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THE IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

VOLUME 29 ISSUE 7 | WEDNESDAY, JUNE 11, 2008

UW Goes to Formula SAE Competition

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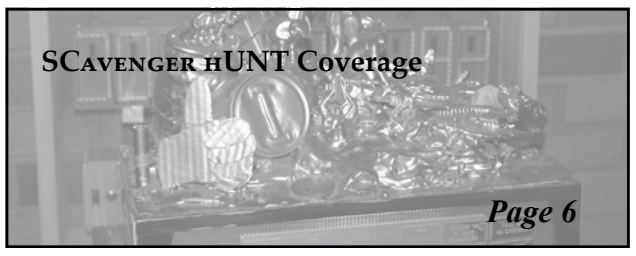

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Better Know a Beer: Whistler Brewing Company Classic Pale Ale

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http://iwarrior.uwaterloo.ca

New UW Residence on Phillip Street?

SUNNY NG
4A COMPUTER

University of Waterloo students are probably familiar with the townhouses at 256 Phillip Street. Located at the intersection of University Avenue and Phillip Street – right beside the University Plaza, these townhouses, sometimes referred to as the Phillip Street Townhouses, are where many UW students call home due to their close proximity to campus.

The townhouses were also the former home to Unit 36, which became a big part of Waterloo Engineering tradition over the past decade. It was known as the ideal gathering place for off-campus parties to Engineering students until last December when the last group of Engineering tenants moved out.

On this Tuesday, June 3rd, the UW Board of Governors held a meeting at the School of Architecture in Cambridge. In addition to approving the budgets for the Quantum-Nano and Engineering V buildings and changes to student incidental fees, the board was to approve, in principle, the concepts of an agreement between the university and the owner of Phillip Street Townhouses, CBS Property Management.

The proposal involves tearing-down the townhouse style units to make way for suite style apartment units to serve as student residences in a high-density building. Phase 1 of this project is expected to house approximately 500 students in three-bedroom and four-bedroom suites. Phase 2 of the project may follow depending on the success of Phase 1. It has been confirmed with the municipality that no re-zoning is required for such a purpose.

This arrangement would involve an operating agreement that would have an initial 3-year term. The proposed agreement states that CBS Property Management would be responsible for the demolition of the existing buildings and the construction of the new residence building. They would also be involved in ongoing maintenance and repair.

UW on the other hand would be in charge of finalizing the interior design, marketing, and room assignments. A Residence Life program involving Dons will also be its responsibility. UW would also be collecting rent and providing financial support to minimize financial risk for CBS Property Management during the Spring term when there are fewer students in school. 5% of the gross rent would go to the university.

This is great news for Waterloo students. "Despite what many people think, we believe there is a shortage of quality student housing for our students," said Chris Read, UW's University Housing Officer in an interview with *The Iron Warrior*. He explains, "We have a guarantee for incoming first-year students, and can accommodate that group, but the balance of our supply does not meet demand for other groups. The students who most commonly get denied residence space are the upper-year undergrads." Unlike last year, where there was a higher than expected number of first-year applicants, the projections for this year's enrolment are much more accurate.

Michael Seliske

A new proposal suggests the townhouses at 256 Phillip Street may be demolished to make way for new UW Residences.

See HOUSING on Page 7

Breaking Ground on Engineering V

THE IRON WARRIOR
NEWS BUREAU

The morning of Thursday, June 5th marked the start of a new era for the Faculty of Engineering, as it held a groundbreaking ceremony on Parking Lot B east of Ring Road, the future site of Engineering V (E5), a six-storey building slated to open in January of 2010. The ceremony, hosted by Dean Adel Sedra, saw speeches from special guests including President David Johnston as well as Dean's Advisory Council members and notable alumni Fred Grigsby and Rod Coutts. Members of Waterloo Engineering's student teams, students, staff, faculty members, and department chairs were among the hundreds in attendance to witness the momentous occasion.

With the student teams having their projects on display in the parking lot, the ceremony began promptly at 10am as guests were invited to be seated inside the tent, which included conceptual drawings of E5. Dean Sedra spoke to the crowd about the Vision 2010 plan and the need to address the Faculty's desperate need for space, with its undergrad population having increased by 75% and its graduate population by 95% over the past 20 years. He emphasized that an enormous number of people will benefit from this new building and it will go a very long way towards addressing Engineering's needs.

E5 will be the Faculty's first exclusive multi-use building since Carl Pollock Hall (formerly Engineering IV) was opened in 1971, and will be the first phase of the largest physical expansion in its history. The building will house a state of the art Student Design Centre on its first two floors, showcasing the Faculty's world class student teams. It will be linked to the current Engineering complex through a third-floor overhead link, and will provide some much needed research and lab space on the fourth and fifth floors to Engineering's biggest department, Electrical and Computer. It will also be the new home to two of the Faculty's other departments – Mechanical and Mechatronics on the third floor and Systems Design on the sixth floor.

Michael Seliske

The groundbreaking of Engineering V marks the beginning of the faculty's $150 Million expansion plans and is a part of fulfilling its ambitious Vision 2010 plan.

Sedra introduced several guests who each came up to say a few words, including President David Johnston and Rod Coutts, '64 Electrical alumnus whose $7 Million donation in 2000 helped "turn the submarine into a battleship," in Johnston's words, referring to the 3rd floor expansion of what is now the Rod Coutts Engineering Lecture Hall.

See FUNDRAISING UNDERWAY on Page 7

Letter from the Editor

What Really Grinds My Gears

SUNNY NG
EDITOR-IN-CHIEF

Thanks to everyone who picked up the 1st issue of the term. It has definitely been a rewarding experience for all of us here at the Iron Warrior. Remember, if you have a comment or suggestion about any article or just the direction of the paper, please send us an e-mail at iwarrior@engmail.uwaterloo.ca.

Speaking of responses, I seem to get a general consensus from readers that they enjoyed having the addition of "non-typical engineering articles" such as the fashion column that made its debut last issue. This was exactly what I was hoping for, so I will continue to steer the paper towards this direction to have a more diverse collection of reading material.

On that note, I decided to utilize this space to write an opinion piece that is in the spirit of a "non-typical Iron Warrior editorial", so that people would actually read a 1500+ word editorial! Since I'm not going to pretend that I'm more sophisticated than I actually am, I decided to write about things I see in day-to-day life. In particular, I'm talking about things that bug the hell out of me, everyday. Inspired by Peter Griffin from *Family Guy* and his brief stint in TV news broadcast, here is my own version of "You Know What Really Grinds My Gears." But before I start…

Disclaimer: The views and opinions here do not necessarily reflect those of *The Iron Warrior* or the Engineering Society.

Now that that's out of the way, let's get this thing rolling.

"I could care less"

This phrase has become such a cliché that most people have stopped thinking about what it even means. Let's think for a minute, if you "could care less" about something, then it means there is a level of how much you care below how much you care right now. So, doesn't that mean you actually do care about the subject matter quite a bit?

The correct way to express that is by saying "I *couldn't* care less." Unfortunately, this grammar mistake seems to be ingrained into many people's minds, and can be often found in popular culture. I can already think of two recent songs that have the phrases in their lyrics, those being My Chemical Romance's "Teenagers" and Incubus' "Anna Molly."

Other common grammar mistakes that annoy me include people who say or type "should of", "irregardless" and those that can't tell the difference between "lose" and "loose", as well as "it's" and "its." English isn't even my first language, if I can spot those errors, you really have no excuse!

Pronouncing what you sell properly

For those of us who have worked in the service industry before (this includes those of you who picked up shifts at the local CnD), we all know that unless it's your first day on the job, it's important to be familiar with what you're serving. And in order to be familiar with what you are serving, one of the most important things to know is simply the pronunciation of the products you are serving. I can understand if you work at a record store and you accidentally mispronounce the name of some obscure band. But if you work in the food industry, you have no excuse.

There's a certain food joint in the University Plaza that I sometimes go to, and one of their main staples is their gyro. And by it being a staple, I mean it is what everyone goes there for because it's the only special they have. I still remember the last time I went there for food. "What do you want on your JYE-row?" said the disgruntled worker. Way to bastardize any ethnic authenticity left in your food! It's actually quite debatable on how gyro as a food should be pronounced. It could be YEE-row, JEE-row or even GEE-row, but it's definitely not JYE-row!

Unfortunately, this was not the only place in near proximity where I have heard such butchering in the pronunciation. I mean at least in University Plaza, you don't normally expect quality food and service anyway. However, at Conestoga Mall, there is this "Greek" fast food joint which by the way, has one of the worst "gyros" I have ever had. They also managed to butcher the pronunciation of their "signature" item.

This rant also extends to those who work in coffee shops and mispronounce espresso as "expresso." While it may seem like a minute thing, but for an environment that is usually stereotyped as a relaxing spot for the highly sophisticated, this can totally ruin the experience. Besides, with the prices I pay at places like these, I expect better services than that!

Drivers who feel the need to block sidewalks when they are waiting to turn

Maybe I'm just bitter because I don't have a car, but there's nothing that annoys me more than when I'm walking down the streets and drivers act like they rule the roads. And it usually doesn't bug me that much if they keep their antics on the actual road, but when they start making it inconvenient for pedestrians, that is where I draw the line!

I find it extremely annoying when drivers find the need to block the sidewalk when they are either waiting to turn right on a red light or just waiting to turn on to a local street when they are leaving a parking lot. According to Ontario traffic laws, for these scenarios, through-traffic has priority. And guess what, this includes both motorized vehicles *and* pedestrians! Shocking, I know. For God's sake, wait for your turn!

I find it amusing when drivers think that just because they are blocking the sidewalk, I should have to walk *behind*/ them or walk *faster* when I'm in front of them; you know as a courtesy or something. Well guess what asshat, if you aren't considerate enough to let me walk on my normally dedicated path and making me walk *around* you, then I sure as hell am not going to be considerate enough to let you turn sooner!

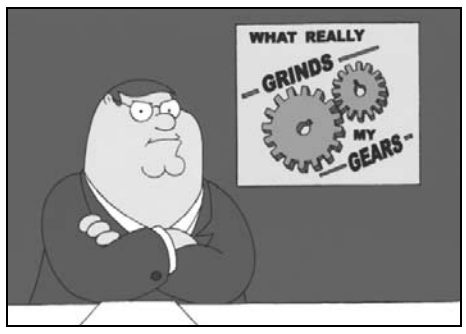
In fact, for drivers like these, especially the ones that act like they want to step on the gas pedal when I'm about to walk in front of them, I would purposely walk *slower* when I'm walking in front and make them wait even longer. Because guess what, I too can be an asshole.

If I were to have it my way, I would re-enact my favourite scene of the music video to The Verve's "Bitter Sweet Symphony", where Richard Ashcroft walks right on top of the hood of a car that is blocking the sidewalk. However, I would have to explore the legality of that.

Stretching 4:3 content on a 16:9 screen

Okay, maybe I'm bitter about this subject matter as well since I don't have a fancy expensive TV, but hear me out. With HD television sets being such a common item in households, there's nothing that bugs me more than people who don't know how to use them properly.

One common technological abuse is when people play standard definition content with a 4:3 aspect ratio on their HDTV and feel the need to stretch it to cover an entire 16:9 screen. I used to see this all the time in stores and in bars, but thankfully, in recent years, most of them have stopped doing that and got actual HD content. However, it annoys me when



people do it to their own TV set at the comfort of their home. I mean really, if you have the money to blow on this, you damn well better know how to use it properly!

First of all, stretching the content to cover the entire screen does not magically turn SD content into HD! In fact, by doing so, you're distorting the image, and in turn degrading it and making it look like crap. Isn't that the *opposite* of what you were trying to achieve when you decided to get an HDTV? I personally can't even fathom how people can stand watching stretched content all the time. It just doesn't *look right*! But that's just me.

The solution to this is to simply keep your aspect ratios untouched. If it's 4:3 content you're watching, then keep it 4:3! I know the black bars on the side can be annoying, but at least your image isn't distorted. If you're worried about the black bars causing burn-ins, then the alternative is to simply zoom in. Sure, you may lose a part of the image, but at least it's not distorted. Besides, people have been doing this all the time when they watched Full Screen versions of movies on their standard definition TVs back in the day.

People who do not have any disabilities using the handicap door buttons

This has got to be my biggest pet peeve of all time. I don't even know why people do it, other than for laziness. I can think of so many reasons why you *shouldn't*. This obviously excludes people who actually have physical disabilities or are carrying some large equipment or some groceries or pushing a stroller and can't actually open the door.

First of all, it's not designed for you to use. As engineering students, we should know by now that the increased use of a machine would increase the wear-and-tear of it. In other words, you are practically degrading the mechanism for those that actually need to use it and make it breakdown sooner.

Secondly, it actually makes it more inconvenient for those around you. We all know that these things aren't that efficient. Those that are behind you would have to wait an extra 20 seconds per door just because of your laziness. This is amplified when people do this in the underground PATH in downtown Toronto during rush hour near Union station, causing congestion in traffic flow for people rushing to get to work, or on to a train.

I know some argue that the doors at Davis Centre are ridiculously hard to open due to the lack of airflow (or something like that, I don't know, I'm in ECE), and that the buttons can be used there. What I do find really annoying is after I struggled to open the first set of doors, some asshole presses the button and makes me wait another 20 seconds for the second set of doors because *they're* too lazy to open them. What a prick.

Besides, this totally defeats the purpose of the design. There are two sets of doors for a reason. They are to keep air from circulating in and out of the building, to conserve energy from air conditioning or heating.

So there you have it, things that grind my gears every day. Now that I think about it, I probably shouldn't have published this. Now, everyone will purposely do those things in front of me just to piss me off. But really, how else would I be able to write 1500+ words of content and still make you want to read it? Besides, this provides the perfect venue for me to boast some self-importance.

What grinds *your* gears? Let us know, e-mail us at iwarrior@engmail.uwaterloo.ca.

THE IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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FSAE Team Hopes New Recruits Improve Performance

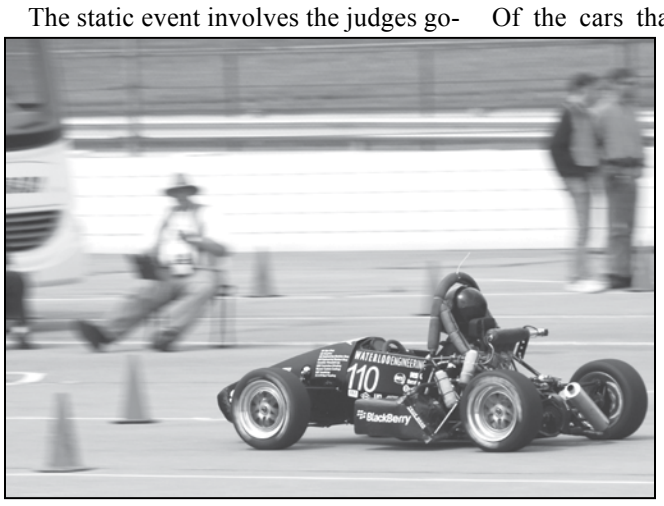
CHERRY HO
1B ELECTRICAL

Several weeks ago between May 14 and 18, the University of Waterloo Formula Motorsports team participated in a four day competition at the Michigan International Speedway. The Formula SAE Competition is the largest of its kind in the world, and Waterloo has been participating in the competition for 21 years. This year, the team placed 39th overall, out of around 110 teams. Their best finish was in 2005, where the team placed 4th overall in the competition. In the recent years, the team has not been able to find enough people to join the team, and thus have not done as well.

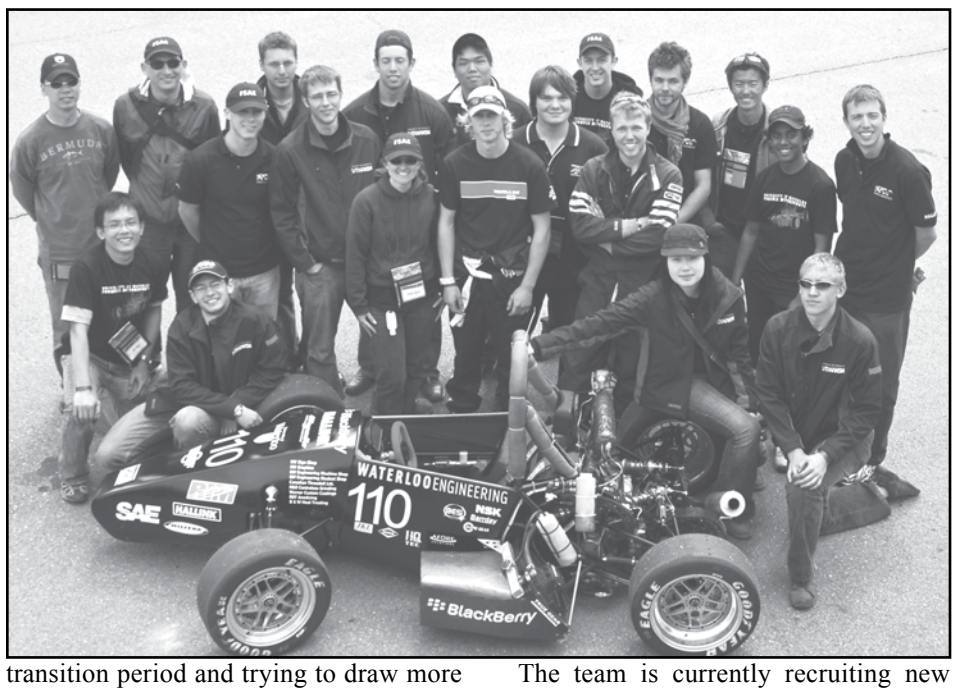
The competition consists of two main categories of events: Static and Dynamic. The performance of the team is tracked using a point system, with points awarded by the judges based on the performance of the team.

The static event involves the judges going around to each team and asking questions about the design of the car, and is worth 150 points. There is also a marketing competition, where students have to try to sell their idea to "potential investors", as the objective of the design competition is to design a prototype of a car that can be massed-produced by investors. Teams can gain a maximum of 75 points in this portion of the competition. A cost report of the prototype is also a component of this event, worth another 75.

The dynamic portion of the competition involves timed events, where most points are awarded to teams with the best performance in each event. There are acceleration and skid pad tests, where the best team would receive 50 points. A larger event, worth 150 points, would be the autocross: a long sweeping high-speed race, where two drivers would be required to complete two laps each. The final event, for 400 points is an endurance race, on a tight and complex track designed to break the cars. Only one third of the cars competing in the race were able to finish. Of the cars that were able to complete this portion of the competition, the team was very pleased to be ranked 23rd, as they were not able to complete the race in the past two years.



The year 2009 will be the 22nd year of competing. This is one of the longest-running teams in the school, and is one of the most competitive and focused on engineering design. Right now, the team is going through a transition period and trying to draw more members to the team. This team is not necessarily just for Mechanical or Engineering students. Anyone from any department or faculty is very welcome to join. In general, only Mechanical Engineering students join this team, but it has been noticed that the teams that perform better have members from a variety of disciplines, such as Business, Accounting, Mechatronics and Electrical Engineering. Right now, the team has around 30 people, with two thirds of the members in Engineering, and the rest from Accounting, Business and other disciplines. Being part of the team allows members to learn more about and appreciate their program of study, and to directly apply their learning with lots of hands-on experience. You can also find out how to design and manufacture things that will work. The team is for anyone.

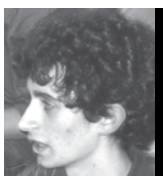


The team is currently recruiting new people, especially younger years, who are interested in a long-term commitment to help team development. No experience necessary! Being on this team looks great on a résumé, since the Formula SAE competition is a very big and well-known competition. If you are interested in CAS integration, NX, team management and team organization, business or marketing, or anything else, be sure to contact the team right away!

Full details about the competition results can be found at http://www.sae.org and clicking on Formula SAE Series.

For more information about the team, go to their website at http://fsae.uwaterloo.ca . You can also contact the team leader, Alex Berlin, or the team advisor, Ken Yuen for more information, in E2-2107, or at uwfsae@gmail.com.

Google Games Challenges Waterloo Students



DAWSON OVERTON
1B SYSTEMS

The first Google Games ever to be held at the University of Waterloo took place this past weekend, and it was a huge success by any measure. What are the Google Games, you ask? Picture it as the thinking man (or woman)'s Olympic Games – substitute the pole vault for a barbed wit and the ridiculously fit athletes for people with an uncanny amount of knowledge about Isaac Asimov and Linus Torvalds. Yes, perhaps not as glamorous as its more physically-oriented counterpart, but just as fun.

Another thing to note was that Waterloo was the only Canadian university to host a Google Games event this year – joining a guest list of such illustrious American schools as Harvard, MIT, and UC Berkeley. Yes, it has been mentioned that this could simply be due to the convenience of hosting here thanks to their Waterloo office, but regardless of the reason, you can't help but feel important being listed among these world-renowned schools.

Onto the day itself – the day was split into 4 main events, starting at 9:00am on Saturday and ending just after 4:00pm. The events consisted of the following: Geek Trivia, Puzzle Solving Alpha, Lego Building, and finally Puzzle Solving Beta. Each of the events lasted approximately an hour and a half, and Google graciously provided lunch for us after the first two events. Teams were given points for their performance in each of the 4 events, with the 3 highest scoring teams (of the 16 competing) winning prizes for their efforts. As well, a special spirit prize was given to a team with the most energy and enthusiasm throughout the day.

Starting off with high energy was the Geek Trivia event, where two teams were randomly pitted against each other and read 3 questions relating to Math, Computer Science, and other various "nerdy" geek-culture topics. Teams were called up two at a time, faced-off against each other on either side of a table, and had to fight to be the first to press the buzzer and answer each question before the opposing team. In a tribute to Alex Trebek, all questions had to be answered in the form of a question – many points were needlessly lost for teams not adhering to this rule. Questions such as "What common internet slang expressing joy is typically spelt with two zeroes?" and "What webcomic concerns romance, sarcasm, math, and language?" were commonplace. Correct responses garnered teams 25 points, whereas incorrect ones lost them 10 points. After 3 rounds of trivia, teams got ready for...

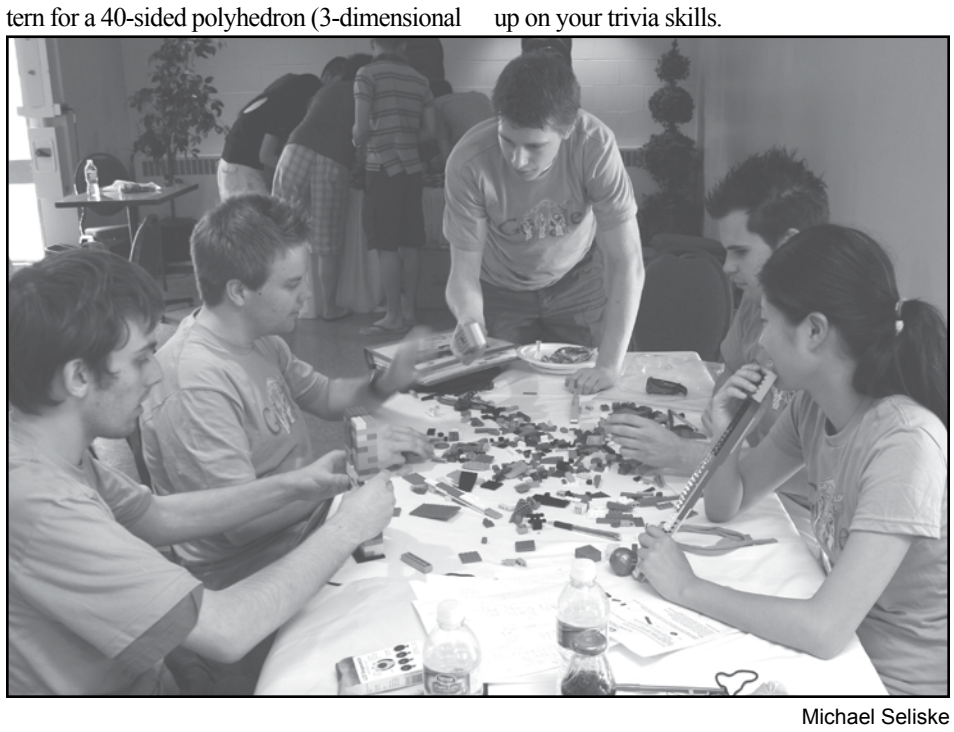
Puzzle Solving Alpha. Each team was given an envelope containing 6 puzzles – logic puzzles, not jigsaw puzzles – of varying type and difficulty and 90 minutes to complete them all. Multiple tries to answer each puzzle were allowed, but teams were given a limited amount of submission sheets and had to use them wisely across all puzzles. Points were given based on the difficulty of the puzzle, and bonus points were given to the first 3 teams to solve a particular puzzle. One of the puzzles involved 4 images that differed from each other in only very subtle ways, and teams had to find the PAIR of images that differed in exactly 10 ways. The images were also rotated and skewed to make comparison more difficult. Another puzzle involved the placement of people and monitors (for an office) on a 10x10 grid with rules given regarding which people could be in line of sight of one another and how many monitors must be in each row and column – basically Sudoku on steroids.

Next up after lunch was the Lego building competition. Teams were told at the start of the event that they had to build a trebuchet, using only the bag of random Lego blocks given and a large lead weight, as well as various extras such as a strip of cloth and some string. Teams had one hour to build their trebuchet, and the goal was to make one that could launch a Lego tire the furthest, though points were also given to the trebuchet with the most aesthetic value. When the time was up, the launch-off began, and it seemed that the notion of testing their contraptions beforehand did not occur to many of the teams – many trebuchets self destructed after one launch. Only two trebuchets were able to launch the tire past 2 meters, but points were given based on how the teams faired relative to one another and not absolute distance. Cool fact: my team came in 2nd.

The final event was Puzzle Solving Beta, and it was essentially the same thing as the earlier puzzle solving event except significantly harder. One particularly ridiculous puzzle required team members to cut out a paper folding pattern for a 40-sided polyhedron (3-dimensional geometric shape) and fold it properly to actually make it– judges would know you folded it properly by numbers and letters on each edge of the shape that had to match up.

After all was said and done, a great time was had by all and several appropriately themed prizes (puzzle games and a bunch of Google swag) were given to the winners. Congratulations to the winning team – Gulpers – and the runners up Infinitely Random and Mona Lisa Overdrive. A special shout-out also goes to Team Home Row who, despite being Mathies, won the spirit award with their high levels of enthusiasm and fashionable suit jackets.

Anyhow, hopefully I was able to capture enough of the excitement of the day in these paragraphs to make you want to sign up next year (it was not officially announced that this would be an annual event, but I believe it is a relatively safe assumption). Until next time... keep randomly reading Wikipedia and brush up on your trivia skills.



Michael Seliske

UW Engineers Win Google Android

Mobile Application Innovatively Tracks User's Carbon Footprint

BRYAN SACHDEVA
4A COMPUTER

Congratulations go to Eco2go, a group of UW Engineering students that have made it to the Top 50 in the Google Android Development Challenge. The group, made up of Robert Lam (Systems Design '08), Jeffery Kao (Systems Design '08), Taneem Talukdar (Systems Design '08) and Gary Pong (U of T) secured their position by creating an application entitled Eco2go, that aims to help users reduce their carbon footprint and environmental impact.

The application is designed to work on Google Android, an innovative mobile platform. Out of 1700 entries from around the world, our students placed in the Top 50, which, as Robert Lam describes, "is unbelievable". For their success, the team has been awarded $25,000 to further develop the application.

Taneem Talukdar, a team member and spokesperson, says that "[the challenge] generated a lot of attention and it was clear there would be a lot of teams entering with all sorts of ideas. [...]There are a lot of exciting things going on in the world of mobile technology and this was a great way for us to get involved." The three Systems Design Engineering students, who came together during the end of their 4A term back in Fall 2007, asked Gary Pong of University of Toronto Engineering to join them and "round out [their] skill set."

The challenge, announced back in November of 2007 by Google, was to have developers submit innovative and useful applications for their new platform. For the competition, a total of $10 Million was offered in prizes by the company. Android is an operating system for mobile phones which is designed, as Talkudar says, "so that developers like us find it really easy to develop programs like Eco2go." Android focuses on allowing a wide variety of applications to be developed that can run on any phone that has Android installed on it. When asked what this new platform means for mobile application development, Talkudar replies that "Google is focusing on allowing anybody to create applications that run on your phone [which means] that there will be new opportunities for the taking. It's another sign that North America is starting to really use mobile devices for more than just phone calls."

In response to the challenge, the team has come up with a "green" application. "We developed the idea for our application after we realized that many car owners are concerned about climate change, but they don't know how to connect their daily actions with their impact on the planet," explains Gary Pong. "Our application is designed to inspire people to adopt a more sustainable lifestyle by enabling them to accurately measure their carbon footprint and empowering them to make educated lifestyle choices."

According to their press release, Eco2go addresses the user's carbon footprint and environmental impact in three ways. First, the application automatically tracks the user's daily movements and calculates his or her personal carbon footprint. Once evaluated, the application will show the user how they can reduce their personal carbon emissions by using public transit instead of driving. The application also tracks the user's results over time. For privacy reasons the user's travel information is stored on their phone only.

Second, Eco2go encourages the user to stay motivated by enabling them to connect with the larger Eco2go Community. This is a vibrant network of users who swap stories and ideas, organize local initiatives and share information. "We recognize how important a community is to encouraging users in their commitment to reduce their carbon footprint, and the Eco2go network is available right on your phone," explains Jeff Kao. "Most people aren't going to go home and blog about a great deal at the local coffee shop if you bring in a reusable mug, for example," says Jeff. "But you can tell your friends from your phone while you're waiting in line."

Finally, Eco2go also allows the user to track carbon offsets that they can use to counter their carbon footprint. Eco2go users can get carbon offsets by investing in carbon reduction initiatives around the world such as alternative energy projects.

"We've got lots of ideas, but we are always looking for more. We invite anyone who is interested in our application to visit our website at eco2go.org and share their thoughts with us," says Taneem. "Our vision is to change the world by giving people a sense of self-awareness about their carbon footprint and by giving people a way to gradually change their lifestyle with the help of an enthusiastic and involved community."

The University of Waterloo and the Faculty of Engineering are proud of their achievement and wish them continued success in their developments. For more information about Eco2go, you can visit their website at http://www.eco2go.org/.

Eco2go shows a list of all the trips taken recently, along with some helpful information such as how to make the same journey using public transit, if available.

UW Grads Propose Sustainable Transportation

KEVIN LING
1B ELECTRICAL

Earlier this year, TD Canada Trust held a contest challenging students to come up with feasible solutions and proposals for more sustainable living. Waterloo graduate students Ben Clare, Jeremy Finkleman, and Matthew Lee answered the call and won the challenge with their proposal of a bicycle share program dubbed *VELO*.

The team of three is based out of the Transportation Research Group in UW's School of Planning. Working with the help of their faculty sponsor Assistant Professor Jeff Casello, from the School of Planning and Department of Civil Engineering, the team created a practical plan to reduce car usage by implementing a service where individuals can borrow bikes from automated bike stations around the city at any time.

This approach to transportation gives the user much more freedom than public transportation. "Unlike conventional bus transit, system users determine their own route and decide when to depart and arrive," said VELO team member Ben Clare. "As Waterloo Region becomes more focused on providing quality public transportation, there will be a growing need to fulfill short trips to and from key urban areas."

The VELO team conceived the idea of a Waterloo Region bicycle share program when trying to solve issues of transportation on campus. "We soon realized that the idea – although it might appeal to students – could easily be applied to urban Kitchener-Waterloo," said Clare.

The idea of a bicycle share program is nothing new though. When creating their plan, the VELO team looked into examples of already successful bicycle share programs throughout Europe. Cities like Paris and Barcelona have seen much success and are planning to expand their services. Several American cities are also looking into the feasibility of similar programs. Clare says a Washington, DC-based program, SmartBike DC, is planned to launch this month.

VELO is proposed to work similarly to existing bicycle share programs. Users will pay a yearly or per term membership fee and then pay additional rental fees based on how long they check out a bike for. The rental fee is not significant, and if the user returns the bike within an hour, there is no additional cost. The purpose of this fee is to discourage individuals from hoarding bikes for long periods of time. By having a system that encourages short usage times, there would be a greater circulation so a smaller fleet of bicycles would be able to service the user base.

Users can borrow a bike from any of the stations around the city and drop the bike off at any other station. All stations will have automated bike locks and use swipe cards to unlock bikes. There is even a suggested tracking system so that users can easily find the availability of bicycles on the Internet in real time. Needless to say, just because users are going back to manually powered vehicles does not mean that the system isn't high tech.

A system like VELO will be the first of its kind in Canada. It is hard to say exactly what the public's reaction will be but the VELO team believes it will be positive. VELO is an alternative transportation method and things like rising gas prices and a greater public interest in the environment will make the VELO system more appealing to the general public. The large student demographic in the Kitchener-Waterloo area should also contribute to the demand for a bicycle share program.

While there are no finalized plans to implement the proposed VELO system yet, the team will be meeting with city and regional officials over the next few months to discuss their idea in depth. Clare is optimistic about how the idea is being received and thinks that the team will likely present their ideas to the city council before the end of 2008. Their idea has already received a lot of attention and there are many interested parties in the area. The team would like to see the launch of a pilot system next summer, but Clare admits "[they] do have a considerably long way to go before VELO will be implemented."

For more information about VELO, the team's winning TD "Go Green" Challenge submission can be found at http://www.fes.uwaterloo.ca/planning/about/awards/GoGreenChallenge.pdf

Proposed VELOstation locations, and population density of persons aged 15 – 24 in the Kitchener-Waterloo area.

The New Boar on the Block

Arts Magazine EIC Talks about the Newest Campus Publication

SUNNY NG
4A COMPUTER

Most B-Socers probably do not realize that the Arts Faculty just got its own (for now, still unofficial) undergraduate student magazine. Since Winter 2008, *The Boar* is the latest addition to student media on campus. I had the opportunity to speak with Editor-in-Chief Ashley Csanady to talk about how it all began and where it's headed.

The Boar was started when Csanady came up with the idea of having a magazine that represents the students of the Faculty of Arts along with Arts Student Union (ASU) President Allan Babor and Vice-President Paul Matheson back at the end of Spring 2007. Matheson later became the General Manager of the magazine. The idea of the magazine was pitched to their faculty and to the Arts Endowment Fund, where it was able to secure funding to print its first issue. It also received additional funding from ASU.

Ashley describes *The Boar* as a mix of *The Walrus* and *Adbuster*s, with a strong mix of artistically structured essays, feature articles, poetry, fiction, art and photography. She explains, "What I really wanted to do was to create something that could represent the diversity within the Faculty of Arts. Striking a balance between the arts and the humanities is always one of the bigger aims, which is why we print it at such high-quality."

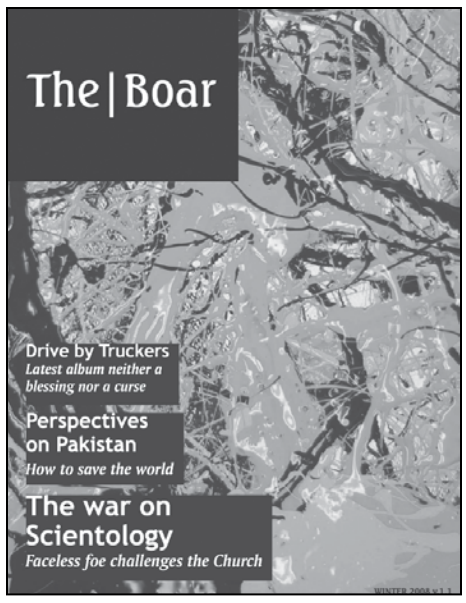
When asked about how it differs from other campus publication such as *The Iron Warrior*, Csanady explains that *The Boar* does not intend to cover campus issues. Instead, it tends to cover larger timely issues from a broader perspective such as the perception of the humanities or the point of view from Political Science studies.

Ashley describes one of the biggest challenges so far has been securing funding. Right now, they do not have a steady stream of funding and have to rely on looking for funding to print each issue.

The first issue of *The Boar* came out on March 21st. Its reception was phenomenal. It received praises from students, as well as the faculty including the Dean's Office. Csanady says, "I think there was a need for this. I think as the biggest faculty to not have a publication – as a voice of what we do was almost a travesty. I think the time was right and people were ready for it."

Ashley thinks that the Arts Faculty liked the fact that in addition to representing the different sides of the students in the faculty, it also creates a learning environment for those who want to learn more about magazine production. This adds to the fact that it is the only student-run magazine on campus and that there is no journalism school in UW.

For its upcoming issue, Csanady hopes to see more balance, such as a stronger representation from the research-based humanities content. She also hopes to engage in more discussion from readers as to what they think of the magazine. She says, "People like to think that [we] don't want bad press. But [we] do, because it means not only do [the readers] care enough to read it, they care enough to actually say something about it."

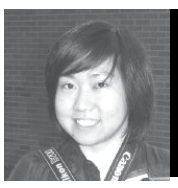


The Boar currently has approximately 10 production staff. "We're definitely always looking for people, especially on the business side of things and the web-end of things," says the editor.

Watch out for *The Boar*, its Spring 2008 edition is set to hit the stands by mid-July. Its submission deadline is June 14th. Submissions are open to students from all faculties. For more information, visit their website at http://www.theboar.ca or e-mail Editor-in-Chief Ashley Csanady at editor@theboar.ca.

Waterloo Unlimited

Not Your Typical Summer Camp



SYLVIA WU
1B MECHATRONICS

This is a camp where you don't just play the clarinet, train for soccer, or do delta epsilon all week. Instead, imagine attending lectures from all UW faculties, doing workshops on improving personal and study skills, living in Conrad Grabel with UW professors, and meet talented, well-rounded, and motivated youth (like yourself) from across Canada, all in one week. You can do this whether you are in grades 10, 11, or 12. It's the kind of unique education experience that you could never get in a normal high school.

It all happens at Waterloo Unlimited, an enrichment program offered by the Centre of Knowledge Integration at the University of Waterloo. Its creators had the vision of giving high school students a taste of all disciplines at the higher education level. However, taking university-level courses (i.e. the Harvard Summer School program) isn't the main focus of Waterloo Unlimited. Instead, workshops that improve personal skills and encourage curiosity are an integral part of the program.

Transdisciplinarity is one of the most important facets of Waterloo Unlimited. Students who attend it (after submitting a multi-faceted application) will gain exposure to all fields of studies related to a central theme. This year's Grade 10 Waterloo Unlimited Program had Vision as its theme. Students attended lectures and public talks on Visualizing Information (Computer Science), Forensic Optometry, Vision and Visual art, just to name a few. The Grade 11 and 12 programs are themed "Design" and "Research" respectively.

Founded by Professor Ed Jernigan (also the founder of the Shad Valley program for Grade 12 students), Waterloo Unlimited fills the gap left by other enrichment programs for high school students. Most such programs hosted by universities only focus on one academic or extra-curricular aspects: engineering, robotics, computer science, etc. What if you were interested in everything? Hence, Waterloo Unlimited is the perfect camp for those who are well-rounded and have diverse interests.

The Waterloo Unlimited program also has a university-level extension: The Bachelor of Knowledge Integration degree program. The program will welcome its first students in September 2008. Tailor-made for high school graduates who do not want to tie themselves down to one discipline or even one field, the program focuses on problem-solving across traditional discipline boundaries. KI no doubt will get UW even more bonus points for innovation in the next Maclean's University issue.

"Specialization leads to extinction," Professor Jernigan remarks. In our rapidly changing world, technologies and problem-solving methods go quickly out of phase. Innovative programs that encourage transdisciplinarity and flexibility, such as Waterloo Unlimited and the KI degree program, meet the demand of the future.

Old birds, don't you now wish Waterloo Unlimited existed while you were in high school?

Student Horizons: Break Out!

KEVIN GU
4A COMPUTER

In its inaugural Break Out! event, Student Horizons has made an explosive entry featuring Greg Overholt. Over 50 students attended Break Out!, ranging from first years to graduate students, all with strong ambition and great visions in mind.

Student Horizons is a newly-founded Feds club dedicated to creating a peer-to-peer network where students share ideas, practices and theories of personal development and success. This network will foster growth in self-improvement, provide a forum to share interesting projects or business ideas, and build relationships among students with a keen interest for achievement.

As one club executive reports, "We got higher than expected numbers in terms of attendance and the event was a logistical success." The keynote speaker of the Break Out! event, Greg Overholt, is a Computer Science/Business student from Wilfrid Laurier University. Starting from a vision of supporting education in third world countries, he has built up a charitable organization called Students Offering Support (SOS), which now spans multiple provinces across Canada. Over the last two years, he has raised over $130,000 and has worked on education-building projects in multiple countries.

At Break Out!, Overholt inspired the audience to break out of their normal routine and make an impact on the world. He talked about the arduous journey of building SOS into the nationwide organization that it is today. He also talked about all the different development projects that he has worked on and how rewarding they have been to him. Overholt gave advice on what it takes to becoming successful in all respects of life. It's as simple as just finding something you are passionate about and following through with conviction.

"I really liked your event. I thought what Greg did was really impressive and I really feel like I should go out and do my own thing," one attendee replied when asked for feedback after the event. The next event for Student Horizons will feature the founder of the Impact Leadership Conference, Kunal Gupta as a guest speaker. Gupta will present new and inspiring ideas of how to develop and solidify a vision for an organization, based on his experience in seeding the national Impact Entrepreneur Organization. This event will occur on July 10th between 6 and 7 pm.

More information about Student Horizons and their events can be found at http://horizons.clubs.feds.ca and also through their Facebook group.

Engineering's Monty Python Flying Circus Scavenger Hunt

MAY WONG
3A NANOTECHNOLOGY

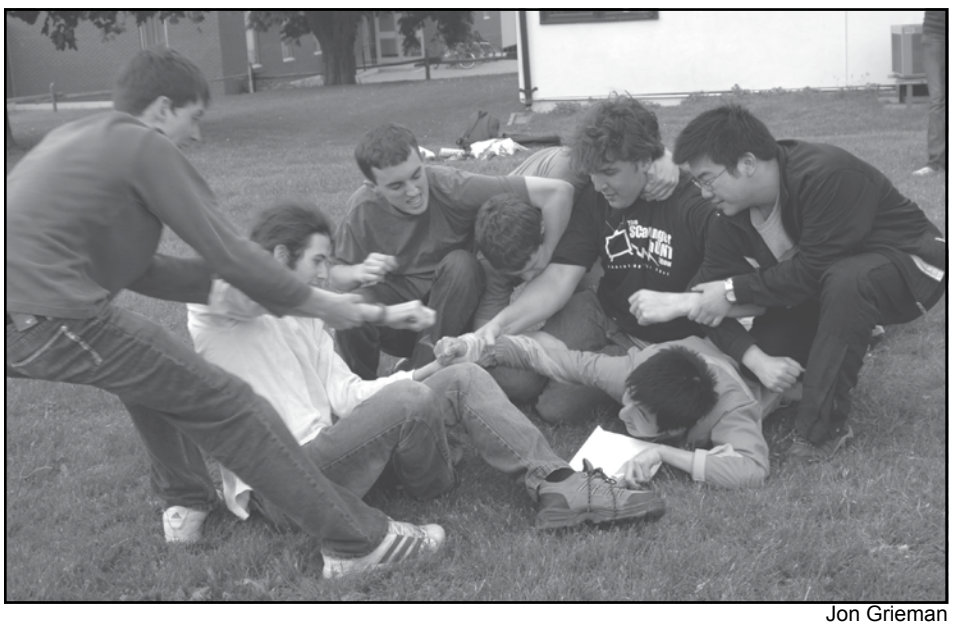
What do you get when you combine sleep deprivation, utter nonsense, and 24 hours of non-stop fun? Well, if you were there, you would know that the answer is obviously the Scavenger Hunt that happened on May 30th, 2008. The event went off without a hitch, with a whopping participation of 7 teams, of which only 4 remained by the end of the night.

The day kicked off with the exhilarating Pooh Sticks, where CANT, the systems design team, proved to everyone that they know the optimal shape of a stick that floats the fastest down Laurel Creek. The afternoon brought people together to kill each other over calculus; throw, not to mention touch, an awfully sketchy mattress; gallivanting all over campus searching for impossible clues.

If this was not enough, we sent most of our participants off to Paris. If you type in Paris in Google Maps and ask for directions, it will tell you to swim across the Atlantic Ocean. However, the directors decided that it would be too much to ask of our participants as we actually wanted them back after the road trip. So Plan B, they went to Paris, Ontario instead. The strange images and items they acquired during the road trip included a very nice looking waterfall, various moons (I thought only one was visible from Earth) and a chocolate iPod.

For those who a) did not want to be gouged by the current gas prices, or b) were paying their own tuition, there were also other events occurring simultaneously. There were rumours of people discovering a fist full of spam, followed by Software 2011 who thought tying 4 pairs of shoes together is a good way to bring down a Frisbee, minor injuries from flying shoes aside.

The classic *Name That Tune* brought in a crowd unlike any other to POETS. Picture this, a crowd of people sitting around a super sketchy and beat-up mattress in POETS at 10pm, all fighting over a plastic banana, which somehow managed to be broken TWICE! With the crowd riled up, the classic grudge match of Balloon Burst ensued in CPH Foyer, where Mech 2011 proved their sidestepping potential through surprisingly gentlemanly-like movements and courtesy. Right after that, they disposed of all traces of friendliness and ran outside for two hours dragging people back to CPH Foyer in The Hunt. No one was hurt, but Sean O'neill of 2011 Nano proved he can stuff a 3.5 cm thick stack of loonies and toonies into his belly button. Well done, Sean, well done.



Jon Grieman

Nothing sounds more fun than a good game of Full Contact Calculus.

Jon Grieman

Participants pose with the OPP during their Scunt Road Trip in Paris, Ontario.

The attitude shifted into nice, quiet and yet questionable games. Gods decided it was a good idea to pelt cardboard boxes off the balcony of POETS and have 20 people below clamour for them. For those of you who participated, thank you very much for helping to clean up the upstairs part of POETS. The Systems Design team once again impressed us with an astounding tower of boxes measuring four Caitlins. Controversy ensued when the Mechs argued that a plunger in the wall was, in fact, a free standing structure. However, it did not meet the requirement that the structure must be contacting the floor, and thus they were disqualified for that entry.

The night sped by, before we knew it, we were drawing on blank index cards with a game that involved becoming a cow, rolling over, standing on a chair, profit, Mario stealing your profit, spawning more overlords, PDEng workshop invitations; all powered off sleep deprivation. For the first time in at least 2 years, Scunt actually ended at noon on the Saturday, followed by stumbling over to Front Row, as per Engineering tradition.

The winners of Scunt: Software 2011, for their undying enthusiasm all throughout the night. Their strangely mathematical approaches to the various challenges throughout the night confused us thoroughly. They even did pudding drop using a specific algorithm. The hands-down most astounding accomplishment of the day was their massive flowchart in sidewalk chalk between E3 and ESC in response to the acquisition: The longest flowchart on a sidewalk made with sidewalk chalk showing how to find a holy grail. Their passion, attitude and overall spirit earned Software 2011 the title of Scavenger Hunt Champions of Spring 2008. Congratulations to our winners. For those of you who are interested in partaking in this fabulous event, there is one almost every term!

Exchange! Don't Miss Out!

PETER ROE
DIRECTOR OF EXCHANGE PROGRAMS

If you are in 1B, 2A, 2B, or even 3A it's not too late to join the growing numbers of UW Engineers who go on exchange to one of our 60 partner universities around the world. UW is fast becoming renowned as one of the world's top Engineering Schools, and we have world-class universities in other continents that enjoy receiving our students for stays on their campuses for as little as one term or as much as a full year, including, possibly, a work term job that they will help you find.

Why would you want to do such a thing, interrupting school here and spending your hard-earned money? There are several reasons. You will have the opportunity to:

- participate in learning at other first class institutions
- become familiar with the cultures of a variety of countries, not merely by short term visits, but through living in the environment of the host institutions' peoples
- make yourself more attractive to industry in the increasingly-integrated global economy
- expand your technical and cultural knowledge and gain a truly global understanding
- travel to see and enjoy the attractions of these foreign lands
- improve your linguistic skills in at least one foreign language
- meet fellow exchange students from around the world and make new life-long international connections and friendships
- generally become more complete citizens of the world

The whole Undergraduate Engineering student body benefits from the presence of international exchange students who can share their special cultures and knowledge with those students who are unable to take advantage of our opportunities for international experience. When you go on exchange you make it possible for us to welcome more world-wide students here; they will become your friends, and long-term friends and traders with Ontario and Canada as a whole. While you're away you will be an ambassador for Waterloo and for our country, contributing to the cultural and physical well-being of our society.

OK, the main thing is: you can have a great deal of fun and at the same time improve your resume. You can see the world, really, not virtually. And doing it is simple. If you satisfy, or will satisfy, the simple criteria for exchange, just apply. And there is even available financial support, from UW, from the Sandford Fleming Foundation (you pay them a fee, so why not get repaid?), from some governments, and even from some of our exchange partner institutions themselves.

What are the criteria? To be selected to participate in an engineering exchange program, you must be "in good standing". This means in good standing academically, in good standing with the CECS Department, as well as in good standing with PDEng. Other criteria include:

- You must have successfully completed the 2B academic term.
- You must have a cumulative UW average of at least 70%; however, each student is treated individually: if you demonstrate a substantial increase in second year despite a lower overall average you *may* be approved.
- You must have sufficient ability to write and communicate well in the host language.
- You must have a valid Canadian passport and travel on that Canadian passport.
- You must have proper health and travel insurance in place.

So, just visit the Engineering Exchange Opportunities website (www.eng.waterloo.ca/~exchange), download the application forms and start your preparation. If you would like to go on exchange, but don't know where, read about our partners on their websites (our's links to them), talk to students who are here on exchange, or to students, usually in 3B or 4A, who have returned, read some of our student reports on our website, or just drop in and see Cindy Howe (cindy@engmail.uwaterloo.ca, or extension 33084) or Peter Roe (phoroe@uwaterloo.ca, or extension 35175) in the Faculty Exchange Office (CPH 1320).

Everyone, without exception, who has gone on exchange from UW Engineering has returned saying words like: *"Going on exchange abroad was perhaps one of the best decisions we made in our university careers. It was an unforgettable experience and we would definitely recommend Université de Technologie de Compiègne as a destination. However, you really cannot go wrong in your selection as any university, either in France or elsewhere in the world, will have its own charm and offer a unique experience. All the students we knew who studied abroad spoke positively of their time in a foreign country. Do not let language be an obstacle to participation in an exchange program; other students, professors and friends will be more than glad to help you along."* (Ash Charles, MTE & Blaise Pinaud, CHE, May 2008).

UW Volunteers Help Out at KidsAbility Fun Run

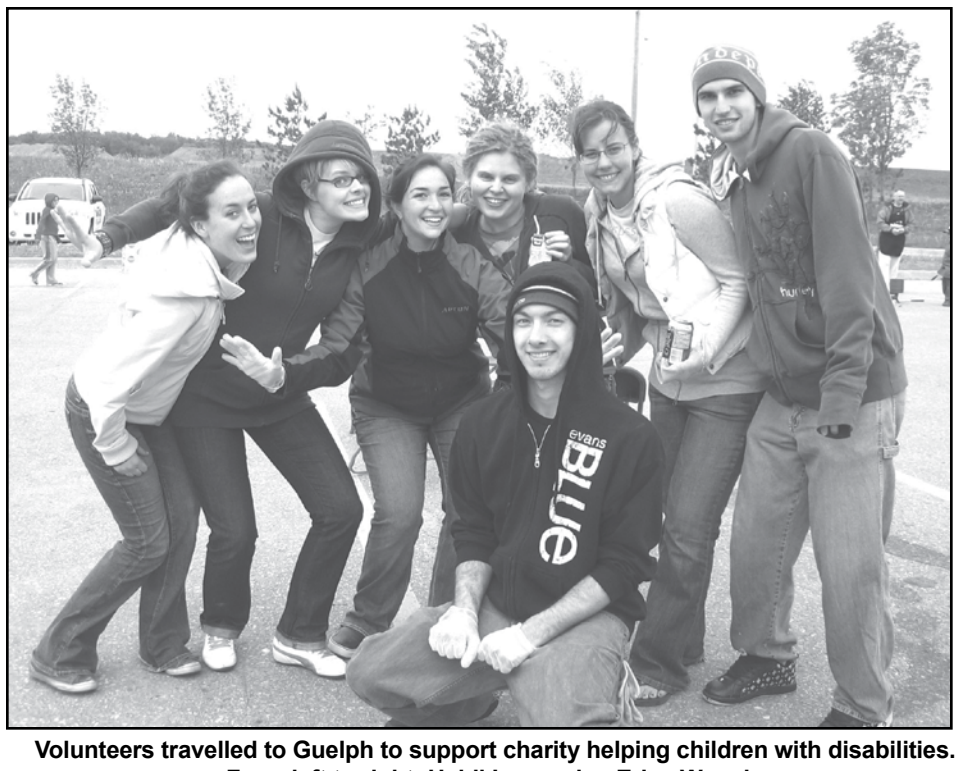
JESS HOWCROFT
4A CIVIL

On Sunday, June 1st, three EngSoc charities directors, one EngSoc VP-External, and three other EngSoc members travelled to Guelph to volunteer at the 2nd annual KidsAbility Fun Run. The event included a 1 km walk or run through a marked track at the West End Community Centre in Guelph. Participants collected pledges to raise money to support KidsAbility, which is an accredited, charitable organization established in 1957 to help children with disabilities

The UW volunteers arrived just after 8:30am and had the first task of moving and assembling scaffolding that would mark the start and finish line for participants. Next, volunteers helped preparing food for the participants, including snacks and an M&M barbeque, and registered participants as they arrived for the Fun Run. The festivities kicked off at 10:45am and lasted until about 11:15am. When participants finished the run, the food tent was a popular destination as hot dogs and hamburgers where cooked by the helpers. In spite of the chilly weather, all participants and volunteers were enthusiastic and the morning was truly filled with an amazing atmosphere.

The UW volunteers found out about this great event and cause through one volunteer's past work term employer. The employer, Melanie, is also a past EngSoc President and FOC. This year, over $20,000 was raised, which is an incredible increase from last year's already impressive amount of $10,000.

Charities directors would like to thank Erica, Heidi, and Alex for helping out. In particular, a special thank you goes out to Mark for connecting us with this great volunteering opportunity. If you have any contacts for events like this one that need volunteers, please contact me or any of the other Charity Directors. My e-mail is at jhowcrof@engmail.uwaterloo.ca.



Volunteers travelled to Guelph to support charity helping children with disabilities. From left to right: Heidi Lamarche, Erica Waugh, Jessica Howcroft, Laura Sisson, Mark Cremasco, Nikki Weckman, Alex Chortos.

Suite Style Residence Proposed

HOUSING
Continued from Page 1

This means it should not be necessary to resort to temporary measures again, such as converting some double rooms in Ron Eydt Village to triple rooms.

While many UW students opt to live off-campus after first year, that is not always the case. Read describes that, for students, this type of residence would equate to "close to or on-campus suite-style accommodations with all the amenities a university residence provides." These benefits include short-term leases (4 or 8 months instead of annual leases), technology infrastructure, university presence in the building for crisis response, as well as a safe and secure environment.

Read expresses optimism on this project, "The project with CBS has been discussed for some time now, and we expect to enter into an agreement with them as they have a good understanding of student housing and want to work with the university to provide a building that meets [our] requirements. This partnership will allow for a good amount of appropriate student housing for UW students." There is no confirmed timeline for the project yet, but the university hopes to have this facility open as soon as possible.

Engineering V to Open for 2010

Michael Seliske

Dean Adel Sedra speaks at the Engineering V Groundbreaking Ceremony

FUNDRASING UNDERWAY
Continued from Page 1

Johnston also took the occasion to announce the kick-off of the Vision 2010 fundraising campaign, the goal of which is to raise $120 Million for the Faculty towards its expansion plans. Johnston remarked that the Faculty hasn't waited for this announcement to start the fundraising process, though. "They have already raised $51.3M," he said to applause from the audience.

Alex James and Brandon DeHart, Directors of the Waterloo Engineering Endowment Foundation, also spoke briefly and announced the student-run fund's $1M gift towards E5. The gift is being matched by the Dean and doubly matched by the University, to help turn the students' donation towards the building into $4 Million. E5's opening is also expected to coincide with WEEF's 20th anniversary and its principle hitting the $10 Million milestone. "It is monumental to see the effect that student contributions can have on development of the campus," James said.

With the completion of the speeches inside the tent, the Dean invited everyone outside to the pile of dirt that had been specially brought out to accommodate the problem of breaking ground on asphalt. Members of the print and TV media recorded the occasion as Sedra was joined by the special guests who had spoken earlier to stick the shovels in the simulated ground.

The morning also saw some lighter moments, with Sedra quipping that the audience "sounds like one of my classes" to get the crowd's attention at the start, and commenting that a train passing by the train tracks "wasn't part of the program". Johnston also got in on the fun by jokingly promising to hold the Faculty to the completion date of Christmas of 2008 – as opposed to Christmas 2009 as planned – which Sedra had misspoken about earlier.

Upcoming Events Calendar

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
June 9 5:30 : IW Meeting (CPH 1323B)	**June 10**	**June 11** GradComm Pizza	**June 12** Enginuity #3 WIE Movie Night (POETS) Boggan Burgers	**June 13** GradComm PubCrawl	**June 14** Convocation	**June 15** 2009 Year Spirit Bocce Ball Tournament
June 16 5:30 : IW Meeting (CPH 1323B)	**June 17**	**June 18** GradComm Pizza	**June 19** Boggan Burgers	**June 20** IW Issue 3 Deadline MOT Warrior Weekend	**June 21** Warrior Weekend	**June 22** Beach Day
June 23 5:30 : IW Meeting (CPH 1323B)	**June 23**	**June 24** EngSoc Meeting #4 (CPH 3385) Coffee House IW Issue 3 Publication GradComm Pizza	**June 25** EngSoc Exec Nomations Open Enginuity #4 GradComm PubCrawl Boggan Burgers	**June 26**	**June 27** ESSCO AGM (Ryerson)	**June 28**

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

ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report

Hoff's "the weather is too nice and I want to go sit on the POETS patio" prez report (and yes, that's the title of my report)

AMANDA HOFF
PRESIDENT

Here we are almost halfway through the term and things appear to be off to a solid start! The rest of the exec and I had a meeting with Dean Sedra earlier this week and discussed everything from our term goals to the Vision 2010 progress to the PDEng Independent Review to what will be happening over the next year while he is on sabbatical. The past year's update on the Vision 2010 campaign is now available on the faculty website, so if you're interested in seeing what progress has been made over the past year, and where we are headed for the next few, be sure to check it out at http://www.engineering.uwaterloo.ca/Vision2010/

The Dean's Office is also looking for feedback from you, the student body, on a few recent and ongoing topics of concern. Specifically, they are interested in hearing your ideas for increasing the female enrolment rate in Engineering, and feedback on whether or not you feel that the environment in Engineering is open and welcoming enough for female students (specific reasons would be helpful in this as well). They are also looking for suggestions on how they can help improve student life in Engineering at UW. They recognize the fact that we are in a tough program and that many factors such as co-op can make things even more challenging for us, so they are wondering what they can do to improve the overall experience for us (for example, they are currently working on improving the space allocated for Engineering students through the construction of several new buildings over the next couple of years).

If you have any feedback for the Dean on this, or any other topics of interest to you, please send me an e-mail at bsoc_prez@engmail.uwaterloo.ca. If you include which class you are in, we will also be awarding P**5 points for your contributions!

Back on the topic of space allocation, I had the great opportunity of attending and participating in the Engineering V Groundbreaking Ceremony this past week, and I'd just like to send a quick "thank you" out to everyone who helped out. It was a fantastic event, and I can't wait to see the building develop over the next little while!

In other "fantastic event" news, the POETS patio is now licensed on Friday afternoons, which means you can come enjoy a drink or two and be social in the "great outdoors". We will also be featuring Open Mic events through the term, so be sure to watch out for those and either come play/sing or just sit back and enjoy the music!

That's about all for me for this week, so enjoy the great weather, good luck on your midterms, and I hope to see you all out at MOT (June 20th, Summer of Love), and at the next EngSoc meeting on June 25th!

VPI Report

CAT HAY
VP INTERNAL

HEY YOU: We finally have the family photo from the Fall 2007 term. There are still a few unidentified people. If you were in the photo after our potluck meeting in the fall, please drop by the EngSoc office to make sure we have your face matched to the correct spelling of your name.

Now on to the actual report:

Midterms are coming, but that doesn't mean the fun is over! We've still got tons of awesome events coming up over the next few weeks…

Enginuity: Come on out to the CPH foyer on June 12 (11:30-12:30) to participate in the latest challenge! Win P**5 points for your class just for coming out and eternal bragging rights if you win!

The **2009 Year Spirit directors** are hosting a **Bocce Ball tournament** for anyone graduating in 2009. The tournament will be held on June 15 – stay tuned for more details.

We're starting a new tradition with a **coffee house** after the June 25 EngSoc meeting. It will be held in POETS 7-9pm. Sign-ups will be in the EngSoc office or you can contact our fabulous music directors (Mark and Paul) for more info.

"Dirty Dancing" semi-formal is coming up July 4. Tickets are on sale now in the EngSoc office - $15/dance or $35/dinner&dance.

Find out more about our upcoming events at the following locations: whiteboard outside EngSoc office, engsoc.uwaterloo.ca, our Google calendar, or through the event forms in the office.

VPX Report

ERICA WAUGH
VP EXTERNAL

This past weekend was the beginning of a great initiative by the Charities Directors. We packed up early Sunday morning and headed to Guelph to help out in the 2nd Annual KidsAbility Fun Walk. It was tons of fun and it was a great way to get EngSoc out in the community. This is a new initiative that the Charities Directors are taking. Not only are they planning events, they are also getting out to help with other events! Great job guys!

More director news… Canada Day directors are looking for volunteers to help out on July 1st at Columbia Lake Fields for the annual celebration. If you're interested in spending the day in the sun please email them! Canadian Federation of Engineering Students (CFES) and Engineering Students Societies' Council of Ontario (ESSCO) are pretty quiet these days. ESSCO Annual General Meeting is coming up at the end of June; stay tuned for new initiatives as well as the announcement of the new ESSCO exec. As the EngSoc elections are coming up, please feel free to contact me if you are interested in this glorious position. Keep fit and have fun!

3A Chem Wins Genius Bowl XIII

BRYAN SACHDEVA
4A COMPUTER

Have you ever wondered why Engineering demands such a high entering average for admission? Do you look around at the people on-campus and think that because you know how to build a bridge/car/chemical separator/circuit/rock or lake (what do Enviros/Geos do anyways?)/paint (hahaha, oh Systems) that you are significantly better than them? Well, you're probably right. Engineers are distinct because of their intellectual prowess, it's just a fact of life.

To prove themselves, '06 Electrical Engineering graduate, Matt Strickland brought forward the Genius Bowl four years ago in Spring 2004,. It represents a formidable challenge to all engineering students, and serves as a testament to the skill of those who've held it in the past. Every term since then, the Genius Bowl tradition has been kept alive. This term, the Genius Bowl competition was held on May 26th, 2008 in the Davis Centre.

Essentially, Genius Bowl is a group-participation event. Groups sign up with a maximum of 6 players in-game with the possibility of alternates being substituted in and out. The game unfolds as a series of question rounds. The host asks questions during the regular rounds, to which teams write their answer on the answer sheet before them. The sheets are collected promptly at the conclusion of each round and are marked by the judges. Each correct answer is awarded 1 point. Between the regular rounds, there are lightning rounds, which afford the judges time to mark all the answer sheets. The lightning rounds were run a little differently this term. 4 teams are summoned to the front, where they are given a question category one after another. Based on the category, a team can wager up to 3 points. It's not truly a wager since it is independent of the number of points the team actually has. After the team members make their wager they are given a question to which they must answer. Incorrect or non-answers result in a loss of the wager while correct ones result in a gain. Finally there is a death round where point values are tripled, but usually ask for entire lists as answers.

The prizes this term include a combination of money, P**5, and food! But prizes aren't just for the highest scoring teams. There are spirit prizes for being eager and enthusiastic and for coming in with coordinated costume. There were also spontaneous prizes for teams that sung their answer. In other words, if the answer to a question was a song title, a team could earn food by singing the song ungracefully. But the true prize is the Genius Bowl itself and the pride of having ranked among the most elite of elite (because elite is a word that has multiple degrees of elite-ness).

A hearty congratulation goes to 2010 Chemical for winning the bowl this term with an outstanding 38 points. 2009 Civil and 2010 Nanotechnology were the runner-up and second runner-up respectively (with 36 and 34 points). Actually, 2010 Nanotechnology was tied with the entry from Math. Congratulations to 2011 Mechanical A, whose team ranked dead last with 10 points (a full 5 points behind the next team). The teams were diverse in origin with teams from all programs and terms. There was even a team from the EngSoc executive, as well as the *Iron Warrior*. The organizers even managed to get those Software Engineering students to join us and as well as their fellow Math friends.

Sylvia Wu

2010 Chem (3A) wins the termly prestigious Genius Bowl.

Past Genius Bowl Champions			
B-Soc		A-Soc	
Spring 04	2B Computer '07	Fall 04	3B Computer '06
Winter 05	2A Mechatronics '08	Spring 05	4A Computer '06
Fall 05	2B Mechanical '08	Winter 06	3A Chemical '08
Spring 06	3A Mechanical '08	Fall 06	Mary and the Boys
Winter 07	4B Software '07	Spring 07	4A Chemical '08
Fall 07	4A Mechatronics '08	Winter 08	4B Mechanical (B) '08
Spring 08	3A Chemical '10		

Kudos goes to the event organizers for doing an excellent job this term. It was an excellent decision to limit the number of participants so as to keep the game more manageable. Further than that, the questions were diverse and interesting. Marking was fair and the host did an excellent job of keeping the crowd entertained between rounds. Tabulations were done quickly with scores updated almost after every round. Next term's directors have big shoes to fill.

The best line of the night was from our host: "keep my mom out of this, and I'll keep this out of your mom!"

VPF Report

CHRIS JAMIESON
VP FINANCE

Hello everyone and welcome to my second exec report of the term. This report is primarily to show you the budget which was passed last week by council. You can see it below. We will be running a deficit this term (like most summer terms) but will be financially safe due to surpluses from previous terms.

Just a reminder that donations proposals are due on June 23rd, at 4:30pm. Good luck on all of your midterms.

EngSoc Budget - Spring 2008

Estimated Income		
Student Fees	$31,000.00	$31,000.00
Orifice Services	$2,000.00	$2,000.00
Total	**$33,000.00**	**$33,000.00**
Fixed Costs		
Bank Charges, Payroll, Utilities, Office	$22,000.00	$22,000.00
Total	**$22,000.00**	**$22,000.00**
Expenses		
Tool	$1,000.00	$500.00
President	$1,000.00	$1,000.00
VP Finance	$1,000.00	$1,000.00
VP Education	$500.00	$500.00
VP External	$500.00	$500.00
VP Internal	$500.00	$500.00
Total	**$4,500.00**	**$4,000.00**
Directorships	**Requested**	**Allocated**
President		
POETS Manager	$1,400.00	$300.00
POETS Programmer	$1,150.00	$100.00
Speaker	$2,200.00	$2,000.00
WOAH!!	$80.00	$80.00
Prez Subtotal	**$4,830.00**	**$2,480.00**
Education		
Frosh Mentoring	$588.00	$300.00
Resume Critiques	$140.00	$100.00
Education Subtotal	**$728.00**	**$400.00**
External		
Charities	$400.00	$300.00
Canada Day	$705.00	$550.00
Competitions	$500.00	$300.00
FrontRunners	$55.00	$45.00
Media	$75.00	$25.00
Student Life 101	$400.00	$300.00
WIE	$210.00	$175.00
External Subtotal	**$2,345.00**	**$1,695.00**
Finance		
Novelties	$30.00	$0.00
Finance Subtotal	**$30.00**	**$0.00**
Internal		
Arts	$160.00	$130.00
Athletics	$170.00	$120.00
Bowling	$96.90	$96.90
Class Rep Advisors	$75.00	$60.00
Drama (EngPlay)	$1,425.46	$1,100.00
Enginuity	$375.00	$200.00
Environmental	$50.00	$40.00
EOT Video	$180.00	$50.00
Extreme Sports	$440.00	$300.00
Genius Bowl	$289.19	$289.19
Jazz Band	$1,500.00	$1,000.00
Multiculturalism	$250.00	$150.00
Music	$450.00	$250.00
P**5	$1,000.00	$630.00
SCUNT	$610.00	$500.00
Semi Formal	$837.00	$600.00
Special Events	$460.00	$150.00
TalEng	$900.00	$600.00
Task Team	$300.00	$100.00
Wheelchair Basketball	$60.00	$50.00
Whiteboard	$120.00	$80.00
Year Spirit 2009	$100.00	$75.00
Year Spirit 2011	$500.00	$75.00
Internal Subtotal	**$10,348.55**	**$6,646.09**
Total	**$18,281.55**	**$11,221.09**
Donations	$2,000.00	$2,000.00
Net	**-$13,781.55**	**-$6,221.09**

VPEd Report

PATT GILLIS
VP EDUCATION

Not too much to report from the desk of the VP Education this time around, but there are a few updates:

First of all, I need to apologize for giving wrong information regarding the PDEng Independent Review. The review has not been completed yet. They are currently putting the finishing touches on the PDEng Self-Study which will be combined with all of the student feedback before being sent off to the independent reviewers as pre-reading for their visit. It is expected to take them a couple of months to get through all of the information, so the visit is expected to happen in mid-September. After the visit, the reviewers will compile a report of their review, including conclusions and recommendations which will be made available to all UW Engineering students. For further information on this please see the article in this issue.

Secondly, PDEng 57 has officially been approved at the Senate Undergraduate Council which means it will be offered in the Winter 2009 term. This course will be a one-time offering for the first cohort that has been required to take PDEng, as a kind of last, last, last chance to take care of this degree requirement so that you will be able to graduate with the rest of us in the summer. The reason it is only being offered to the 2009 cohort is because of certain developments that have occurred with the structure of the program. These developments were not available to the 09's, which could have allowed PDEng completion prior to winter 09 – for example, students were initially not allowed to take two PDEng courses during the same term. If you are affected by this, you will be receiving a memo from PDEng shortly which outlines the criteria for admission into the course and highlights expectations. It is important to note that admission into the course will be voluntary, and will not be done automatically.

Finally as we work our way into midterms I'd like to remind everyone to have a peek at the exam bank to see if there is anything helpful, and if there isn't, be extra sure to submit yours when you get it back (you can submit them electronically so you'll still have them to study off of for finals).

That's all for now, hope everyone's having a great summer!

WEEF Director Report

ALEX JAMES
WEEF DIRECTOR

Hello everyone,

I hope everyone is enjoying this hot weather - I know I surely am. This week I had the honour of speaking at the Engineering V ground breaking ceremony. It was a great honour and I would like to thank the faculty for inviting WEEF to be there. For those who haven't heard, WEEF will be donating $1 Million to the Student Design Centre housed within the building. The event was quite special with some very interesting speakers. It was highlighted by the official dirt lifting done by yours truly along with VIPs like Engineering Dean Adel Sedra, and Waterloo President David Johnston.

On another note, the WEEF website is getting updated. If you see any out-of-date information please let me know. The class rep list and meeting times are now up-to-date. Also, I would like to thank all the class reps who got back to me with their WEEF rep. I now have almost every class covered, which will make for an amazing funding meeting.

WEEF proposals are now being accepted, so please follow the instructions on the website, and submit, submit, submit. There is $85,000 up for donation and I would hate to let any of it go to waste! If you have an idea of a proposal, or need help filling one out, please let me know.

Goodbye for now,

Alex James

P**5 Update

SASHA AVRELINE, PETER KELLY, & SYLVIA WU
P**5 DIRECTORS

There are a couple of easy ways to improve your class standing. For example, you can win points by completing the chess puzzle and the crossword in this issue submitting them to the Orifice (given you get there first). We are also looking for exciting things you did during your work term, may they be work or non-work related. Submit your stories into the Sexy Box at the Orifice and you could win a big chunk of points as well as a chance to have the story published! M.O.T. is coming up on June 20th. We'll be anouncing the updated standings then. Class Reps should review The Official List at http://engsoc.uwaterloo.ca/www/p5_pointlist.php and send in any points that have not yet been accounted for by June 19th at 4:30pm. Also, remember to attend M.O.T. for 100 points per head!

Congratulations: 2B Nano for winning last issue's Chess and Crossword contest.

*Correction: The P**5 Directors would like to clarify that due to budget restraints, this term's P**5 top prize will be $300, runner-up will receive $100, and 3rd place will receive $100 (As opposed to $500, $300, and $100 stated in Iron Warrior Issue 1).*

Top 10 Classes (as of June 6)

1. 2B C1V1L THIS
2. 2B Mechs in Public
3. 2B Knights of NE
4. 3A FUChem 2010
5. 1B SparTRONS
6. 4A unCIVILized
7. 4A Byte Me & RAM It
8. 2B Software
9. 1B Comp
10. 1B Systems

POINT VS. COUNTERPOINT

Is Our Primary Motivation for Getting Our Degrees to Learn?

POINT

OM PATANGE
3A NANOTECHNOLOGY

Why do we do it? Why do we subject ourselves to nearly 5 years of arduous training in mathematics, the sciences, and engineering design? Is it simply to say we got through Waterloo Engineering, therefore we must be doing something right (so now give me a job)? Or is it to get a rough idea of a field so we can manage other people that will actually do the work? There are, of course, many reasons for pursuing an education in Engineering. However, the main reason is to learn the fundamental laws that describe nature and to learn how to apply this knowledge to solve problems relevant to humanity.

For the first hint that this is the true purpose of an engineering education, consider the degree we are all hoping to get – Bachelor of Applied Science. This clearly implies that we are supposed to apply science, which, in turn, means we must learn science. The validity of this statement can be seen in the chemistry and physics courses that we are required to take in first year (and more for some programs).

For those (such as my esteemed opponent) who say the point is mainly to learn how to learn, I point out that our degree in applied science is not the only degree which teaches this. In fact, this is a universal feature of higher education, and indeed, education in general. What sets us apart from the Artsies and scientists is precisely the material that we learn – the science and mathematics – and the methods of application of science and mathematics that we learn.

Now that we have established that we are meant to learn science in the pursuit of our degree, we need to see how in depth our knowledge needs to be. My esteemed opponent will argue that we need to learn just the basics, if that, required to solve the problems that are presented to us in the upper year engineering courses because these problems are representative of what the industry has required up to now. He might argue that it is more important to learn the way technology is used currently by industry, e.g. what are the latest standard operating procedures for constructing a bridge. This education would exclude, for example, the detailed derivation of the Laws of Thermodynamics.

There are two things wrong with this. First, the problems of tomorrow are guaranteed to be different than those we faced yesterday. Second, without deep knowledge of the subjects that underpin our discipline we will not know the source of the limitations of the models we use, and then we will simply be technicians. If we can only solve problems that have already been solved previously, then we are of very little use in the advancement of humanity. If all we can do is create systems based on examples of already existing systems, then we will never be able to innovate beyond the current limitations of technology. What is important is to learn what nature itself will permit, and then using this knowledge to push technology to the edge of its limits.

Take, anecdotally, the development of the integrated circuit, on which modern civilization is built. Till the development of solid state transistors, people were using vacuum tubes to achieve the switching process. Upper-year engineering courses at the time might have taught how to calculate the optimal dimensions of the tube, or the best materials to use in the tube. The fundamental science courses would likely have focused on the detailed description of basic properties of materials, the physics of atomic interactions, quantum mechanics, etc. Clearly, the study of the basic concepts of science led to the real innovation in our world, and not the optimization of the then current industry problems.

My esteemed opponent might argue that the main purpose of our degree is to get our foot in the door of employers. While this does happen, it should not be the major reason for getting the degree. Consider, what will you do when you get the job? Will you continue optimizing their technology, or will you use existing technology that is already implemented by competitors to solve the problems? Instead, by embracing the education in applied science you are receiving, you can bring truly innovative solutions to the table limited only by the very nature of our universe.

I have now shown that the true purpose of our degree in applied science is to learn the fundamentals of science, so that we may apply them. I admit, there are many other reasons to get an education in engineering (such as employability), but we should not forget that these are only secondary motivations. What makes things like employability possible is that our predecessors have shown great ability in applying science. So rejoice in getting the ring and the piece of paper, but always remember why you got them and what it means you should now know and be able to do.

COUNTERPOINT

SUNNY NG
4A COMPUTER

Engineers have been known throughout their history as competent problem solvers in a variety of areas. This can, in many cases, be attributed to the fact that within our respective areas, we have quite broad educations – for instance, Computer Engineers have a wide range of software and hardware knowledge, as well as all the prerequisite theoretical mathematics knowledge, for example. In today's current work environment, this raises the following question: how much do we really use all of this knowledge? If you ask an average co-op student about their latest work term, chances are their expertise in estimating values of functions with Taylor Series didn't help them QA their software. In fact, if you look at the co-op jobs and even potential full time jobs after graduation that a Computer (or any other engineer) would apply for, nearly all of them require none of these skills. Engineering is defined as the application of scientific and mathematic knowledge to solve real world problems, but if this knowledge isn't required to solve said problems in today's working world, are they really part of a well balanced engineering education?

While it is true that having theoretical knowledge is valuable for further development of technology and can be used to increase innovation, there are other programs that are designed for learning and understanding such concepts. An engineering degree allows us to apply theories in mathematics and science in various situations. Many of us will probably not ever see these theories after school.

The truth is, unless you're going to a research-based position or planning on pursuing in graduate studies after finishing your undergraduate degree, you are unlikely to use most of the theoretical knowledge acquired from school. Is it really that important to derive an equation in the workplace when there are already standard procedures in place? Probably not. Instead, it might make more sense to learn the steps on how to apply this prior knowledge in the real world. It seems like the knowledge we actually use in the workplace is a small subset of what we learn in our 4 years of school. And really, if we are not going to use this knowledge within a few years from now, how much of this are we actually going to remember?

For those of us who have been through at least a co-op term should realize that a lot of what we need to know for the job can actually be learned within the workplace. This is especially true for first years, who have taken mostly only general Engineering courses and are usually unable to apply knowledge from them in typical engineering problems. However, this is still true for upper years or even graduates, when the company they work for specializes in a field that is not taught in school. Even during interviews, employers tend to focus on past experiences than courses that were taken during school. It is very common for companies to provide training to their employees to get them on track and make sure they really know what they're doing. Workplace experience is a way for engineers to acquire technical skills in the practical world. Unlike school, it is a much more hands-on experience and as such is not something that can be learned in a classroom setting.

This brings me to another point. The world is constantly changing and it's especially true for the field of Engineering. No matter which discipline of Engineering you are in, technology plays a big role in your career. Improvements in technology allow concepts and methods to continuously evolve, and making the current ones obsolete. What you are learning right now may no longer be applicable 5 years from now. I can't help but feel that right now we are simply learning for the sake of learning. Instead, we should be keeping ourselves up-to-date with the latest advancements and learn these new concepts incrementally. Of course, there is no better place to stay up-to-date with the current technology than in the workplace.

In the end, all this boils down to is money. As bad as it sounds, we pay an exorbitant amount of tuition fees to go to school because we want to be able to get a recognized and reputable degree. This degree may lead to a decent job with job security. Having this degree can prove that we are capable of learning, work under stress and think critically. But is the knowledge we have been learning that important? Maybe not.

Editor's Note:
Point Vs. Counterpoint is a feature meant to stimulate discussion on thought-provoking topics. The views and opinions expressed here do not necessarily reflect those of the authors, *The Iron Warrior*, or the Engineering Society.

My 13.3 Days of Toronto Transit System

MICHELLE CROAL
2N CHEMICAL

Commuting an hour and a half in the morning to get to work is a new experience for me. In the past, I have been lucky to be able to walk to school or work, with at maximum an hour in traffic caused by tropical storm flooding or pseudo-random police road blocks. This work term is turning out to be a lesson in patience, at the very least. Getting to work involves a bus, a GO train, a streetcar and finally another bus; and I have determined that driving on the QEW when I leave at 5pm takes the exact amount of time, only with 3 less transfers.

Something I find interesting is that the mornings are fairly routine, in that you see the same people. (This is a pretty obvious statement, because we are all committed to getting up at the same time and going to work at the same place and taking the same route every day, day in and day out). I like to wonder where people are going and what they're going to do when they get there, and if they enjoy their jobs or not. One guy who gets on at the stop just after mine is always really well coordinated, down to the hoodie matching the stripes on his shoes. There's another that gets off at Long Branch and takes the same streetcar. He's a first year Mech Eng from Queen's, and doesn't stop talking about it to this glamour girl next to him, who evidently works at the same location, somewhere posh in Etobicoke. There's an older woman who travels partway along Lakeshore with a girl in Grade 8 who's hoping to be valedictorian for her graduation, and I wonder how they got to know each other. As you can see, the one thing that I'm getting out of my work term so far that's résumé worthy is "excellent stalker skills".

While I'm at this, I should say "thank you" to the transit system workers. You have to work odd hours, stick to schedules, and deal with everyone else's moodiness about the crowding, loneliness and joltiness that is commuting in a big city. And, unlike most of us, who are only in traffic for a few hours a day, that's your whole shift (just when you get up some speed, a passenger wants off). I would assume that the unions give sufficient benefits to make up for the negative aspects of the job, but I still feel that not enough of us appreciate those people who get us safely to work and back every day. I get off three stops early on my last bus in the evening, because I can't stand to be on it any longer than absolutely necessary, so I am truly grateful to those drivers who do it for me. If only my commute was taking me to the beach instead of Kipling Avenue industrial zone!

Moving In and Moving Out

EVELYNE RUSSELL
3A ENVIRONMENTAL

One advantage to summer terms is the cheap sublets. However, at the end of April, people seem to be in a hurry to leave and a lot gets left behind. We moved into a house where four people used to live, and there are traces of their identities everywhere. We find Asian hair on things the Asians couldn't possibly have come into contact with, like the furniture we brought with us. Yesterday I woke up with strands of Asian hair on my pillow. If I had a boyfriend, he might think I was having an affair with a shaggy Japanese girl.

I'm not at all irritated by the evidence of their former presence. In fact, I'm fantastically amused by it. Through our powers of inference we're getting to know the ghosts of these people. They were very Asian, as revealed by the Hello Kitty designs on their hand towels, and cell phone charms left dangling off pins stuck on the corkboard

As my housemates and I wade through the junk, these leftover items also make us aware that someone else is deducing small things about us from what we've left behind at our old place. We left boxes of useless crap, like an old Batgirl costume, bouncy balls of various sizes, and a Coke machine on its side with the change burst onto the concrete - we've taken the quarters, but who can be bothered to bend over for a full minute just to scrounge up a few dozen nickels. This doesn't say much, besides maybe that we like dressing up and we've taken sides on the Pepsi challenge.

Next time we move I think we should be a little more calculating in what we leave behind. Drawing chalk murder victim outlines on the kitchen floor is a little over the top, and not too believable. But let's say we nail a hook to the wall and leave a scrap of leather on it. By placing a little ketchup dripping down the wall and a stack of BDSM magazines (with lists of gimps' phone numbers tucked between the pages) in the closet, the next resident might start to wonder if their new bedroom was once a breeding ground for STDs.

Another fun prank to play on unsuspecting new tenants is the what's-that-smell game. The name explains it all. If your budget is tight and you don't want to splurge on props, you can always knock on their door a few weeks into term for a face-to-face prank. Just blink a whole lot while asking, "Hey do you mind if I poke around in your garage? I think I left my sidewalk chalk, syringes, and a couple garbage bags filled with stuffed rabbits in there. Have you seen anything like that lying around? And by the way, if Bill comes by looking for his money, don't answer the door. He's a crazy man." You get to see their reaction as they wonder what use heroin junkies could possibly have for stuffed rabbits and children's games.

The Adventures of ~~Dangerman~~ Eric Blondeel

DANGERMAN
3T CHEMICAL

Dearest Readers,

Some weeks ago, I was approached by the always charming and lovely "assistant" editor of *The Boar* magazine (a UW artsy publication) to write a piece for one of their summer issues. Naturally I had some concern over whether or not my brand of journalism would go over with the Boar readership given that it lives in perpetual disdain of objectivity and basically only exists for self-advertisement and the glamorization of my life. All the same, I decided to give it a shot anyway.

Dangerman: "Can I call it 'The Adventures of Dangerman'?"

Editor: "Of course not."

Dangerman: "Why?"

Editor: "We have standards."

Dangerman: "No you don't, just look at your authors: Exhibit A." *Dangerman gestures to himself.*

Editor: "Think of this as me doing the world a favour by attempting to rein-in your horribly over-grown ego."

Dangerman: "But it's such an awesome title, people see 'The Adventures of Dangerman' and they can't help but read on!"

Editor: "Still no."

Dangerman: "Well what do people write in this fancy pants magazine of yours anyway?"

Editor: "Why don't you try starting with some short fiction."

Thus, it fell upon my shoulders to do something I've always considered near to impossible: have an original idea.

Editor: "Okay, what do you have so far?"

Dangerman: "I was thinking of love story…with the bullfights of Pamplona Spain as a backdrop"

Editor: "Isn't that *The Sun Also Rises* by Ernest Hemingway?"

Dangerman: "I was going to change the words a bit..."

Editor: sighing audibly, "Glaring plagiarism aside, that story is the length of a novel,"

Dangerman: "Fine… Oo, how about a story about a Danish prince whose father is murdered by-"

Editor: "That's *Hamlet*."

Dangerman: "A young boy leaves his planet to learn about a mysterious force-"

Editor: "*Star Wars*…maybe you should try non-fiction, your daily existence tends to be pretty ridiculous."

Dangerman: "I like to think I disprove Karma…Hmmm, non-fiction…Eric Blondeel, by day an arrogant self-absorbed engineering student with little to no understanding of punctuation; by night an arrogant self-absorbed crime fighter and seducer of women-"

Editor: "-With little to no concept of reality…can you actually comprehend the distinction between fiction and non-fiction!?"

Dangerman: "I'll have to ponder that…"

And so I pondered, and ruminated, and meditated, and had my thesaurus taken away…What enriching stories could I, "a muddy-mettled rascal" tell? What heart-warming tales of my education could I relate that arts students might "get"? And all of a sudden I was struck by lightening, both literally and figuratively. I knew exactly what I could write to achieve not just an artsy appeal, but a universal appeal! So after a short hospital visit and mild open-heart surgery (I was suffering from myocardial infarction and various cardiac arrhythmias from the lightning), I sat down at last to write my opus.

"The Adventures of ~~Dangerman~~ Eric Blondeel"

the nonfiction account of a Danish prince who is exiled to Spain after his father's murder where he falls deeply in love with a bullfighter, but then leaves earth dramatically to learn about a mysterious force and save the galaxy!

Till next time,

Dangerman

A Lecture Hall for All of Us

Experience Proves that RCH has Something for Everyone

SPENCER MCEWAN
2B ELECTRICAL

Almost every engineering student has had the pleasure of having lectures held in Rod Coutts Hall. The building itself had been entirely underground until the third floor was added, and the floor is fully exposed to the rest of campus (and natural sunlight). RCH has been a staple of learning at the university, and nicknames like "the submarine" and "the dungeon" reflect its rich history and physical layout. However, many students do not give RCH the respect it deserves. It actually is the best place to have lectures on campus. It has amenities that other buildings only dream of having. The following is a list of luxuries RCH has that many students take for granted.

Michael Seliske

1. The lecture halls are in close proximity to vending machines. If you haven't noticed, there are very few vending machines in the Engineering buildings. In the few minutes that exist between lectures, most of us cannot get to the closest vending machines, which are way up on the second floor of E2 or the main foyer of the Physics building. Luckily, the bottom floor of RCH is equipped with not just one, but four vending machines! One can only feel sorry for the vending machine guy, who has to forge his way down into the catacombs of the RCH Dungeon once a month to fill them up with chips, candy, and Coca-Cola products.

2. The first floor of the building has natural air conditioning. Even though it is summertime, it is very common to see students bundled up with sweaters during lectures. Since the first floor of the submarine is completely underground, it is much cooler than most buildings. Since it also requires no electricity to maintain this temperature, RCH is very environmentally friendly! So the next time you and your friends want to cool down during the summer months, don't head to the public pool or the beach. Grab a calculus textbook and head down to RCH 112, and escape the summer heat.

3. There is no sunlight whatsoever. There isn't much to be said about this. There are no windows on the first and second floors. Therefore, your chances of contracting skin cancer, a sunburn, or a tan of any sort are effectively reduced to zero.

4. The submarine acts as a massive anechoic chamber. As students venture down the three floors from reality into the learning abyss, they leave something else behind as well. Cell phone reception doesn't exist in the Dungeon. Actually, no radio waves penetrate the concrete walls into the lecture halls. People who suffer from radiophobia (the fear of radio waves) take comfort in the fact that aliens cannot control their thoughts in the basement.

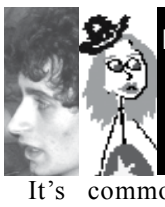
Michael Seliske

The mysterious and forbidden entrance that leads to the underworld that is known as the RCH Dungeon.

5. RCH doubles as a nuclear fallout shelter. It isn't immediately obvious, but the concrete that covers everything inside the submarine is actually there for a reason. During the Cold War, the university needed a fallout shelter to house all the students on campus in case of nuclear war. RCH was the solution. The concrete walls are three feet thick in every direction. Ever wonder why there are so many vending machines on the first floor? They are remnants of the rationing system that survivors were meant to live off of. However, once the Cold War ended, there was no use for RCH, so it was turned into a lecture hall.

There are countless other reasons that make RCH one of the more luxurious places to live and learn. So the next time you head over to RCH for a lecture, a tutorial, or to just hang out, remember. Rod Coutts Hall is actually a blessing in disguise, and may someday save your life from the sun, from your cell phone, or from reality.

How to Improve Our Campus



DAWSON OVERTON
1B SYSTEMS

EVELYNE RUSSELL
3A ENRIVONMENTAL

It's common knowledge that our campus isn't the most aesthetically pleasing group of buildings in Canada (or Southern Ontario, or the surrounding two blocks). In fact, from University Avenue, Waterloo can be, and is, mistaken for a high security prison. So instead of building more dreary, grey buildings (*cough* Quantum-Nano Centre *cough*), here are a few suggestions that would bring a little more life and excitement to campus.

On-campus grocery store: Sure, one could walk to Valu-Mart or Sobeys, a mere 15 minutes away by foot if said person lives on campus. But that would be forgetting one of the defining characteristics of being an engineer - a lack of willingness to do anything even resembling work, unless not doing it equates to bodily injury, death or failing. Some students adhere to this principle by eating at their cafeteria, but for those who have moved on from residence life (or those who prefer the taste of real food), there is no substitute for a decent grocery store.

Couches with people-shaped pillows: Despite their work-adverse nature, all engineers are sleep deprived. Campus should be equipped with soft spots for napping, which could be accomplished by setting a couch quota for every building. In addition to being exhausting, studying engineering is lonely. Worked to the point of social isolation, engineers rarely have the opportunity to be in the presence of other people, let alone hug them. You can't spoon with an ordinary pillow, but people-shaped pillows solve all of this. Engineers are able to experience intimate, pseudo-human interaction, with the added benefit of potentially catching a quick nap before class.

Colours: Let's face it, most engineers couldn't recognize a Piet Mondrian if their PEO certification depended on it. A quick Google image search, however, reveals we could learn a bit about building decoration from his paintings. Instead of a boring, monochromatic collection of buildings, let's make our side of campus a panorama of random red, blue, and yellow geometric shapes. We'll be praised as avant-garde, and we may even attract (from the Arts department) the sorely underrepresented group of people in Engineering known as women.

A labyrinth, stocked with minotaurs: Studying can be dull, and few would disagree that engineers need more excitement in their lives. What better way to introduce exhilaration than a labyrinth that makes every trip to class a fight for your mortal life? Due to potential lawsuit concerns, the minotaurs wouldn't actually KILL you, they would simply make you retake PDEng 15 (although some students would probably have difficulty choosing between the two).

Improved campus security: With all this fancy new stuff, we're going to need a better security strategy than "Don't lock any doors, ever." The solution: ring of fire. A flaming, gasoline-powered wall of death along the inside perimeter of University Avenue and Ring Road would be very effective. We'd keep out those sneaky UofT'ers who might otherwise skulk around campus for a taste of our superior educational experience. Also, it would be Waterloo's ultimate tourist attraction.

So the next time the University asks the student community where their development dollars should be allocated (stop laughing! Someday they might care about our opinion), be sure to keep the above list in mind. Say no to architecturally-insignificant rectangular prisms being touted as buildings!

ARTS & ENTERTAINMENT

Otaku's Ranking Guide

IVAN WONG
1B MECHATRONICS

Watch a bit of anime? Do you consider yourself a typical anime fan? Or maybe you think you're a hard-core anime freak that knows it all. Find out what rank you are in the anime hierarchy by reading this guide!

You have **no clue what anime is** if you:
- Think that Pikachu is orange
- Can find the country where anime comes from on the map south of Canada
- Think that Final Fantasy is a very popular anime series

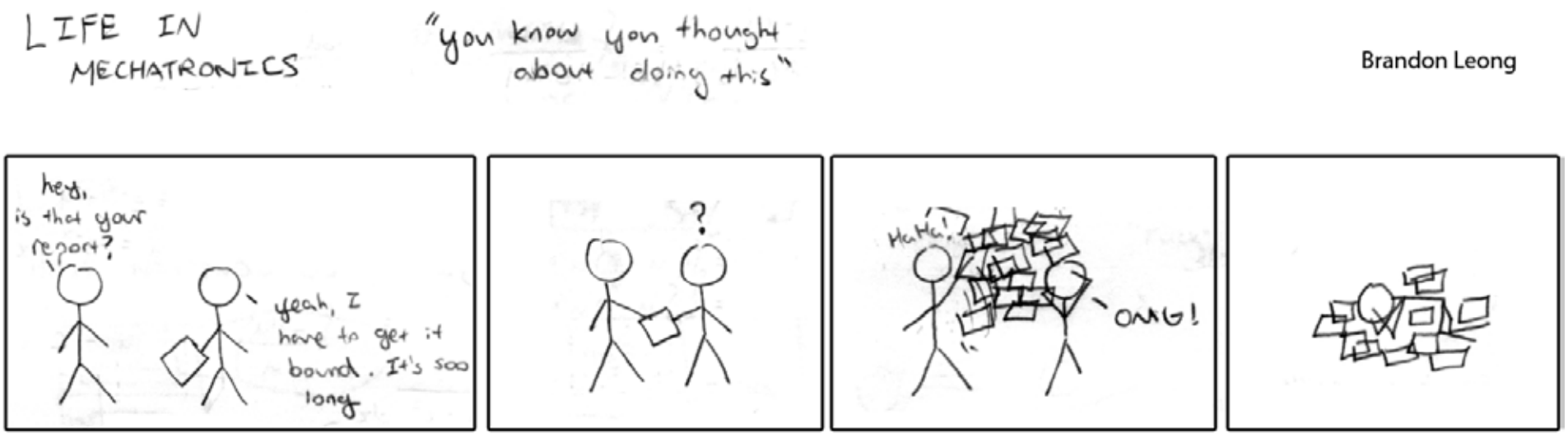
You've **watched a bit of anime** if you:
- Tried to look up the word "baka" when you read it somewhere
- Picture some kind of sword when you hear "Saber"
- Think that all the characters have huge eyes
- Have never heard of the term "nice boat"
- Can only think of Gundam when someone mentions mechas
- Wonder if it's actually possible to see seven people each with hair of a different colour of the rainbow

You're **a typical anime fan** if you:
- Have "baka" is in your vocabulary
- Have looked for a Saber wallpaper before
- Wish you had a pair of sharingan
- Think of a cruise ship when you read "nice boat" on some forums
- Have built your own Gundam model
- Have asked a Japanese person if they really sleep on the floor and sit on their knees

You're **a wannabe otaku** if you:
- Actually use the word "baka"
- Have a Saber cell phone strap
- Wish you had the eyes of the shinigami and a death note
- Have seen the "nice boat"
- Will try to write your mid-terms in seed-mode
- Have made failed attempts at learning Japanese

You have **reached the rank of otaku** when you:
- Actually use the word "baka" correctly
- Have a Dark Saber figurine on your desk (or wish you did)
- Wish you owned a fancy knife and the mystic eyes of death perception
- Ordered a "nice boat" t-shirt from jbox
- Considered Mechatronics because you want to build the first real life mecha
- Would be able to write "Watashi wa kira dess" correctly after cutting someone up in a park

You're a **SUPAH otaku** when you:
- Can naturally respond correctly when someone uses the word "baka" on you
- Take pride in your life sized doll of Dark Saber
- Have tried to order a pair of geass contacts from Optometry
- Make sure any prospective relationship partners don't own a "nice boat"
- Sent your drawings to the military and urged them to implement Knightmare Frames
- Understand all of the obscure references in this article



Avoiding Fashion Crime Violations

BRYAN SACHDEVA
4A COMPUTER

ERICA WAUGH
4A CIVIL

Moving on to our second instalment… REAL-LIFE FASHION ADVICE!! Now that you have mastered showering, applying make-up, and shaving all those special parts… let's dress you up and (maybe, if you're lucky) take you out!

Let's start with some basic tips:

- No sweatpants
- No free/event t-shirts
- No work boots
- Running shoes are for running

Now, let's get a bit more particular…

Ladies, you love comfort and ease. You fit in with everyone else. You are in Engineering. You are also a slob. Unless you are in first year, get over yourself. First years, I'll give you a break. You want to fulfill your clichéd duties as a classic overworked university student. Well upper years, let's get over this "I study too much to have time for fashion" opinion. You don't study much at all; you just have no clue about fashion. Firstly ladies, please dress for your body type. I'm going to take a stab in the dark and say that *all* of us are self conscious about our bodies. Time to get over that, unless you are seriously proposing a whole body makeover, accept yourself. There is nothing I can do about the fact that I've got my mom's booty. Accept it and learn how to dress it. Start by buying clothes that fit.

For example, shoulder seams on sweaters should sit on the edge of your shoulder, not halfway down your bicep and not halfway to your neck. Don't swear to one size, I'm a different size at every store, from a small at The Gap to a large at Smart Set. You should not be concerned with what letter is on the label but rather whether the garment fits you. The same can be said for pants. If you are struggling to do them up… they are too tight. If your belt causes the waist of your pants to bunch… they are too big. You pants should also just barely touch the ground. If you get bunching at the bottom of your pants you look shorter. This also goes for cropped pants. I apologize to the short girls but you have to be a little more careful. When buying cropped pants try not to make them too long; this cuts your legs off and makes you look even shorter. Instead, opt for a Bermuda (knee-length) short.

On to some specifics! Jeans are your friend. Jeans are classic and timeless. They can be worn in all seasons and on a variety of occasions. I strongly suggest investing in a quality pair of jeans. Bite the bullet and spend a couple of bucks – you will not regret it. Head into Jean Machine and pick yourself up a pair of Mavi jeans. They will run you anywhere from $70-$120, but are well worth it. A great pair of jeans can be taken from day to night and from office to home if you choose the right wash. Look for a plain wash with no embellishments (rhinestones, extra pockets and zippers). Avoiding these will allow your jeans to be matched with everything.

If you have a big booty (like me) don't choose a pair that is tight on the thighs but with a big flare at the bottom. Your bum will look like a blimp. Instead, choose a pair that is slightly relaxed through the thigh and a smaller flare at the base. This balances your legs and even makes your bum look smaller. Choosing a lower-rise waist will also create a small-bum effect (gee I sure love to make my bum look smaller!). Also, ladies – **no high-waisted pants**! We are way younger and hotter than our moms. Your belly button should not be hiding inside your waistband. In general, try not to choose a style that accents your "problem areas". If you are short, look for a wash that has little variance. This will make your legs look longer. Also, flaps on back pockets accent your bum. If you are going for that – go nuts… if you are like me, avoid it.

Moving on! **Running shoes are for running!!** I know, they are comfy, they are easy, but they are butt-ugly. You can achieve the same results with a walking shoe. Puma carries a great selection of casual sneakers and they are very easy to find on sale. Another comfy, easy, option is the ballet flat. These days you can pick up a pair of these just about anywhere for pretty cheap. Get a neutral black or brown and they can be paired with jeans, skirts, shorts, just about anything.

Finding cute, classic tops is much easier than you think. Ditch your free t-shirts and opt for a bright v-neck or scoop-neck t-shirt. Smart Set carries a beautiful selection of colours and cuts and they are usually only 2 for $22. Sweet deal! Now that you have your cute shoes, great fitting jeans, and a classic top you are ready to go!... I spoke too soon.

What about that stuff that goes on underneath everything? No one sees it so who cares, right? NOT! That's just it – people shouldn't see it, yet you are strutting around with the boldest granny-panty underwear lines known to man. I just threw up in my mouth. Please girls, pay attention to these things. You can buy underwear that has small seams, or thongs, or *(GASP!)* commando. Just do something!

How can we forget our other undergarment favourite: the brassiere! Much like running shoes, sports bras are for sports. They do nothing for you. Some tips for those of us that are still young and perky (sorry to my mom, you can laugh at me when I get there): the largest part of your breasts should lie halfway between your shoulder and elbow. Also, the bottom seam of your bra should be at the same level all the way around. Usually the back sits higher than the front, either loosen your straps or go up a size. And lastly, please avoid the double-boob syndrome. This is when your cup-size is too small and cuts your boob in half… making it look like you have 4… not cute. Go up a size. NOW you are good to go!

Gentlemen, your days of free shirts and Wal-Mart jeans are over. As Erica points out (because I know you read the girls advice first), the "comfy" first-year look says nothing about your personal style other than "I'm lazy". I'll skip the reasons why you need to care because we gave you a fair shot of that one last time. Sufficed to say, your closet should contain more than just hoodies, free UW shirts, jeans, and Matt Hunt. Here are some practical outfit ideas.

It's summer, it's hot (well it's supposed to be anyways), but fashion rules still apply. T-shirts are perfectly acceptable, provided they're chosen correctly. Despite what mechanical design might have you believe, our bodies aren't perfectly square. The male body, in all its glory, actually reminds me of a Dorito. Our shoulders are the widest part of our body, and then our contour draws inward towards our waist. No matter what your body type or physical condition, your body is not a square. To that end, you should opt for fitted T-shirts. Key words to look for are "fitted", "athletic fit", or "trim" shirts. The shape of the shirt and its fit is what determines if it's acceptable (among other things). No guy is a singular size everywhere. *Hint:* try a smaller size first and then get a larger one if you feel constricted. Buying shirts too large for you makes you seem larger than you are, and does not draw attention to places it should. Abercrombie has some of the best fitting shirts I've ever seen. For those of us not making millions of dollars, the Gap has an excellent line of light and playful Tees. Their fitted stretch T-shirt is now available for only $11.

We've all done it: worn those "I'm with Stupid" shirts. They're funny, but you also look like a joke yourself.

Of course, what's on your shirt is just as important as how it fits. Black and dark colours are sliming, but not appropriate for the daytime, especially on a hot summer day. Instead, opt for greens, yellows, and blues. Another easy way of throwing colour onto your palette without much commitment is by choosing faded colors. A popular look in the summer is the classic (almost retro) thin, cotton, feather-light, faded shirt. It feels soft to the skin, and is a great way to look fashionable. Faded red is probably the most all-day/multipurpose colour out there. The design is important too. We've all done it: worn those "I'm with Stupid" shirts. They're funny, but you also look like a joke yourself.

Graphic tees are becoming very popular, and with good reason. They're creative and colourful without being stupid. Structured patterns are best, but creative designs on a shirt are cool too. Shirts that make me read something aren't. Argyle patterns are great for making a t-shirt seem more formal while stripes and curvy patterns make collared shirts more casual. Just remember that horizontal stripes fool the eye into thinking you're wider than you are. This is great for tall or thin guys; conversely, vertical stripes are the way to go to look tall or thin. A quick way to dress up your top during the summer nights is to get a light sport jacket. H&M has an excellent collection of these for guys.

A dark wash jean is super for going out at night. Avoid cargo, carpenter, or painter's jeans. Unless you're carrying a hammer on you all night, leave it alone. During the day, opt for a lighter (but not too light) wash. Your legs aren't rectangular either, so why would you pay for clothing that forces you to conform? Instead, Old Navy, the GAP, and almost every other store offer different cuts. For a looser cut, pick a relaxed fit. Otherwise, choose something that is slim through the thighs and straight or tapered through the rest of the leg. And, as much as you might like to think you're Shaq, get your pants and jeans hemmed! Your pants should go no lower than a couple of centimetres off the ground!

Every pair of pants or jeans needs a belt. Black belts are only good for black & white or gray tops. Otherwise, choose something like a brown or white belt. Leather belts are for more formal occasions, and a material belt otherwise. Belts keep your pants at your waist and not hanging off your butt. You're going to be an engineer, not a plumber, so dress like it!

Shorts are cool too, provided they aren't made of denim. You wear shorts when it's warm out, and denim is not conducive to that feeling. Denim is too rigid in the form of shorts which makes your bottom half look abnormally chunky. Instead, choose a variety of khakis or browns. You only need two pockets, so don't get more than that. Board shorts are acceptable, provided you're wearing a t-shirt (or tank), and flip-flops (or sandals).

Now it's time for summer accessories. Crocs are the devil, plain and simple. Every step you take in them brings you closer to eternal damnation. Sandals and flip-flops are great if you have maintained your toe nails! If it's too cool for those, then consider something like Old Navy's casual canvas slip-on shoes for around $20.

Another cool accessory is a wrist cuff for the more rock look or a simple charity silicone bracelet (say like the Lance Armstrong ones). You can also opt for a sporty watch instead. Necklaces are also a great way to through some creative style into your look and add balance. Avoid metal unless you're dressing up.

Those are some everyday fashion tips for you to take with you. Remember that it doesn't take as much effort as you think to get that positive attention and feel good about yourself. Good luck!

profQuotes

"Programmers who use C are like Spiderman: with great power comes great responsibility."
– J. Yeow, MTE 140

"My talent is doing triple integrals."
– J. Yeow, MTE 140

"The transistors will be on so hard. They will be spraying current everywhere."
– J. Barby, ECE 332

Missed Connections

I saw you sunbathing on the picnic table in the Wellesley Courtyard. The sky was overcast and the temperature was barely over 20, yet you, in a tangerine-coloured bikini, were daring and brave against the onslaught of the spring wind. I always love an attention whore with no regards for weather. Let's sunbath together this Saturday (expected to be warm so I'll dare to venture outdoors) at your favourite spot. I'll bring the SPF60 sunscreen and my mankini.

I see you buying the most vile butter chicken from *CurryUp!* everyday. As time goes by, my pity for you has somehow turned into admiration for your amazing tolerance of disgusting food, and subsequently that admiration has unexpectedly turned into... LOVE. The way you swallow each piece of "chicken" and the numb yet submissive expression to follow has deeply struck me. You do not have to put up with that, my love. Call me at 905-555-1222 and I'll show you what real Indian cuisine is. Maybe we should catch a Bollywood film together too.

Better Know a Beer:
Whistler Brewing Company Classic Pale Ale

RORY ARNOLD
3T MECHANICAL

When given the chance to travel to British Columbia for my co-op, I was determined to dedicate the term to exploring the West Coast beer culture. Of course, you should never drink alone, so I am inviting you to partake in this journey with me.

After suffering through generations of macrobrewed lager since prohibition, BC came to the rescue, introducing craft beer to Canada in the mid 80s. With its strong dedication to fresh ingredients and crystal clear water from the mountain springs and nearby glaciers, BC produces a large portion of the country's best beer.

When I was a little kid, I often chose the cereal I wanted by the prize it came with. Not much has changed. While slowly eyeing the different beers available at a local BC liquor store, the one that caught my eye was a six pack that came in its own little cooler. That beer was a Pale Ale from the Whistler Brewing Company. The Whistler Brewing Company is one of the smaller and younger breweries in the province, with only two brews in their kettles. The pale ale, and a premium lager.

The English Bitter uses roasted malts and is one of the more bitter pales ales, but not as much as an India Pale Ale (a real IPA, not Keith's). In the UK it is one of the more common styles and brewers take great pride in the quality of these brews.

Classic Pale Ale is best drunk from an English pint glass since it mimics an English bitter-style. This also allows you to get your nose in and sniff the amazing aroma of corn and hops. Next you observe the beautiful bright copper colour with a creamy head that never disappears. This is a perfect lead-in for the full flavoured taste. The first

thing you taste is a malty corn flavour with hints of caramel which are quickly overpowered by the bitter hops. Whistler Brewing Company uses a perfect mixture of four types of hops to achieve the fresh bitter finish which glides off the tongue, leaving a refreshing aftertaste.

This smooth taste is attributed to the refreshing glacier water used. It has a high amount of calcium with a little chloride, and boasts being free of iron and heavy metals, giving it a softer, less mineral taste. This makes it more pure then those brewed with Ontario's hard water.

With its amazing aroma, deliciously bitter taste, and smooth finish, Classic Pale Ale scored an amazing 93, which is not surprising since, in 2007 it won a bronze medal at the North American Beer Awards for Best Pale Ale.

I drank the beer with a meal of sausage and spicy potatoes and the hops went perfect with the spicy flavour. I wouldn't recommend drinking this beer without food or in large volume, but it would go great with any hearty meal.

The Iron Chef Recipe
Erica's Super Fab EngSoc Meatballs!

ERICA WAUGH
4A CIVIL

So you came to the EngSoc meeting last week, you had some food, you went home. COOL! ME TOO!... Sort of… remember those meatballs you ate…

(This recipe will make 60 1" balls… not 400… sorry)

1 kg lean ground beef
2 large eggs, slightly beaten (do this in a bowl on the side first)
2/3 cup Italian dressing (No Name makes the best)
1 tsp chopped garlic (about 1 clove)
Dash of fresh ground pepper (not necessary)
Dash of oregano and basil (not necessary)
½ cup super-small chopped white onion
1 cup Italian bread crumbs (or plain)

Pre-heat oven to 400°F.

Combine beef with eggs and dressing. Your hands will work best here, mine did! Next, add the garlic, spices, and onion. Keep mixing with your hands. Lastly, add the bread crumbs. Your hands are definitely required here. Please note that adding the bread crumbs last is CRUCIAL! Everything else can be disorganized.

Roll mixture into 1" balls. Place on a greased cookie sheet (I fit about 25 on a large cookie sheet; they do not expand while baking). Bake for 20 minutes.

That's it! You can serve them with pasta and tomato sauce, or on a sub, or just eat them as a snack. They freeze well, but make sure they are cooled first.

Catacomb

RAFEE AMEEN
4A MECHANICAL

Running blind, on instinct,
friction burns on your palms
and droplets of liquid red
trailing your wake.
Barefoot and alone and lost
in the hungry, seething dark.

-

Been here before, you have.
'will be here again,'
a whisper in the air,
vicious, (cruel)
victorious, (joyful)
like a rusted hacksaw
'and again,'
'and again,'

(Can't stop to rest.
Last time you did the walls
squirmed at your touch;
bit at your fingers
and laughed while you bled.)

You feel the thing
in the dark leer, teeth
gnashing in anticipation,
muscle and hide and hooves
tensing for another run.

You run anyway;
Caught, smashed, broken
and not long after,
reborn.

(The pixel backwash
can't, unfortunately,
resolve your tears.)

-

This is:
spiral theory in action,
an ouroboros game,
a perfect hell.

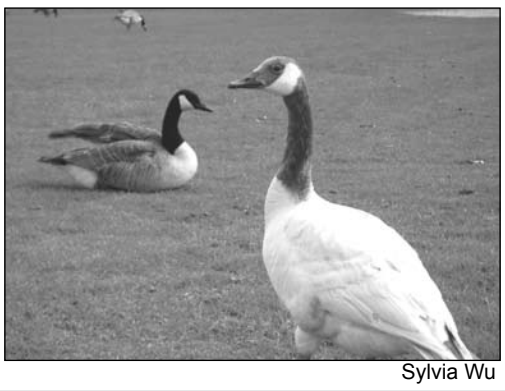
No phone booth,
no operator,
no exit.

Game over/
Retry: y/y?

Michael Seliske

You can win P**5 points by winning the caption contest!

Submit your caption to iwarrior@engmail.uwaterloo.ca
Be sure to put "Photo Caption Contest" as the subject,
and include your name, program and term.



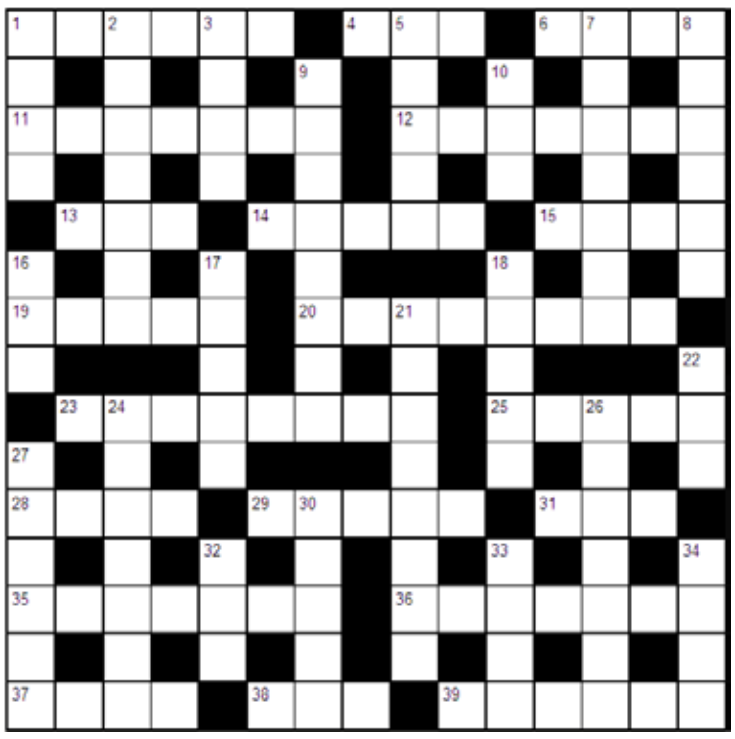
Sylvia Wu

Winning entry from last issue's contest:

"Waterloo Engineering: Where it's actually uncommon to be white!"
- Bryan Sachdeva, 4A Computer

The Iron Cryptic Crossword

ROB GRAHAM
4A COMPUTER



Crossword Clues

Across

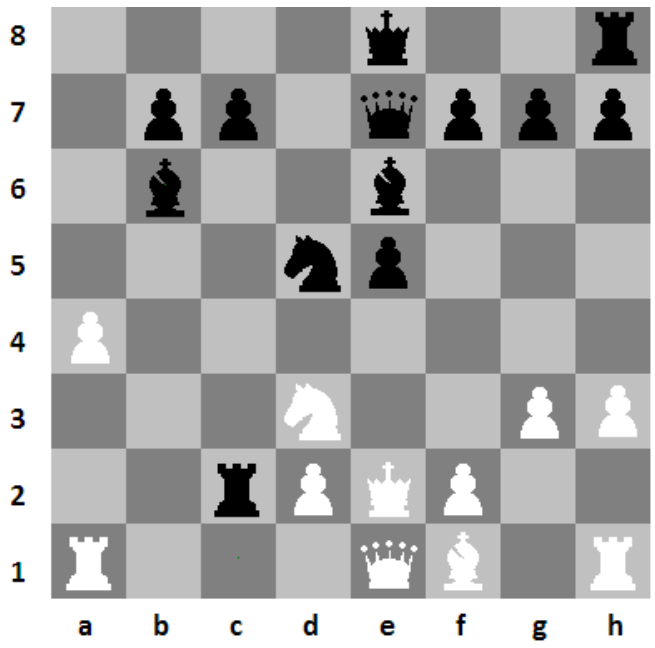
1. Hunt for a mixed chaser (6)
4. Swooping in beginning over wavy lakes (3)
6. Path was similar to him being driven (4)
11. Engage part of the proper atelier for the artist (7)
12. Banks were chewed away because of a changed senior incorporating the espresso ending (7)
13. Grey mixture allowed for its consumption (3)
14. Shout altered the goose's flight trajectory (5)
15. Mobility achieved by initially breaking into keyed entrance (4)
19. Change slowly approaching into sweet pastry (5)
20. At the beginning of a subway without a newspaper reader makes for an elementary combination (8)
23. The solid foundation gave him a bit of encouragement (8)
25. Leading it might make him give you a pink slip (5)
28. Sheltered among tenants, his eviction resulted from some early answers (4)
29. Charles' go-to girl rushes in abruptly (5)
30. Halfway there he turned it around like an incompetent person (3)
35. The stunt autopilot technically had it added, finding it within stalling the plane (7)
36. Hearing a space mission with a right turn excuses their actions (7)
37. Secured by the newborn friend creator (4)
38. Farewell sounds like a hefty purchase (3)
39. Tinge created by a bashed onager (6)

Down

1. Cooled drizzle by flipped Korean tender (4)
2. Hitting for it, he found out he was only mediocre (7)
3. Fumbling catch with eyes closed resulted in discussion with the coach (4)
5. Straw cap among us (5)
7. My impression of half periodicity within the teary plant (7)
8. Sudan ceremony hides the ballerina (6)
9. Foreign article and preposition preceded her painting of a nice drink (8)
10. Don returned to give approval (3)
16. Serving one up like the best in the business (3)
17. Balanced apartment floor (5)
18. Without any concluding contempt, we also heard him ask "how come" (5)
21. Ancient ruler alternatively ending denial of further learning sessions (8)
22. Observer oddly soppy (3)
24. Churning main sea caused his forgetfulness (7)
26. Reckless incursion without foreign approval makes horse kind (7)
27. The rules for the extraterrestrial were to include the sugar drink packets (6)
30. Count mentally omitting uncles and nephews (5)
32. Hit the bartender with a returned tab (3)
33. Programming within business representatives is not prosperous (4)
34. He heard a nip resulting in a collection of bits (4)

Chess

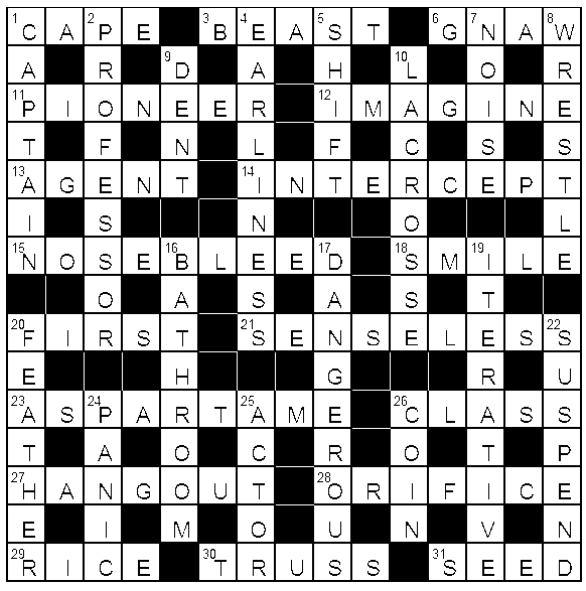
ROB GRAHAM
4A COMPUTER

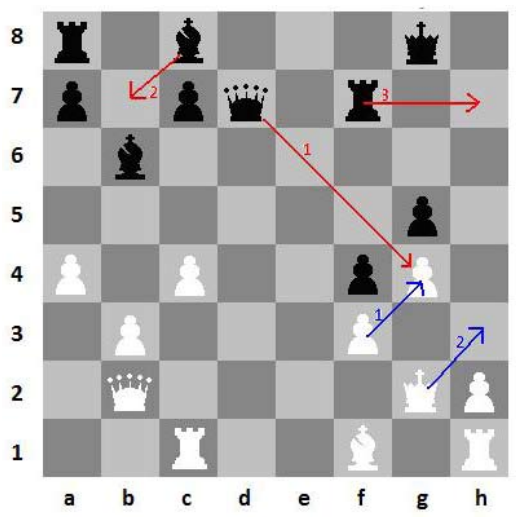


Black wins material.

Be the first to complete the Cryptic Crossword or the Chess Puzzle and win 50 P**5 points for your class! Submit completed puzzles to the P**5 box located inside the Orifice after being time-stamped by Betty.

Last Issue's Solutions





Congratulations to 2B Nano for completing both of last issue's puzzles first!

THE IRON INQUISITION

What grinds your gears?

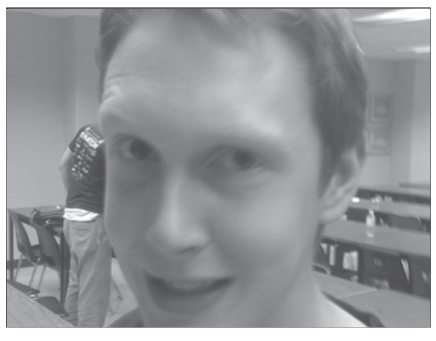
Michael Seliske, 1B Computer

Ari Taub
4A Mechanical
"Chris Jamieson."

Matt Tse
4A Chemical
"Chris Jamieson."

Chris Jamieson
4A Computer
"People in the 19th century. Why don't they get with the freakin' program? It's called an automobile, folks. It's much faster than a horse!"

Jonathan Warren
2B Electrical
"Chris Jamieson"



Ross Ricupero
4A Civil
"Chris Jamieson."