot eyes, clearer vision

And I still believe I cannot be saved,
Facing defeat,
A hunt with no prey,
Sweet conceit

I searched the seven seas,
That restart button, I could never find,
Vain my search, unheard my plea,
Through blood-shot eyes clearer vision, but I am blind!!

I know, I know what you're thinking,
I know what you would say,
Instead of this, I should have slept the day away

But bear with me, this odyssey will end,
My quest within reach, a beach with glass for sand,
The light my destination,
Through blood-shot eyes, clearer vision

I am the son of flame,
And these wounds will never heal,
As I climbed the mountain of insanity,
Those memories of light, those memories I must steal

And in the fields of pain,
I want you to know,
My isolation has left me undead,
And then the voice, the voice that didn't let me leave the show,

"Turns out everything I say to you, comes out wrong, never comes out right"

But it is not your fault, only the bearer is to blame,
It is my plight, and then there was light in my hands
Through blood shot eyes, clearer vision, enlightenment, now I understand

This is a journey you didn't have to take,
I am so sorry, I brought you along,
Can you see the horizon ?
Can you see through this sad song ?

I almost got swept by the seas of temptation,
Your shores, my sister, my salvation,
And then I knew, and I know
Through blood-shot eyes, clearer vision

A lifetime it didn't take,
You're responsible, my fault,
Sister, I am awake,
And I can hear you call

The pain and screams I have cost,
Your trust, your love I have lost,
Blood-shot eyes, but you I cannot see,
What's the use of life, this vision?
What's the use, if you don't embrace,
If you don't embrace the demon that is me

Articulate I am not, my hard fought attempt this, is lame
Nothing has changed, but I,
I am never, never going to be the same

Alone

Quoc Huy T. Le, 4A Electrical

Two seeds ignite two sparks of life
That grow in glorious bloom.
Their journey starts with beating hearts
Inside a mother's womb.

So full of joy, since one's a boy,
Their family's esteem.
His sister's touch is loved as much,
For she completes their dream

As time moves on the children bond
Within the fleeting space.
Daughter and son become like one
In comfortable embrace.

All day and night the two hug tight
And feel the other's mirth.
The beauty of memoryless love,
Storge before their birth.

Nine months are done. the time has come
For them to see the light.
Mom, on a bed with her legs spread,
Pushes with all her might.

Two babies hurled, into the world.
One gives a healthy whine.
The other's face, it shows no trace
Of any living sign.

They feel gladdness with their sadness,
and happiness with fears.

Unopened eyes, the daughter lies
Bathed in her mother's tears.

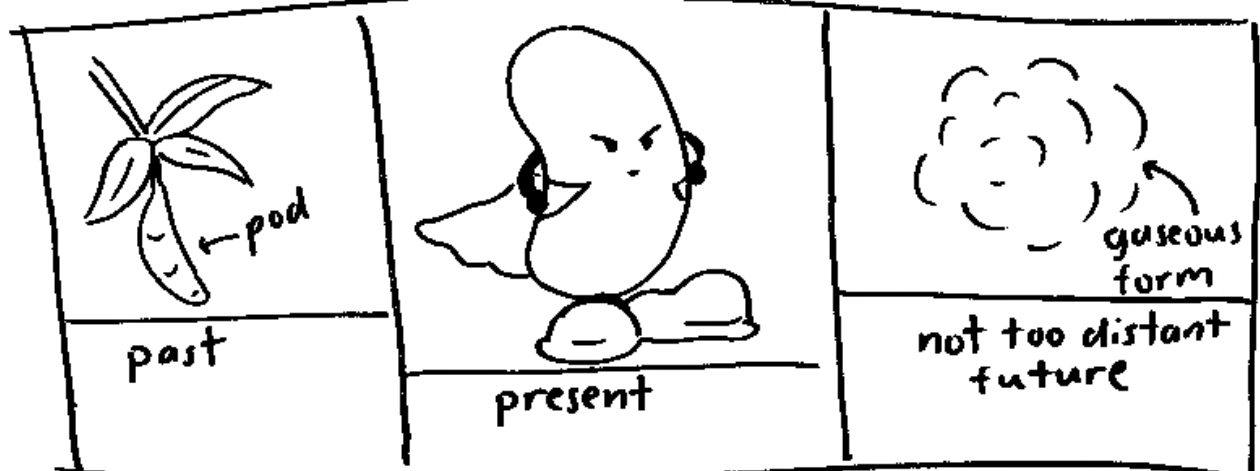
They hide the truth, to shield his youth
From all the guilt and strife.
He'll never miss his sister's kiss.
He'll live a happy life.

"It's half past ten, can't sleep again.
I hate being alone.
I've had these fears for twenty years.
The cause is still unknown.

"Knees at my chest, i try to rest.
But all i do is cry.
I feel my soul is far from whole
And yet, i know not why."



Edward Tan, 2B Computer



Arts & Entertainment

This Ain't Jared: Super Size Me Review

Cindy Bao

McDonald's
Studies

Was it because the public is fed up with scandals like Martha Stewart and Enron? It seems to be a trend of increasing momentum for documentary filmmakers to challenge large corporations with their camera. It began with "Roger and Me" by Michael Moore, after GM closed its Flint Plant and laid off thirty-five thousand workers. Then there came "The Corporation", where the Canadian filmmakers diagnosed its subject a "psychopath". The latest addition to the collection was "Super Size Me".

It is hard not to lend one's attention to its subject matter: a New Yorker, Morgan Spurlock, went on a McDiet for a month. He laid a few simple ground rules for the duration of thirty days: eating three meals a day at McDonald's; consuming nothing that the menu didn't sell and if asked, always super-sized his fries and soda.

Having had his health checked by three doctors and a dietician, Spurlock started in good condition. His doctors warned him only of weight gain. Yet, they were astonished to see his liver turning to pate, his risk of heart problems doubling, and his cholesterol level shooting up along with his weight changing from 185 lb to 210 lb.

His journey was both hilarious and horrifying. He began with the excitement of realizing any eight-year-old's dream: eat McFood everyday! By the end, he was depressed and experienced regular mood swings. The grossness meter of the film rose soon after he puked out his super-sized meal on the second day.

As if the 83 locations in Manhattan alone couldn't feed him, he traveled the

country during the month. On the road, he met a man who had eaten over nineteen thousand Big Macs up-to-date. The man was classified as a "heavy user", one who eats at McDonald's more than once a week. Boy, I thought nobody other than drug dealers called their customers users.

Don't think of the movie as an episode of Fear Factor taking place under the Golden Arch. Through the camera lens, we saw how the food industry brainwashed our children and parents and schools failed to educate them on making healthy choices. On the shelves of grocery stores, people are looking for the magical diet formula to lose weight, without ever thinking to get off of their couch. Of course, there were the lawsuits against the famous fast food chains that boiled the film down to its essence: what are corporate responsibilities and what are personal ones?

The director went on to prove just how deeply rooted the junk food culture is in the average citizens of this Fast-Food Nation. In an elementary school, he showed numerous pictures to a handful of first graders. Despite the fact none can correctly identify Jesus Christ ("George W. Bush" was one boy's guess), they had no problem with the image of Ronald the Clown. Just as I thought this was somewhat ironic in the light of the "one nation, under God" lawsuit, you witness the Americans who know what goes into a Big Mac better than their pledge.

However, powerful and unshakable as the fast food empire is, the seemingly less-than-influential director made a difference. Shortly after the film's Sundance premier, McDonald's announced that it will eliminate its super size option by the end of the year. It is also trying hard to ensure you know that its chicken nuggets are made from 100% white meat. Although the corporation claimed that its decision had nothing to do with the film whatsoever.

With an army of lawyers and public

relation experts, one may think McDonald's would use its media influence to defend Spurlock's attack on a massive scale, yet it didn't. Ronald's corporation is too smart for that, because it knows this is what today's general public wants to see, and a company like McDonald's will never go against the population at large.

Spurlock's brainchild, however, is not devoid of criticism. Many thought it was too sensational and controversial. Some pointed out that the food was not the sole contributor to his health problems, as he stopped exercising and became as physically inactive as the average American. A few individuals, after the movie's release, went as far as announcing to go on a similar McQuest with the aim of losing weight.

All in all, when it comes to eating McDonald's and watching Super Size Me, you need a strong stomach for both.

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.

Engineers
And Old Lace

Dan Arnott

IB Environmental



Attention all engineers with artsy inclinations, artsies with engineering aspirations, and anyone who enjoys drama: The summer 2004 EngSoc play is coming soon to a stage theatre near you!

This term's play is "Arsenic and Old Lace", a play popular with actors and audiences, written by Joseph Kesselring and adapted as a movie in 1944 by Frank Capra (It's A Wonderful Life). The play tells the story of a man named Mortimer, who goes to visit his two elderly aunts, and finds a few dead bodies in their basement. Apparently, one of their hobbies is inviting gentlemen callers and poisoning them. Mortimer is mortified by the fact that his aunts see nothing wrong with this, and matters are complicated by Mortimer's two mad brothers, who have taken on the personae of Albert Einstein and Teddy Roosevelt.

The director is Marcie Sanderson, and the producer, Erica Waugh. Stage Manager Victoria Hilborn describes Arsenic and Old Lace as "a really wonky play", saying it was originally intended as a dark comedy. Perhaps we have become desensitized to murderous old ladies, but it seems like a much lighter topic in this day and age.

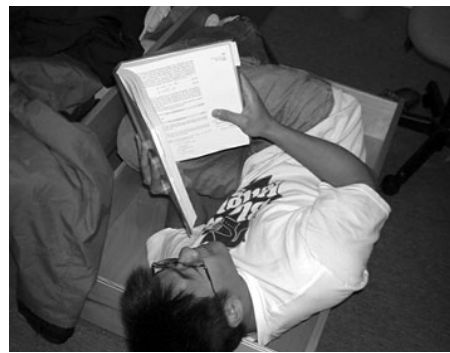
Auditions were held in POETS during the second week of classes, but stage/tech crew assistance is always needed in some capacity. No show dates have been officially announced yet, but keep on the lookout for advertisements. As is the case with every EngSoc Play, Arsenic and Old Lace is definitely one to see!

the Iron Inquisition

Tsu Chaing Chuang, 4A Computer

Where are you going to study
now that DC is closed?

"Ask me again right before midterms."
Zanoon Nissar - 4A Electrical



"In my sock cabinet . . . cozy."
David Trinh - 4A Computer



"I'm a McDonald's study student . . . go figure."
Cindy Bao - 3A Electrical



"At the golf course."
Chris Erven - 4N Systems



"At my home on the 7th floor of DP."
Punit Java - 4A Computer



"Isn't it obvious"
Kiran Dhaliwal - 3A Electrical



"At Roxanne's, with the rest of the greaseballs, ie. Musser."
Dave "Sideburns" Girodat - 2B Civil



"Study?"
Jeff Gordon, Albert Mansour, Nelson Neves - 4A Civil