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#IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

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Where the Laughter Stops

Page 5



Super Buggy?

Page 6

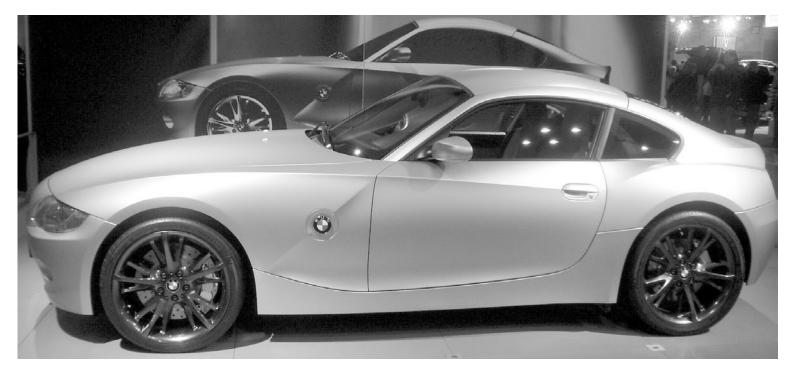


The Future of Engineering

Page 11

Check us out @ http://iwarrior.uwaterloo.ca/

Toronto Puts Out: The Auto Show Comes to Town!





Chrysler's new concept car with an asian sounding name.



Look! Can you say Batmobile?





Industrial: the Future?

Being Last: the Key to Being First



Three issues done, at long last, and I can relax for an enjoyable, if brief moment. It doesn't seem so far off now that my Mondays will have less than twenty hours in them. While it does offer a nice bit of padding to my resume, being Editor in Chief is primarily a labour of love. There is a sacrifice of time, energy, sanity and clean clothes, all to provide you with something to flip through during your electives. While it is only a small example of self sacrifice, and a completely lame one at that, it does represent the basis of what we as engineering students must aspire to be, and what the rest of humanity should

Throughout history, the greatest accomplishments are those that have been accomplished by people putting themselves last and others first. Nobody recalls the specific architects of the pyramids, but we do know who (albeit under slavery) built them. We don't recall the names of the generals and captains who disembarked onto Juno beach in WWII, but we do know that the efforts of the Allied armies that day helped to stop the spread of Nazi hate. It is this full-bodied embrace of selflessness that defined these moments and made the difference between going down in the history books, and just going down period.

Today, people have embraced a different reality. Nowadays it is the one who receives priority, even at the cost of the whole. It can be seen throughout society, emerging in the nineties. Gone are the days when we stood as a proud people, using cooperation, logic, and team efforts to accomplish great tasks. Instead we have a perverted culture where the wants and desires of the individual, however obscene, perverse, unnecessary or detrimental to everyone else. Personal ambitions have helped to build a prosperous world for many, but the cost is too great if we leave everyone else lagging behind, eating our dust.

Looking to my classmates, while there is great promise abound, there is also a dire lacking of motivation to have any concern

over the well being of others. Perhaps an anomaly, I find my class more devoid of spirit than girls, for the most part. While a select few take up opportunities to contribute in non-necessary ways, such as by writing for this very paper, joining clubs, or volunteering, this is not the norm. For the most part, I see them scurrying about frantically trying to study those several extra hours needed to climb the exponential curve of grades, in order to land on a mark 1% higher. I find it almost despicable the way that I have seen some look over their assignments and midterms, ravaging them, scouring for any possible flaw in the marking methodology upon which they could pounce and promptly shove the discrepancy into the TA or Prof's face, out for blood and what amounts to an extra quarter percent of their final grade.

The other perversion I have noticed among students in my term or below is their utter distaste for anything PDEng. They complain to no end that the course is pointless, unnecessary, and unfair. Many have let their voices be heard with angry rants on many blogs, through vandalism of the offices of PDEng mentors (the offices of their fellow students on co-op no less), and a rash of angry, hateful emails, some containing death threats.

In pointing out these acts, perhaps some might be shamed to look at the way they behave (and others incensed to anger, without slowing down the pace of their actions one little bit). To one end, these actions are responsible to a great degree for the image that engineers, and UW engineers in particular have as being self-obsessed cocky students. There are major employers (including one of the top automakers) who will shred a resume simply because the word 'Waterloo' appears on it, all thanks to the reputation we have gained due to the actions of a select few.

All the complaints and neo-crimes against PDEng are unwarranted. The victims (the mentors) of these crimes are not responsible for the program's direction or nature. The program has been going through its first run with my year, and as such cannot be expected to be perfect. Many students complained of resubmits and worry of failing, and yet someone such as myself managed to complete the first level of the program from India, and wrote in the IW in defense of the program, despite failing 2 modules and needing to attend 2 supplemental exams during the

summer, during a very inconvenient time if I might add.

Having seen a relatively large sample showing the writing quality of my peers, I can say without doubt that there is not one of us, myself included, who could not benefit from the practice and lessons 'forced' upon us by the program. Considering that in engineering your ideas are as worthless as dirt unless you can sell them, explain them, and share the ideas contained within, I would think that most people would recognize the benefit in learning to better present and convey these results. For those who doubt that they learned anything from PDEng, consider that the resubmit rate for students' first work reports is fairly constant, and that for our group, with the only real difference in our education coming from PDEng, cut the rate by more than half. Just a thought.

Look to our generation in a broader and more general sense, and the epidemic is just as apparent. During the Cold War, people competed against the 'enemy', uniting to fight the war that never warred, joining to create new ideas and cooperate to accelerate and enhance achievements. Today, we find ourselves competing against one another on all levels. Even something as simple as appearance has come a long way. Students as young as public school will sacrifice their academic performance to take up a part time job in order to buy the new Uggz, or to flash a little bling bling (real or zirconium). Instead of using our energy to enhance our skills, or to aid those in need, we apply it to satisfy our greed, our desire to destroy the competition of battles nonexistent.

Perhaps it goes without saying that the road to hell was paved with good intentions. When I hear of people in Toronto killing over their honour I shudder. When I hear of students who wish to become engineers, and don't realize that as an engineer we have to put the public, our company, our profession and pretty much everyone before our own dumb self, it makes me cringe. But hope lives on. With any luck, someone will turn over a new leaf, and one good deed will deserve another, and help will find its way. If not, I hope that we can all find the answer somehow, because at the basest of levels, as a social species, our happiness and survival lies in interdependence. Alright everyone, group hug!

IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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

The Iron Warrior encourages submissions from students, faculty and members of the university community. Submissions should reflect the concerns and intellectual standards of the university in general. The author's name and phone number should be included. All submissions, unless otherwise stated, become the property of The Iron Warrior, which reserves the right to refuse publication of material which it deems unsuitable. The Iron Warrior also reserves the right to edit grammar, spelling and text that do not meet university standards. Authors will be notified of any major changes that may be required.

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LowRider Draws From His Pool Of Infinite Wisdom



ear Löw-Ryder,

I need to talk to someone. I'm destroyed for life. My eyes burn. I can't live anymore.

Here's the deal my low friend. I was at the local swimming hole about a week ago. My buddy and I were going to do some water aerobics in hope that we'd pick up some hot mothers. Anyways, I'm rolling into the change room, round the corner and there is my prof. He's a huge man of a man. A real manly man. He's gotta be about 7 feet tall and has fingers as long as like tree branches. He's standing there in full buck doing the shimmy with his towel behind his back. His gigantic horn cast a cold, dark shadow on the ground.

I stood dead in my tracks. Dumb founded I was. This guy not only is a bloody genius but is hung like a sperm whale. I'm scarred for life man. I go to his lectures and see nothing but his wang staring at me. How do I increase my manliness Mr. Low? I need to compete.

Regards,

Anonymously inadequate

Dear Teeny Tiny Weenie,

You must be a troubled young man right now. I don't offer counseling services. Way too busy with the groupie chicks. That's why there are a couple of counselors in Engineering that deal specifically with the one eyed snake. My suggestion, if those Swedes can beat us at hockey maybe they can build a solid penis pump.

Smallness is something I've never had any experience with. It's all genetic man. Well endowed like WEEF brother. Does your wang hand low? Does it wobble two and fro? Why do you think they call me LowRider?

LR

Dear LowRider,

Firstly, I just wanted to tell you that I read your column every issue. You're the only reason that I read this paper. I love how you represent the side of Engineering that enjoys their time at Waterloo. I've

made the best of it LowRider. Ever thought of going national? The quality of your writings is world class. Maybe if there was more porn I'd read the rest of the Iron Warrior...

Speaking of Iron, I'm about to get my IRON RING bitch! Woo Hoo! 5 days till IRS. YES. Lately I've been sitting on my ass in front of the TV watching reruns of the Fresh Prince of Bel-Air. I seem to have no drive to do any school work. I've got 'er in cruise control baby. Just rolling along putting in time. I feel like I'm invincible! Nothing can stop me now. How do I get back on track?

Nearly Ringed

Almost Ringed,

I've got to hand it to ya. You've made it this far. Enjoy IRS. I want you to get completed 100% fur-schnickered. It's tradition. We've been doing it like this since 1967.

Let's be honest. You've got one foot out the door. You'll be free and clear just as long as you don't hand in a fourth-year project that was done two years ago. I don't suggest that dumb ass.

LR

Dear Lowest Rider,

I just got back from the EngSoc meeting. Why on God's green earth was there rent-a-cops at the meeting. I offered them one of my beers but they said they were on duty so they'd pass. Why were they at the meeting? Shouldn't they be Dunkin' Donuts or something?

Eddie

Dear Edward,

I think they spend most of their time at Timmy's in the great Canadian North. The law enforcement officers were at the meeting to critique the quality of porn at the meeting I think. They suggested more fifty plus. Who's in for a porn and pizza night at POETS? Sounds like nothing but good times to me.

LR

Dear LowRider,

I have a problem with boys right now. See I pick up these guys at bars (mostly Bomber) and the evening continues at my house or theirs. Now, the issue is that the next morning, I wake up, clearly more sober than the night before and I really don't want to see these guys again. Ever. If I spend the night at some random guys

house, I leave while they are still sleeping at around 5 - 7am, I don't want to talk to them the next morning, I understand the concept of a one night stand. Now, the boys who I have brought home this term have left at either 11am or 3pm. Seriously, I have 8:30 class Thursday which I have to miss because some random guy will not leave my bed. Why can't boys in engineering understand the concept of a one night stand? If I pick up a guy at a bar, I only want him for one night. So LowRider I need to know, how do I explain this to my one night stands?

Sincerely,

Frustrated with clingy boys

Dear Women in Engineering,

Good for you. You pick up at Bomber. The ratio is about three females to six point seven million slobbering drunk guys. That's quite a feat.

Since you have your pick of the crop, why not just hand out wavers at the front door. Get them to give you their johnny hand Cock and call it a night. Maybe they love you. Ever thought of that huh?

LR

Hey Cheif,

I just wanted to let you know, there was some fool in a yellow bandana in front of POETS the other day that was recruiting groupie chicks on your behalf. Only thing is, he claimed to be the "real" LowRider. We can look past that. He had a huge list of damn fine ladies on that list. You are the man. Keep in mind that we get funding from the University per official groupie chick.

LR Public Relations Manager

Secretary of Internal Affairs,

Damn imposters. I hear that all those other high-schools (every other "university" in Ontario) now have cheap imitations of me. We're the real shit. We're the best. Don't let anyone tell you otherwise. Bleed Black and Gold. WERTW.

LR

'till next time keep it low kids congrats you ringed fellows

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



CECS Important Dates

February 27 Writing CVs and Cover Letters 12:00-1:30 TC 2218

February 28

Special Session for International Students 4:30-6:00 TC 2218

March 2

Law School Bound 1:30-2:30 TC 2218

March 2

Teaching English Abroad 3:30-4:30 TC 2218

March 2

Interview Skills: Preparing for Questions 4:30-5:30 TC 1208

March 6

Work Search Strategies 3:30-5:00 TC 1208

March 6

Special Session for International Students 4:30-6:00 TC 2218

March 7

Interview Skills: Selling Your Skills 2:30-4:30 TC 1208

March 7

Working Effectively in Another Culture 4:30-6:00 TC 2218

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March 8 Writing CVs and Cover Letters 12:00-1:30 TC 2218

March 9

Career Decision Making 3:30-5:30 TC 1208

March 13

Business Etiquette and Professionalism 3:30-4:30 TC 1208

March 15

Successfully Negotiating Job Offers 4:30-5:30 TC 1208

ENGINEERING SOCIETY



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

Drinking Water Safety



he TD/Walter Bean Professorship in I the Environment attracts top international research professors on the environment to campus to give public lectures, teach classes and/or meet with professors and students. The professorship is named after the late Walter Bean who was president of Waterloo Trust until its merger with Canada Trust in 1968. When the professorship was launched, it was called a "fitting testament" to his legacy of community involvement and commitment to youth, education and community. The professorship is organized by the faculties of Environmental Studies, Engineering and Science. This year the professorship is being hosted by our own Faculty of Engineering, and they have invited a very respected professor from the University of

Dr. Steve E. Hrudey, a professional engineer, is currently Professor of Environmental Health Sciences in the Department of Public Health Sciences in the Faculty of Medicine and Dentistry at the University of Alberta and is an Honorary Professor in the Department of

Epidemiology and Preventive Medicine at Monash University in Melbourne, Australia. Professor Hrudey is an active researcher with over 200 scientific and technical publications relating to environmental risk assessment, risk management, environmental quality safe drinking water and waste management.

Professor Hrudey served on the Research Advisory Panel to Commissioner Justice O'Connor and the Walkerton Inquiry, is currently the Leader of the Protecting Public Health program of the Canadian Water Network (hosted out of the University of Waterloo) a Network of Centres of Excellence in water research and is a research collaborator with the Australian Cooperative Research Centre for Water Quality and Treatment.

Dr. Hrudey's lecture entitled, "50 Years and Counting: Drinking Water Safety Lessons are Learned Slowly" will explore drinking water safety in Canada ranging from the Walkerton disaster to the recent Kashechewan reservation evacuation. Despite advances in technology and painful lessons, Canadian governments seem slow to understand how to assure water safety. The lecture is open to everyone, and will happen in the Humanities Hall Theater on March 2nd at 3:30pm. I encourage all engineering students to go to this lecture and hear about this very important topic concerning the future health of our world.

SCRUBS...

If you are interested in taking ideas to market, or how we as science and technology students can think business, then the third annual SCRUBS Conference (Science and Business Committee) is for

"The Driving Force: From Science to Business" will focus primarily on what drives



the commercialization of scientific innovations, not only in terms of dollars and cents but while also considering the passion behind making research come to life to improve the prosperity of science

and technology.

With an outstanding list of speakers including Michael Hughes (Canada's Networking Guru), Justin Henry (president of Logitech), as well as Tom Brzustowski (former NSERC president) who will speak on research grants and the importance of productivity, the one

day event is sure to be a winner. A feature event will be the exhibition where companies will display their technologies, products and services. Students will have ample opportunity for networking and to get a sense of what types of innovation are taking place in the local market.

The afternoon will host an "Innovation Challenge", which will be hosted by the Centre of Business and Entrepreneurial Technology (CBET). A case study will be presented to groups of delegates who will use creativity and team work skills to invent real world solutions.

Open to all UW students at no cost, thanks to our generous sponsors, the conference will be filled with a variety of activities to help any student formulate a better understanding of science, technology, and business today. SCRUBS takes this opportunity to recognize our sponsors CBET, BASF, Merck Frosst and AstraZeneca. Visit our website for more details and to REGISTER – www. scrubs.uwaterloo.ca



Commitment-Phobia Holding You Back?



For the past many months, I have been confronted with the nagging decision of what I should do after my upcoming graduation. Several professors and many grad students I spoke with have recommended that I further my education. Yet the all-wise Marge Simpson calls it "a terrible life choice". What about getting a real job to put a stop to the poor student lifestyle? However, that is the next forty years of my life, with a meager two weeks of vacation a year.

At times, I am envious of the people who are so sure of what they wanted. You hear about individuals who couldn't wait to go to work everyday or who enjoy the academia ivory tower, despite the fact PhD comics make them laugh and cry at the same time.

My lack of sureness expends far beyond the horizon of Convocation. After all, making a life-altering decision is not limited to one's career. For example, in the world of relationships, finding the One has been the ultimate ideal, many struggling with the search for longer than they would like. Some succeed, others falter.

I am often befuddled as how we would know if someone is the bashert? From the words on the street, it's supposed to strike you like a lightning bolt, possibly while on your first date. In what form should such a revelation take place? A little voice in your head that says, "made for life," or the butterfly in your heart and stomach? In the first case, I'd suggest a visit to the psychiatrist to rule out any schizophrenic tendency. For the latter, I get one of those before every exam I haven't prepared fully for.

With a bit of critical thinking, it could be nothing more than hind sight. It is quite common to experience some fluster on a first date. When the date had to end with you purposely spilling coffee on yourself, the slight nervousness is dismissed and forgotten. However, if it worked out for the better, it is now known as a moment of epiphany. After all, I remain the skeptic I have always been and see nothing wrong with a bit of doubt.

As a generation spoiled by so many choices, making and committing to one has been increasingly difficult. People now on average change their career five to seven times throughout their professional life. We can no longer commit to ordering one entrée for a meal, which makes tapas bars the new trend in the dining scene.

On the upside, our commitment-phobia means that we are well aware of our options and (hopefully) taking our time to explore them all thoroughly. It's hard to argue that giving each option some careful considerations before hand is far more economical use of resources than rushing into a decision.

After all my indecisiveness, Dr. Rollo May's words put me at ease, "The relationship between commitment and doubt is by no means an antagonistic one. Commitment is healthiest when it's not without doubt but in spite of doubt."



POINT VS. COUNTERPOINT

Should the Caricatures have been Published?



In the past few years, Islam has been repeatedly thrust prominently into the media spotlight. The world is changing faster than usual. Europe, used to its secular traditions, has been shaken. First, there was the murder of Dutch filmmaker Theo van Gogh, and then there were the riots that wracked the poor suburbs for France for weeks. Bombs came to both London

Given this atmosphere, it is not surprising that there is a certain amount of fear expressed when it comes to Europeans and Islam. The culture editor of the Danish newspaper Jyllands-Posten decided to commission cartoons, asking cartoonists to draw the Prophet Muhammad as they saw him - one came back depicting the Prophet with a turban-bomb. This cartoon, and some others, were printed, and then reprinted in other newspapers, creating a furor in the Islamic world. Protests in many different countries have resulted in many deaths, not to mention property damage.

Mr Rose was simply doing what newspapers do, which is report the news. The news in Europe is that there is a tension that exists between secularism and Islam, between existing communities and immigrant communities. These tensions have flared in events such as the French riots. People see Islam negatively, as expressed through the cartoons. Politicians either exploit the fear by enacting nationalist antiimmigration policies, or do nothing hiding under the banner of equality. Newspapers do the same, having grown up in an era of equality and political correctness. No one dares voice their concerns. In a panel discussion with the Brookings Institution, the editor Flemming Rose explained his decision to print the cartoons, citing the self-censorship that prevailed in his country and elsewhere when it came to dealing

While it is true that an open discussion is necessary to confront the issues regarding Europeans and their perception of Islam, clearly printing these cartoons was not the best way to stimulate this discussion.

It is not so much the idea that some Europeans see Islam through a negative lens. This is a problem, and must be addressed. It is more that this was expressed through a cartoon, a graphic, easily republishable, and instantly understood by anyone, regardless of language. Problem is, the nature of this understanding can be twisted when graphics are presented without context, leading to misunderstandings of the sort that have caused so much damage abroad. Cartoons can be interpreted many ways, and can be presented with all sorts of captions. In my view, this problem with this was not the message, but the medium. Both "Hey, we're getting the impression that all Muslims are terrorists here, clearly this is wrong, but let's talk." and "Hey, we think you're all terrorists, and we hate you all!" could both be conveved by the same cartoon.

Doubtless extremist leaders have fur-

ther incited outrage amongst their followers by adding all sorts of incendiary comments, further caricaturizing the view of the West as cultures unwelcoming and intolerant of Islam. Many of the protesters are poorly-educated, where the nature of commentary, satire, and heck editorial cartoons may not be understood. Heck, "burning your neighbor's property and embassies is not the answer" isn't really understood in those parts of the world.

Newspapers in the Western world, either looking for publicity, or on some self-righteous "freedom of speech" mission, or both, reprint the cartoons, deepening the damage. Stories of student papers and university professors publishing the cartoons and decorating their offices with them just smack of people who are bored and desperately need a cause. And what cause is easier to rally for than "freedom of speech" - all you have to do is talk out of your ass. No vegetarianism, fair trade coffee, organic foods, or sweatshop free clothes required. "Freedom of speech!" they cry, not realizing that they can proudly state that they are now widening the chasm between cultures instead of bringing them together. Freedom of speech comes with some condition of responsibility and intelligence.

Sadly, the very folk that were supposed to be enlightened by this discussion that Rose was hoping to provoke have only had their convictions strengthened. Extremists can paint the West as anti-Islamic. Bigots in the West can paint Islam as being a violent, uncivilized religion. Everyone loses. Instead of promoting discussion, Rose has unwittingly made this worse causing the opposing parties to further dig in. Instead of opening a constructive dialogue between both parties, everyone is performing damage control, with leaders trying to get their respective populations to shut up.

A more delicate, and less dramatic way to approach it would have been through written editorial, which can express the nuances of thought far better than a cartoon, and is far less subject to such a vast array of interpretations. Writing is far less context sensitive than pictures are. Editors are less ready to reprint articles, and articles are less apt to be made into t-shirts (As ex-Italian Minister Roberto Calderoli wore), and less easily distributed. Explaining to crowd of extremists is more difficult than merely photocopying a couple thousand copies and distributing. However ideas in word format take longer to disseminate, it yes, it would have taken longer for other writers to pick up the thread so that discussion can be opened gradually. If Mr Rose thought about this, which he probably did, then he must have realized he was making a bit of a gamble by publishing these things, short circuiting the standard wordbased idea diffusion process by using fast-moving pictures instead. I suppose it remains to be seen whether the gamble

In my opinion, misgivings about Islam should be aired out so that they can be addressed constructively. Editorial cartoons that can be recast into propaganda should be approached with more care.

Editor's Note:

The views and opinions expressed here do not necessarily reflect those of the authors, the Iron Warrior, or the Engineering Society.



 Γ irst off I would like to say that people shouldn't be too judgmental about the violence and the vandalism cause the by rioters in Islamic countries in response to these cartoons. Islam would not condone violence as a response to these materials. As the old Jackson 5 adage goes 'One bad apple don't spoil the whole bunch, girl'; after all if it did then it'd be hypocritical for western nations to criticize uncivil behavior as they should look into their own closet – American terrorism against peoples of African origins; Canadian Anti-Chinese Immigration policies of the 20th century; or European colonialism of the past 600 years.

The issue here isn't whether or not organizations should publish these materials, but if they should be able to publish if they choose to do so. I'll admit some of these cartoons insinuate that the prophet Muhammad condones violence; however other cartoons depict the prophet Muhammad in neutral settings and have neutral connotations. Now are these cartoons Sacrilegous? Sure they are satirizing a religion, but wasn't Martin Luther doing the same thing to Roman Catholicism with his 95 Theses, questioning the tenant of indulgence; which he saw as a loophole that neglected the meaning of the confession, true repentance, and satisfactions. Because of this reformed Christian denominations known as Protestism and Lutheranism came about. Thus, being able to question can lead to improvements in theological insight and ideas.

Freedom of speech is an essential pillar of our free and democratic society, it permits any member of our society to comment and question any topic, events, or actions in society. A lack freedom of speech is equivalent to tyranny. Hence, freedom of speech is a right that we should protect even if negative comments are made under its banner.

Firstly, if we do limit ourselves to selfexpression, are we not permitting the rule of society of the majority views and opinions? If so, then the rights of the minority will be oppressed for deviating from these 'majority rules' rules, as the minority has no opportunity to question these rules. promised and the tyranny of the major- discredit these materials.

ity would set in creating a dysfunctional, backwards society.

Secondly, by limiting freedom of speech, the human intellect is then limited also in the development of components of human society - culture, science. An example of this is the struggle of Galileo Galilei. Galileo Galilei was a scientist best known for supporting Copernicus's heliocentrism concept, an idea where the sun is the centre of the universe. At the time, the powerful Catholic Church, that controlled every aspect of European culture, still believed in geocentrism, an idea that the Earth is the centre of the universe. Because of his support for heliocentrism, Galileo was trialed as a heretic by the church and placed under house arrest for the rest of his life. Instead of recanting his findings, he wrote Two New Sciences, a book that documented his scientific findings from the past 30 years, a book that help inspire Issac Newton and the development of his laws of physics. Today, after scientific observation, the heliocentrism concept is the true model of planetary motion. The point of this example is the powerful ideas that can come out from human expression, ideas that may be contradictory to social norms at the time. If Galileo had recanted his work, then his developments in astronomy and physics would have been lost, and development of European society in the sciences would have been hindered. Thus, if we limit freedom of expression, how many ideas are we oppressing that can potentially improve our understanding of life, our society?

Thirdly, religious groups in the past have made negative comments in regards to certain lifestyles, or groups of people; predominately against homosexuals. A example of such comments are ones made by the head of the Muslim Council of Britain, Sir Iqbal Sacranie, in that homosexuality is 'not acceptable', and same-sex civil partnerships as 'harmful' in a BBC Radio 4's PM program in January 2006. Though the homosexual community may be offended by these comments, as much as a member of Islam would be at the cartoons, these opinions were still made, and not censored. Since, we live in an egalitarian society, where what's good for one is good for all; aren't religious groups being hypocritical in their questioning of the freedom of speech when they themselves have made questionable opinions in the past.

Even with the most offensive, slanderous materials, the authors have the right to publish if they choose to do so; however Hence, democracy itself would be com- proponents do the right to rebuttal and



≝IRON WARRIOR

Super Buggy?



Last issue's article, "PC2PC," was written as a one-hit wonder, more than anything else. However, after receiving an overwhelming response from the audience ("no news is good news"), I have decided to continue my saga with a new and marvellous project: building a super buggy!

This name is somewhat vague, and can be open to many interpretations. So, to set up the scenario, let me first tell a story.

This term I am living off campus, so (thankfully) I have to prepare my own meals and subsequently do grocery shopping. A couple weeks ago, my roommate (who is also in my class, but will go unnamed to protect the little innocence he still possesses) and I went to the somewhat nearby Sobeys (and of course The Beer Store) to replenish our fridge and cupboards. When we rounded the corner, who would have thunk it? There was a Sobeys buggy just asking to go home! For 3 years, I was a buggy hound, corralling and caring for a flock of Fortinos buggies. So, it was like second nature for me to bring the buggy home.

It must be mentioned however, that we used the buggy for purposes other than the intended one. What can I say? It is far more fun to get pushed somewhere, then to walk. During the course of this trip, my friend and I came to the realization - somewhat painfully - that buggies are not designed for use outside the level (or at least the somewhat flat) floors inside of the store. The uneven sidewalks, potholes in the road, and general disrepair of the city streets does not allow for much comfort when riding in a 4-wheeled open tray. Plus, think about it. No one wants to carry a 2-4 home, so what do we do? We commander a buggy to do our bidding for us. Now just think about it: if the buggy is not fit for human transportation, is it worthy of transporting the sacred nectar? I think not! That is why we need <insert super hero music> the SUPER BUGGY!

I would like to note that the 6 step procedure that follows is not based on solid scientific evidence, nor is it to be consid-

ered wholly complete and accurate. Judging by the marks from midterms, I don't think that I am able to calculate the Mechanics of this Deformable Solid very well...so use it at your own risk. I know that I will!

- 1) Commandeer a grocery cart from a local grocery/department store. There are a variety of styles and colours to choose from, so pick the one that best suits your personality. I personally prefer the bright red Zeller's buggy.
- 2) Now comes the part of the job that every engineer loves: smashy, smashy. You are going to need to modify your buggy to allow for the significant improvements to be made. Start by removing the wheels, but make sure that you leave the bottom tray intact. It is

mighty handy for carrying items that come in bulk.

- 3) Next, you are going to need some new wheels for your Super Buggy. For this, I recommend a nice leisurely walk about campus in the middle of the night, paying special attention to the Nuclear Bomb Shelter (aka MC). Keep your eyes peeled for ninjas in black who can jumo out of the woodwork, and also any bikes that have been left lying around. Since it is Winter, I recommend looking for bikes that are covered in snow, because they obviously have not been moved in a while. Another good sign is if the chain and gears are so rusted that not even WD40 will save it now. Those are the ones that you want. You are going to need to find 4 wheels during to continue this modification, so it may take a few walks to make sure that you have sufficient material to continue. Take as much time as you need for this step. Your buggy isn't going anywhere - you already took the wheels off.
- 4) So you have acquired 4 wheels to allow your buggy to move, good work. Now we need to attach them to the cart. If you are daring, you can use some springs or suspension system to give your buggy a better ride, but it is all up to you. Use your imagination here. Just picture yourself as a buggy...where would you like your wheels to go?
- 5) Now that your wheels are installed, it is ready for a test drive. Get a friend, a helmet, and some ice packs, then head out. Make sure that you test the buggy under all possible operating conditions to ensure that it will meet all requirements. When you are satisfied what your buggy is stable enough, move on to step 6.
- 6) This is probably my favourite part of this procedure. Now you get to mod your buggy. Add as many accessories as you can. A holder for your grocery list, an alarm system to keep someone from stealing it, brakes, lights, turn signals, a sound system, pom-poms on the push bar...let your heart guide you!

If you are not completely satisfied with your new Super Buggy, then you can always get another and start again. Think of it as a work in progress. It is not complete until you are completely satisfied.

Stay tuned next issue for something that every engineer needs: The Spoon-Belt.

MSG: Not the Evil Demon You Think it is



Everyone loves a good conspiracy theory, so get out your tin foil and sit back: This week's exciting adventure beyond the world of fact, brought to you by MSG.

Everyone knows that MSG is bad for you. People blame MSG for everything from headaches to ADHD, and restaurants flaunt large neon "NO MSG" signs. But I was shocked recently to find out that MSG is a very natural part of food, and may be quite similar to salt. MSG, like salt, is a flavour enhancer that is self limiting, meaning that there is a finite amount that tastes good. So the broth you might get at a Chinese food restaurant is no more likely to be MSG water, than the chicken soup at a North-American chain is to be brine. MSG (Monosodium Glutamate) is a naturally occurring substance and can be found in large quantities in popular vegetables, such as tomatoes and mushrooms. It can also be produced by fermentation and aging, and is found in soy sauce and many cheeses, such as parmesan. Milk, eggs, and meat also contain naturally occurring

MSG was first discovered by Dr. Kikunae Ikeda at the Imperial University of Tokyo who was able to isolate it from seaweed in 1907. More recently Japanese researchers announced that MSG could be the fifth taste. Umami is said to have a slightly bitter-savoury taste on its own, but a powerful flavour enhancing effect when added to other foods. The status of umami as a taste is still under hot debate, however, as many people do not agree that 'round' and 'full bodied' can be tastes. "I thought that I should begin by making the case that what the glutes [i.e. the glutamate industry] call the taste produced by MSG is not a taste, per see, but is, instead, little or nothing more than the vague sensation that nerves are firing" wrote one

conspiracy theorist on his website [www. truthinlabeling.org]. "Umami is a clever contrivance/device/public relations effort to draw attention away from the fact that MSG is toxic"

Though many people complain of a variety of symptoms supposedly brought on by MSG consumption, no research has shown MSG to be harmful to people in the general population. Some of the symptoms associated with MSG are migraines, ADD, shortness of breath, seeing shiny lights, obesity, heavy feeling in arms and legs, depression, and chronic post nasal drip [www.msgmyth.com]. Some people are sensitive to MSG, but most people given a double blind test for MSG sensitivity show no reaction when given MSG. MSG has been accused by many of being behind the obesity epidemic in America because it is used as a flavour enhancer in North-American foods, including KFC chicken, potato chips, and instant soups as well as a number of other highly processed foods, which are being consumed at an alarming rate. And if you doubted that MSG was responsible for dpression you may be interested to note that China (a large consumer of MSG) accounts for 42% of all suicides world wide.

Mgsmyth.com also suggests that home cooked meals will cure ADD and ADHD because they cut MSG out of a diet that would otherwise be inundated with processed foods. In order to test for a reaction to MSG the web site suggests cutting out everything from your diet for two weeks, except white rice, pealed apples and pears, chicken, and mild cheese, because, that's right, everything contains MSG! Even tooth paste, so use baking soda. While I agree that home cooked meals likely improve the health of children, I wouldn't necessarily point the finger at the MSG 'hiding' in school lunches and pre-packaged snacks. But as has been proven time are time again, irrational fear is a good way to get people moving.

So until next time kids, remember that if you believe hard enough, facts are irrelevant.

SUP BUGGY



Charobeem Cooks: Spinach and Sole with Fines Herbs



Fines herbes is NOT a typo despite what your spell checker may say; it's a staple in French cuisine and refers to a mixture of herbs. Chervil, tarragon and chives are the aforementioned herbs, but sometimes parsley is included. For the sake of this recipe and to keep things simple, you can omit the 'fines herbes' since 1 tbsp is negligible!

Spinach and Sole with Fines Herbes

Serves 4, about 260 calories per serving.

Ingredients 1/4 cup all purpose flour cooking oil, preferably olive

4 sole fillets

10 oz coarsely chopped spinach1 tbsp fines herbes

- 1. Coat fillets with the flour & fines herbes and shake off any excess.
- 2. In large skillet, preferably nonstick so clean up is easier, heat 1 tbsp cooking oil over medium heat. Fry the fillets until crispy and golden. Remove fish from skillet but leave heat on medium.
- 3. Add spinach and 2 tbsp of water to skillet. Cover and let steam until spinach is tender, stirring occasionally.
- 4. Serve the steamed spinach with the crispy sole fillets; maybe add a lemon wedge or two for flair! Sweet potatoes or wild rice make a good side.

Infiltrating the Math Lounge: Part II



The Math Lounge Saga continues.

For those who did not read the previous documentary regarding infiltrating the Math Lounge, this article describes an account of the Math Lounge and an attempt to integrate into it to describe the social structure there.

Jan. 23

After studying the Math Lounge social hierarchy from a distance, I have started to try to integrate with the people of the Math Lounge. They are a bizarre people. When I first attempted to integrate with them, I came dressing in a true gamer t-shirt, carry around some 12-sided dice and ripped jeans. They seemed to accept me except they were leery to do so because I did not have enough stains on my clothes. I told them that this was the week of the semester that I washed my cloths. To the left I saw what appeared to be a hairy troll fondling a dwarf.

There were also some vampires trying to scavenge for food from the vending machine, and some people dressed up as wizards saying something like "that Shivan Dragon is level 5 awesome." In the far corner of the room were a bunch of barbarians and elves attacking each other. I

to ask them what usually goes on in the Math Lounge, but all I found were level 4 elves and a 7th level barbarian that was almost at level 8 which would enable him to wield a 'great north axe of burnination'. First I tried to interview the elves and barbarians, but they were attacking each other. Apparently they were LARPG (live action role-playing), which is too intense for traditional RPGers or online MMORPGs. Since I do neither I figure I was more scared than most people. I quickly fled and tried to talk with the Vampires at the vending machine. They were apparently a group of Malkavian vampires and Gangrel, which they used to explain why they were so crazy and dressed so gruffly. I tried to talk with them for a bit but they tried to suck my blood too many times so I decided to talk with the people playing cards. They said that they had put a ring of protection on so that I would leave them alone. I still tried to talk with them so one of them summoned one of the barbarians to attack me and I fled. The day seemed to not be very productive but then one of the people in the lounge said that that I get 500 experience points for partly completing the quest.

Feb. 7

I have tried to infiltrate the math lounge a couple times since my last visit. I have notices some strange changes in myself. Strangely the hair on my face has seemed to grow a couple feet in a few days, and I have planned to braid my facial hair into

tried to interview some math students plates. I have also noticed that I am to ask them what usually goes on in giving off a strange new odor.

Feb. 16

Since I last sent off an email I have finally integrated with the people in the lounge playing Pokemon; that happened when I got Mewtwo. I also have managed to talk with the Vampires without them attacking me. This happened when I got an amulet of +5 protection against the undead. I have also integrated with the LARPGs by becoming an elven ranger.

Feb. 18

My lexicon has slowly begun to change. I have started to say shizzle after every spoken sentence. And my vocabulary has become more verbose in some cases when discussing the dynamics of RPGs, but I am having more trouble talking with people outside the lounge and with all forms of females, even my newfound friend's twelve female cats. My friends barely recognize me through my long beard, chainmail and elven war helmet.

To compensate with the new problems with the ladies I have decided to put my experience points into CHARISMA and APPEARANCE instead of boosting my bowmanskill. I used this to try to seduce one of the math chicks but when I did I only had level 2 CHARISMA and 3 APPEARANCE bonus modifiers. I rolled a 2, 3, 4, 3 and 2 which was not a high enough roll to seduce her and resulted in me being slapped across the face.

Mo' Music

JASON GUPTA

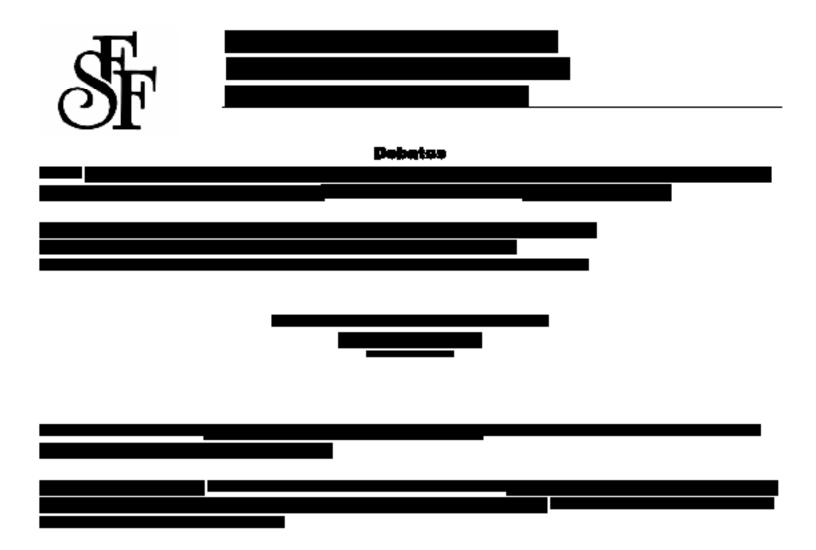
2B COMMERCE

James Yancey, aka Jay Dee, aka J Dilla, died on February 10th 2006 from complications brought on by lupus. The man once lauded as "my favourite producer right now" by Pharrell Willams left behind a large catalogue of work. Dilla has produced tracks for the likes of Common, Pharacyde, De La Soul, and his own outfit, Slum Village. Even though his manager said he's left behind 2 un-released albums. who knows when or if they will ever be released. He did release one album before his death, on February 7th 2006 (which happened to be his birthday), called Donuts. Donuts is essentially a commercially available beat-tape; a cd of semicompleted beats that he might have been shopping around to different mc's. As a matter of fact, 2 of the half-completed beats from Donuts are going to be on the upcoming Ghostface album.

The beats on Donuts were constructed using a NuMark portable turntable and an iBook laptop when Dilla was in the hospital. All of them, with the exception of one track, do not even pass the 2 minute mark. Listeners who are only familiar with his older, Slum Village type work, will find that these beats are rougher and less polished than his older works. They have a different feel; they are less bass fuelled and more melody driven. Donuts may be an album for the music geeks but even everyday hip-hop (and maybe even soul) listeners will be able to nod their head to this collection of beats by the once, and still, great J Dilla.

Other recommended tracks: Fall in Love – Slum Village

Other recommended albums: Fantastic Vol.2 – Slum Village, Common – Be



Engineering Society Executive Reports

P&P Awards



NICK LAWLER PRESIDENT

Wow, what a hectic midterm week! By the time you are reading this, the 4th years (including yours truly) will have their iron rings, and be recovering from the evenings festivities. The most important thing I have to talk about in this article is the upcoming EngSoc meeting on March 1st. We've got a few things to take care of at this meeting. Firstly the nominees for Paul and Paula Plummer (P&P) Awards will be presented to council for their vote. This vote does not determine the winners, but the EngSoc exec who choose the winner use the votes to make a determination. For those who don't know, the P&P Award is handed out at GradBall and goes to members of the Engineering Society who

went above and beyond the call of duty in their contribution to EngSoc. It is a tremendous honour, and I want to thank all of the nominees for all of their great work for EngSoc, and wish them luck in the future. Also at this meeting I will be presenting the Engineering Society's policy on harassment and decorum. This presentation will outline when and what things are appropriate for EngSoc activities, with the purpose being that this presentation is read at the start of every term, so that new members of EngSoc can know what is expected from them. Kristine Meier of Counselling Services will be in attendance to answer any questions that you may have.

On another note, EngSoc elections will be kicking off very soon. Please keep your eyes open for a call for nominations. Lastly please see my article in this edition of the IW about the Walter Bean Lecture on Water Quality in Canada by Dr. Hrudey of the University of Alberta. That's it for me, have a good one!

Silly Rabbit, Trix Are For Kids!



Tey Everyone! Things are really rollnow and reading days are only a few short days of hell away for all of us, or perhaps have already passed us by way too quickly. Thanks to everyone who made it out to MOT last weekend, it was a great time as per the usual... Personally I'm busy as hell with midterms right now but if you're done and looking for something to do then there are plenty of great Engsoc events coming up very shortly this term!

First I'd like to congratulate the crazy fourth years; I hope your IRS was the bomb. It must feel pretty good to have those rings after these 4 long years! Second, hopefully everyone will have a great time over reading days; it can't hurt to have a couple

days off from school. Third, National engineering week is happening from Feb 25 - March 5 so make sure that you are keeping your eyes open for all of the great events that will be happening around then. Fourth, there is an Engsoc meeting next Wednesday March 1st so I hope to see you there! Genuis Bowl is going to be the 8th, and to give you a heads up Semi-Formal is going to be near the end of March, so start thinking about that right now!

In the not so near but still relatively near future, Wheelchair Basketball is coming up! This is a great charity event which I hope tons of teams will be out for. Furthermore, Explorations and Campus Day will both be happening soon. As well elections are occurring this term so if you're thinking of running for VPI and want to know what it is all about find me! I'm around everyday and I'll let you know what the score is...

Watch our for Wiley Wabbits, Butch

Keep Your Debt, Share Your Agony



MELINDA HURD VP EDUCATION

Tidilly-Ho my fellow engineering students! Welcome to the week of hell - midterms, assignments, and meetings OH MY! Despite the chaos of these few weeks there are many exciting and important events going on that YOU need to know about!! First off – every class that is enrolled in the PDEng courses – please contact the VP Education assistant (Kevin Choboter) with the name and email of your class representative for the PDEng student committee. There was a meeting on Tuesday February 21st in the evening so be sure to email Kevin ASAP.

In other news, prepare yourselves for Debt Load Surveys!! Debt load survey packages will be available to class reps to pick up in the orifice on Monday March 6. They will be due on Friday March 10th. There will be a prize for one of the classes that gets their debt load package in on time!! It's a good prize!!!

Otherwise, CONGRATULATION 4th YEARS!! Hope to see everyone out on IRS!! Good luck with midterms – don't forget to check out the Co-op Matching Results on Wednesday this week!

Party On.

IRS: the Bitter End



Hey everyone....it is an extremely busy time at UW right now as the 4th years are getting prepared for IRS. There was an IRS Slave auction that went on in P.O.E.T.S. this Friday that went fabulously well, and the actual date of IRS was this past Tuesday!...So be prepared to have those crazy fourth years dressed up as your

favorite sesame street character rampaging through the halls.

M.O.T. was a blast....even though it happened to be directly in the middle of most midterm weeks. There was a great showing at both Unit 36 and P.O.E.T.S. Thanks to everyone who attended, hope to see all of you at E.O.T.

Many people have been asking about the next races...they will be happening sometime after I.R.S., as was requested by the fourth years. I guess they think those rings will make them faster!

That's all from me, Git r Done, Gunnerz

Cash in on Flash at Novelties



SABRINA **GIOVINAZZO VP FINANCE**

 \mathbf{F} or those who missed it, the budget was passed at the last meeting. So this term there is \$2500 in donations to be given out. For those doing powerpoint presentations, make sure you've sent me the file since the meeting is tonight! There's a lot of money

to be given out this term so make sure you come out!

Novelties has just got a whole bunch of sweaters, long sleeve shirts, t-shirts and doctor pants in, so make sure you stop by on your lunch and see all the awesome stuff we have. Also, if you're interested in engineering board shorts and have some ideas for the design, e-mail Rishi (rlukka@engmail).

Not much else to say, hope everyone has some relaxing reading days!

Sabrina

WEEF Stats

WEEF Participation - Winter 2006

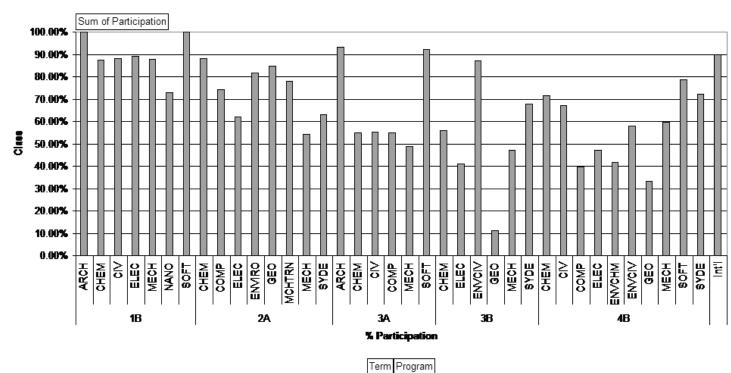


i all, by the time you guys read this, TIRS will be over, and I'll be passed out somewhere with a huge hangover to overcome:P

Anyways. Here's the participation for Winter 2006. This term we have an overall 75% participation, which is pretty good. A big thanks to all those who participated in making Waterloo better.

Several things to mention as well. Proposals are due February 27th (that's Monday next week!) by the end of the day. information is available online (www. weef.uwaterloo.ca). Proposal presentations are March 7th and 9th, from 4:30 to 7; if you have submitted a proposal, you have to present. An email will be sent out next week for further information. The funding council will be meeting on March 14th to decide the allocations; if you are the WEEF rep, please make yourself available for that day.

I have to go prep for IRS...see you guys on the flip side!



The Great Canadian Auto Show



adies and gentleman, start your ✓engines! It is that time of year again when the world's automakers introduce the "new" and greatest models for the upcoming year. This annual festivity is taking place in Toronto, at this very instant. So here is my recommendation to you. Instead of just reading this article while you sit at home on your glorious study days, put it into your back pocket, hop onto a Greyhound (dog or bus, whatever suits your fancy) and head to the Rogers Centre (formerly Skydome for those that don't read the newspaper...like me) and Metro Toronto Convention Center. While you are on the way there, you can continue reading this article to get a taste of the wonderful things that await. Be sure to hurry, because the show ends Sunday, February 26th at 6:00 P.M. It costs \$20, but is well worth the price of admission.

The show takes place in three different places, with the various exhibitors spread throughout. All the major automakers were well represented: Kia, Suzuki, Toyota, Mazda, Ford, DaimlerChrysler, GM (and all of it's divisions), Lexus, BMW, Mercedes-Benz, Volkswagon, Hyundai, Honda, Acura, Mitsubishi, Volvo, Audi. Prosche, Jaguar, Land Rover, Nissan. Infinity, Subaru, Mini, Bently, Rolls Royce, Lamborghini, Ferrari, Maserati. There were plenty of cars to see, touch, and sitin. Of course, the higher end cars (such as Ferrari, Lamborghini, and some Porsche) were roped off, so that you couldn't even breathe on them. But it was nice to see the cars that I will never be able to afford, even if it was from 10 feet away.

This was my first time going to the Auto Show, and I was not disappointed. Being a lowly student, I have not had the opportunity to look at very many cars, because I can not realistically afford to buy one (or pay for the insurance). Yet, at the car show, it is like a grown-up toy store. They have all the new cars, just sitting there, and you can hop in and push

all the buttons (but you can't turn many knobs, because most have been taken off to prevent people from stealing them.) Of course, the concept cars are merely for show, and you can't really get close enough to see what is under the hood, or even inside, but they were impressive none the less.

However, there is one thing that did disappoint me: the lack of hybrid vehicles that were there. Of the "big three", GM had the most, but it still wasn't enough to keep me content. They have a hybrid pick-up (both Chevy and GMC models) that uses an electric generator to power the electric system when the engine is idling. The sales rep said that the engine would "stop" when you put your foot on the break, and the electric generator would supply the power for the car. Then, when you put your foot on the gas, the engine would start again, and get power the truck. This didn't seem very reasonable, becuase how can you stop an engine dead, and then restart it without using a starting mechanism. It was a good idea though, and it hopes to reduce fuel comsumption by ~15%.

Something that you should definitely try is the Toyota 4x4 Off Road Course. You can sign up at the Toyota exhibit to test drive one of the new SUV or pick-up models on an outdoor track that has been set up to simulate off-road conditions. When we signed up, we only had a 45 minute wait, and the event was running

right on time. If anything, it was ahead of schedule. The one draw back is that you mostly idle through the course, and don't really get to "give 'er" over the bumps. I was impressed with the handling of the vehicle though. I drove the new Toyata Tundra, which had a lot of power, and plenty of ground clearance. Going over the rocks, bumps and railroad ties was no problem and I didn't scrap the underside once. Also, when I headed up the hill (about a 45 degree angle), the engine didn't whine at all. It was really smooth. I suggest you check it out, but remember to bring your license (doesn't need to be from Ontario, as long as it is valid) and you need to be 19 years of age (to sign the waiver, etc.).

There were a few things that did catch my eye and strike my fancy as I walked around. One of the impressive innovations I saw was the "Continuously Variable Transmission (CVT)." It does not shift like conventional transmissions, but uses a chain drive with a nearly infinite number of gear ratios to keep the engine running at almost constand RPM, improving fuel efficiency. Also, a compnay that really impressed me was Subaru. They had a display showing a horizontal-opposed engine. It uses horizontal cylinders instead of the traditional vertical style. This seems very logical to me, especially since cars are getting smaller, and engines bigger all the time. Looking under the hood shows just how cramped things can get. With

this style of engine, it can save a lot of space. Also, all of their cars come with symmetric all wheel drive, for improved performance.

There was one shortcoming that I found with almost all manufacturer's however. They tried to increase the carrying capacity of the vehicles and decreasing the size of the vehicle at the same time. This led to very cramped back seats. The rear row allowed me to put my feet under the seat in front, and then to rest my knees against the chair in front. It was not very comfortable, and I would not like to sit in that for a ride longer than 1 minute.

If you are going to go, make sure that you wear comfortable shoes, because there is a lot of walking. And there are signs that say backpacks are not allowed, but we carried ours around for the entire day without anyone saying anything, so I say you should bring one, to put all the brochures and such into. It is much better than carrying them in your hand in a plastic bag.

If you want more information about the show, head to www.autoshow.ca. They have a list of the days and times it is open, some pictures of the different exhibits, and you can even buy your tickets online (and save \$2. WooHoo!). So get out there and check out the cars that we will never be able to afford, and the cars that we won't want to buy because we know how they are made. What else are you going to do with those two days off? Read?!?!?!



Nanotech Steps up Game

It's a sad fact that often the equipment used by doctors and nurses is badly designed for their work. Nanotechnology, however, offers a chance to redesign many instruments to achieve better results.

University of Waterloo Prof. John Yeow, Systems Design Engineering, works every day to find a way to help doctors save lives.

"It may be the best technology in the world but if hospitals don't like it, they won't use it," said Yeow, who spent much of his engineering master's degree period listening to doctors complain about unwieldy equipment.

As a result of the frustration among doctors, Yeow began several projects to use the novel properties of nanotechnology for medical purposes.

One of those projects is to design a much more patient-friendly endoscope. The long, snake-like device is used by doctors to see inside a patient's stomach and intestines, but the endoscope's diameter is larger than a toonie -- that's a lot to swallow.

The micromachine-based endoscope, however, is only as thick as a piece of spaghetti. Plus, it has a much higher resolution, about 10-20 microns -- enough to get visual images of a fruit fly's central nervous system during tests.

The consequence is that a patient suffers far less, while doctors can use the new endoscope to see greater detail further into the intestines. Yeow expects that the micromachine-based endoscope, which is just moving from fruit fly to animal testing, could be ready for use in a clinical setting in less than five years.

Yeow's team is also working on helping miniaturize hospital X-ray machines. Currently, X-rays are produced by heating huge filaments to very high temperatures at which point an electron bursts forth, hitting a heavy metal screen and producing X-rays. The present system is not energy efficient, wastes many of the X-rays it produces and the filaments must be frequently replaced resulting in lost time.

But, nanotechnology has an answer. When placed in an electric field, carbon nanotubes emit electrons, which could hit a heavy metal and produce X-rays. That would mean energy and space could be saved, plus less fewer X-rays would be wasted.

Yeow is also seeking to improve the

precision of X-ray beams. Every morning, technicians must measure where the X-rays are being shot to make sure there is no unnecessary radiation. By creating a vast array of tiny sensors, technicians would have a more exact profile of the radiation to assure patients weren't getting too much or too little radiation.

Finally, Yeow envisions building micromachines that can move about in a patient's body or analyze a sample in a portable device.

These nanotech bots would be able to work on the cellular level, allowing doctors to not only move a cell from point A to B but also break it apart and release the cell content. Point-of-care diagnosis (referred to as "lab on a chip" nanotechnology) could give essential information about the composition of cells on the spot, rather than sending the sample out to a lab and having to wait several days for a result.

All of Yeow's work comes back to a desire to make functional devices that can be deployed in the real world. "In addition to working with models or software, I want to be able to hold and move the things I build."

Do You Have Something to Contribute?

Drop off your poetry, cartoons, drawings, photos and anything else artistic in the "Arts" box in the Orifice, or email them to iwarrior@engmail.uwaterloo.ca

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

Sink or Swim, it's up to RIM to Win



Here's a Patent on the Back RIM.... of death: RIM vs. NTP

Other than being a generous donor to UW in terms of donations to the university, the supply of co-op jobs, and gracious use of RIM ground on weekends, RIM is most well known for creating of the BlackberryTM (aka Crackberry), those little wireless e-mail devices that appease thumb fetishes with the invention of thumb typing. RIM has been the darling of the Canadian high tech industry over the past decade along with Nortel during the golden age of the high tech sector in the mid 1990's - 2000. Even with the tech bubble bursting in the most dramatic way and Nortel crashing and burning, RIM stayed relatively unscathed – i.e. no accounting frauds, major layoffs in the tens of thousands – even though their stock price crashed from \$155 to \$9.00, much to the chagrin of a certain author's portfolio. However RIM's Blackberry product was quite innovative as it permitted email accessible anywhere in the wireless net-

work in the world, as long as Blackberry service was available. The Blackberry has been especially popular in the USA, the orgy parlour of capitalism, where it is associated with capitalism. In the wireless email device market, the Blackberry owns 50% market share with a user population of 4.3 million. This population consists mostly of the business elite and 'masters of the universe' types, along with many elements in US government, with an estimated 200,000 users from such organizations as the Central Intelligence Agency, National Security Agency, Department of Justice - so much for made in the USA solutions, hmmm how about Acura limos instead of Cadillac's? And so an IT bubble burst didn't equal six to the grave for RIM. However what may put RIM to the grave is a patent dispute with a company called NTP Inc.

NTP is a patent holding company based in Virginia, USA, whose only patents held are ones for wireless email technology. Hence, in 2001 NTP Inc. sued RIM in the USA for patent infringement for the Blackberry. Initially RIM lost the court battle and was forced to pay \$23 million in damages. RIM appealed base on the argument that the Blackberry system with the disputed patents was based in Canada not the US so the US patents were not valid. RIM lost this appeal and was motioned to

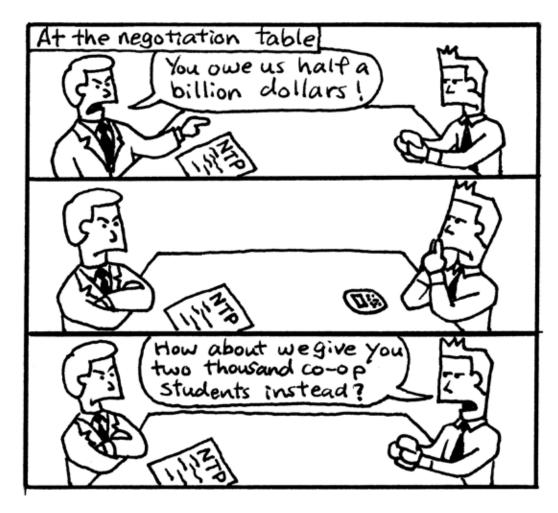
pay damages. In 2002, NTP got a injunction to stop RIM from selling and operating its Blackberry system in the USA However, in the land of litigation where money can buy your freedom, even though evidence against yourself is so compelling that you committed murder, RIM has unleashed its warchest and legal team with countless legal appeals against the decision in higher courts, and filing legal proceedings to dispute NTP's claim to the patents with the United States Patent and Trademark Office. Though RIM has been able to get the Patent Office to void several patents of NTP Inc over the past 5 years, RIM's court appeals have been either rejected or been refused re-examination (as with the US Supreme court ruling). There had been attempt for a \$450 million settlement between both parties in June 2005, but that deal fell through. Thus, the final battle appears set for February 24, 2006 where Judge James R. Spencer, who issued the injunction back in 2002, will decide finally whetever to uphold it or not.

If RIM should lose its patent battle and a injunction is upheld, 4.3 million users of the Blackberry system will be cutoff from communication, grinding to a halt the government, and the capitalist machine of the USA, letting in economic chaos and anarchy. With the US being its major market, RIM would lose its main source of income

and would severely have to downsize its company to survive. Thus these court battles have serious implications for RIM. Ironically, even the US government has made press statements that the Blackberry should still be operational after the injunction because of the dependence on it for the daily operation of the government.

So what can RIM do now if it loses it patent battle with NTP Inc.? Well just this past week RIM had announced workarounds with its Blackberry software that did not require the use of the disputed technology. However there are doubts from industry sources of its reliability, and functionality (Why can I only send 'who is your daddy and what does he do?' messages). And this past week Microsoft introduced its own wireless email technology platform, Windows Mobile, ready to muscle its way in to annex the marooned Blackberry customers.

Why should we care about RIM? Well to begin with, if RIM goes under there go a few co-op jobs and the northeast part of our campus is gonna be quite empty, much like a Clippers home game. Also, should RIM capitulate, the annals of history will tell of another crash and burn of a shining star of Canadian capitalism, like Bre-X, and the National Energy Program before it





Upcoming Events fr							om EngSoc
Sun Febuary 26	Mon Febuary 27 Arts Week Starts IW Meeting EWB - Discussions Without Borders	Tue Febuary 28	Wed March 1 Intent to Graduate Filing Deadline Engsoc Meeting 4	Thu March 2	Fri March 3 IW Submission Deadline	Sat March 4 Bus Push Athletics Weekend #2	Check out up-to- the-day event postings on the EngSoc website at www.engsoc. uwaterloo.ca
Sun March 5	Mon March 6 IW Meeting	Tue March 7	Wed March 8 Engsoc Meeting 5	Thu March 9	Fri March 10 EngPlay Arts Contest Submissions Due	Sat March 11 EngPlay	

Socks!

ALEX GIROUX

2A MECHANICAL

I walked into my house today to find a package from home on the table. I wasn't expecting any packages, but it was from my parents, so naturally I opened it, expecting there to be a stack of mail from home. Nope! Instead, I got a bunch of granola bars and socks. And chocolate, but the chocolate is irrelevant. So are the granola bars, although they did taste most excellent. The relevant part of this little rant is the socks.

The one thing I have learned over the years is that you can never have too many socks. Unfortunately, socks do tend to wear out after a while, and wearing winter boots and socks with a massive hole in the toe or heel is, well, not the most comfortable or warm thing in the world. Just last week I put on a pair of socks only to discover that one of them had no more heel. It was rather disappointing, let me tell you, as that had been my last pair of clean socks. Fortunately I managed to find another pair of clean socks, but not until after a frantic search through several drawers. It's never a good feeling to realize you need to do laundry when you're running late in the morning.

What else about socks? Well, socks come in many shapes and colors, so a great deal of fun can be had when choosing which socks to wear in the morning. If you're really creative, don't even bother trying to match your socks. Just reach into your drawer, pull out two socks, and Bob's your uncle. This approach has the added benefits of reducing the amount of work you have to do when putting away your laundry. However, mismatched socks may not be such a great idea while on a work term. It's probably not a good idea if you have an interview either.

My housemate has just informed me that socks can be used as ammo. I'm not sure exactly what that is supposed to mean, but given that my other housemate fairly consistently leaves his socks in the middle of the floor...I'm thinking a trebuchet or other catapult like thing might be involved. Perhaps a slingshot?

So what exactly was the point to this little rant of mine? There's actually two points. First of all, getting care packages from your parents is awesome, and secondly, socks provide a great deal of amusement. And an excellent topic for an article.

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.

Vision 2010 Planning Update



Afew weeks ago, lured by free food and drinks provided by the Dean's Office, I went to the Vision 2010 Update presentation. Sadly upon arrival (Very late) the food was gone (But it was Campus Pizza, so really there's a silver lining on everything), and there was still Coke.

Armed with a Coke and my camera, I sat down to listen the last 10 minutes of the Dean's presentation, as well as some student questions. The rest of the presentation I'll backfill with heavy adoption from the PowerPoint slides that are available online.

Because I doubt that any of you, myself included, remember back to fall 2004 when I first reported on Vision 2010, here's a refresher

Vision 2010 is the Faculty Planning Exercise initiated in the spring of 2004, to meet the Faculty's aspiration of being "widely recognized as Canada's premier engineering school and counted among the leading engineering schools in North America."

The plan has four goals: Maintain and build the strong undergraduate program, build capacity for the graduate program, increase research, and enhance our image as a multifaceted engineering school. Committees

for each Department within the Faculty are responsible for their respective Departments, and Faculty level Committees are responsible for Faculty wide issues such as Research, Undergraduate, Graduate, Computing, and Resources. The Resources Committee also has three Task Forces devoted to each specific issue: Women In Engineering, Faculty Issues, and Staff Issues. Why 2010? Back in the day the Dean quipped "Because it sounds better!", but actually, it's because it's far enough in the future to be effective, but not so far such that the unknowns become

There are seven actual plans, one for each department, and then an overall plan for the faculty.

There are five stages in the plan. The first is self study, where challenges and opportunities are identified. The second is a draft plan, with an academic plan, resource plan, and space plan. Stage three, the external assessment involves "consultation and feedback from discipline leaders". Stage four is the final plan, working with the self study, revised draft plan and response to external assessment. Finally, annual benchmarking will allow the Faculty to analyze updated data, measure progress, revisit and revise plan as required.

In progress at the moment is the final plan, with benchmarking slated to begin the spring of 2007. Benchmarking will include a report from each department each year, reporting out on metrics to track the progress over time.

Key findings in many areas were presented in the update presentation. Specifically in undergraduate, several points are brought forth. There will be no significant enrolment expansion. Increased faculty will be hired to improve quality.

More new programs are on the radar:

More new programs are on the radar: Management Engineering is under consideration, and Architectural Engineering may be considered. An additional Associate Dean position who would be responsible for co-op and other special projects will be created.

The task force on Women In Engineering also reported out, making many recommendations, such as the following: Creating a new full-time staff position, with ½ of position allocated to WIE support, strengthening the WIE Committee, and supporting. events and initiatives for undergraduate students, graduate students, and faculty members.

After the presentation, a student wondered if the potential Management Engineering would further dilute Systems Design. Another student recommended that more initiatives be present to broaden the undergraduate curriculum, and existing initiatives such as the Options in different fields be better promoted. I agree with this – I'm not sure many students even know which Options exist, or even about the existence of the Options themselves. Noting the potential for new buildings, another student asked if there were any plans to make any new constructions green buildings, to which the Dean replied that at the current stage it was too early to consider those details.

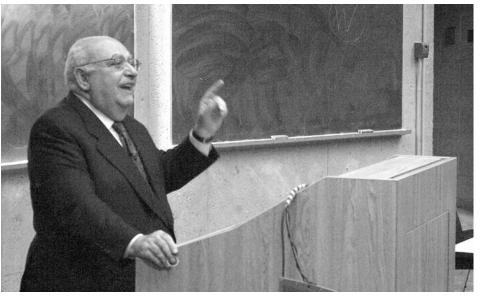
Finally, quoting the website once more:

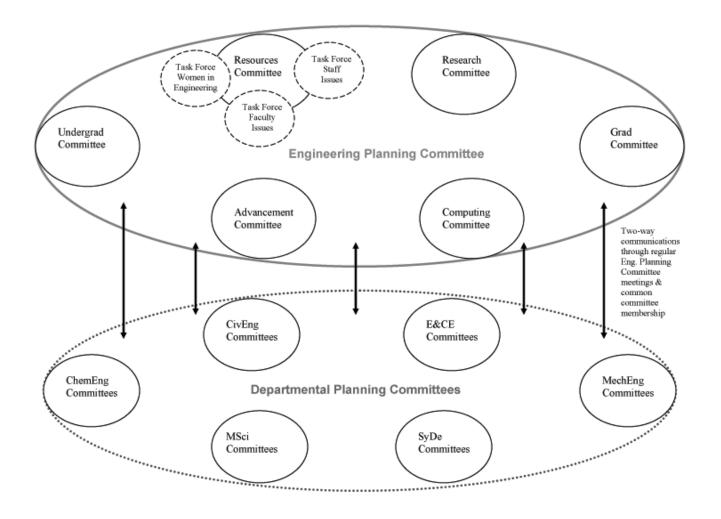
"This planning exercise is to be broadly consultative, and all members of the Waterloo Engineering community - students, staff, faculty, alumni and external partners are welcomed and encouraged to participate."

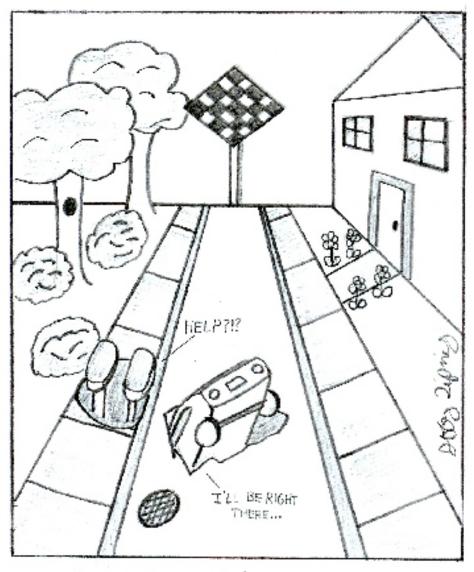
While many of us will be out by the time this plan takes effect, the Waterloo reputation will linger on your resume long after you leave, so it is in your interest also to contribute if you can, to ensure the success of this school for the years to come.

To get in touch with your department Vision 2010 contact, visit

http://www.engineering.uwaterloo.ca/planning/contacts/contacts.html



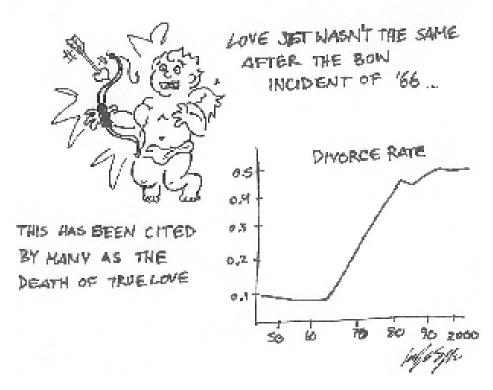




STREETS-O-WATERLOO

Jeffrey Lipnicky, 2A Mechanical

Send in your prof quotes, drawings and poems!



Jaclyn Sharpe, 2A Mechanical

Prof Quotes

Prof: "And this one is..?"

Class: [nothing]

Prof: "It starts with a Y and ends with an empty string..?"

-- Joe West - Math 118

[just after midterms]

Prof: "Let's talk about why they call it fatigue. The material gets tired of all the stresses, and it gives up and fails."

Class: [nervous laughter]

Prof: "What?"

--S. Esmaeili - ME 215

Prof: [after a bad joke] "I don't think I made Prof Quotes with that one." --Joe West - Math 118

Student: [pointing at power point slide] "Can you explain why that graph dips in the

Prof: [studies graph] "...No."

--N. Zhou - ME 230

Firon Inquisition David Yip, 3B Mechanical

What's the best use for engineers?



"Paperweight."

"NYC cab driver."

Jeff Alfonsi 4B Systems



"Money for the university - Go Plummers Pledge!"





"Ruling the world!"

Tara McCurdie & Julia Kossowski 4B Systems



Matt Strickland

4B Electrical

M: "BOT, MOT, and EOT."
T: "BOT, MOT, and EOT, and sex."
Tracy Damon & Mike Walters
3B Computer Science



"... They're not really good for anything."

Christine Moran & Megan McCracken 5A Math & Business



"Rich husbands."

Erin Lucuik 4A Art History



"Having no social life."

Prannoy Chadhury 3B Actuarial Science