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

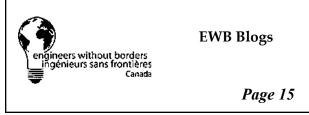
WARRIOR #IRON

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

VOLUME 29 ISSUE 10 | WEDNESDAY, JULY 23, 2008







http://iwarrior.uwaterloo.ca

Truth, Compassion, Tolerance Art Exhibit

Falun Gong Art Comes to the SLC

KEVIN LING 1B ELECTRICAL

This past week in the SLC great hall, paintings from the "Truth, Compassion, Tolerance Art Exhibit" have been on display. The exhibit features art created by Falun Gong practitioners around the world, as well as photos of people in different countries practicing Falun Gong.

The weeklong stop here at the University of Waterloo began Monday, July 14, with the opening ceremony. In attendance were the Dean of Arts, Ken Coates, and the Mayor of Waterloo, Brenda Halloran. Both Dean Coates and Mayor Halloran gave very inspirational messages at the ceremony.

The paintings are all allegedly based on true stories and depict the joy and the suffering of Falun Gong practitioners. Some pictures showed the enlightenment and happiness that comes from practicing Falun Gong, while many others reveal what is said to be ongoing in China. In particular, several of the paintings portray practitioners being persecuted and tortured by Chinese government agents.

Since 1999, the communist regime in China has banned the practice of Falun Gong and declared that the organizations that promote the practice are illegal. Allegations of the torture, persecution, discrimination, and even the murder of Falun Gong practitioners have been on going from the time that the practice was banned.

The art exhibit is a means for Falun Gong practitioners and sympathizers to get the word out and let the world know what is going on in China.

Event organizer and UW student Kelly Wen said, "Art is such a powerful medium... it is able to portray messages that we can't see through words." She adds that the paintings are all done in a very realistic style which helps to grab attention and convey message to the people of the world.

The exhibit is part of a worldwide campaign to raise awareness about the human rights issue in China. Organizations such as Amnesty International and politicians such as former MP David Kilgour are also promoting awareness about the alleged persecu-



Art by Falun Gong Practitioners on display in the SLC. Some of the more graphic images depict practitioners being tortured by the Chinese government.

such as: Korea, Japan, Australia, Vien-

na, the United States, as well as many The exhibit is currently on a world European countries. The next stop on tour and has passed through countries the tour is Toronto City Hall, and then

UW Rappers Promote Charity Album

Recent Viral Music Video Features Many Local Celebrities

SUNNY NG

4A COMPUTER

Two weeks ago, a viral music video for the song "Streets Of Waterloo Part 2" made by Waterloo local rappers hit the web via YouTube. The video by Baby Buddha, which consists of Yuvraj "DJ Fobulous" Goel and Raymond "Rayman" Chan, features many University of Waterloo "celebrities" including UW President David Johnston, the Deans of the Science and Environment faculties, various wellknown professors such as Department of Economics' Larry Smith, and (shameless plug) yours truly. Since its upload date, the video has obtained almost 10,000 views on the Internet, featured on the UW Daily Bulletin, and has become a popular topic of conversation amongst UW students. The hip-hop duo performed at TalEng – the termly Engineering talent show, and was also featured in a recent newscast on Kitchener-Waterloo's CTV station, CKCO.

I had a chance to catch up with one half of the duo, Yuvraj Goel, who is a 3T Mechanical Engineering student (Chan is a Math & Chartered Accounting student) to talk about the pair's latest project in music. Their latest song "Streets Of Waterloo Part

2" speaks about both the struggles and the pride of being a UW student. When asked about the process of getting the involvement of UW "celebrities" to make cameos in the music video of the song, Yuvraj said, "The featured Deans and the President were very supportive of the initiative. I think they liked the charity aspect of the video, and were happy to be part of a project that promotes UW by paying homage to its greatest assets." In the recent news segment by CTV, UW President David Johnston was quoted saying that it was "great fun" making the video and that it "makes us all feel a little younger."

"Streets Of Waterloo Part 2" was not the first video they have put on YouTube to promote their music, in fact a quick search on the website yield to 3 other results. "Streets Of Waterloo" in particular featured the cameos of UW Hip-Hop Club and UW Place Dons. Yuvraj embraces the power of the website as he says that "a video on YouTube can essentially be 'immortalized', since the video link enables access from anywhere in the world any time."

When asked about how he started in rapping, Yuvraj said that has been composing hip-hop beats since 2003 and has always had an interest in poetry. Finally in 2006, he gave a shot in writing a couple verses for his own beats to see how it would result. At that point he realized that he had a sense of rhythm, but needed more vocal work. He strived to work on his enunciation and lyric-writing. Yuvrai admits that he still continues to learn despite a rather apparent improvement in skills from two years ago.

Yuvraj cites Eminem as a source for inspiration on his use of literary devices, vocal delivery and his work B.I.G. and Lil Wayne, with their different approaches

to rhyming and fresh rhymes. When making beats, he draws inspiration from Dr. Dre and Timbaland, as well as melodies from Bollywood music.

Baby Buddha is promoting their latest album Streets Of Waterloo, which is available for purchase at UWShop, for \$10 (taxes included). The proceeds of the album will go towards the "Free the Children" foundation. Yuvraj Goel mentioned after hearing a keynote address by the founder of the



as a producer. He is also Baby Buddha's latest music video "Streets of Waterloo inspired by the Notorious Part 2" features cameo from UW President David Johnston. Their charity album Streets of Waterloo is available at UWShop in South Campus Hall for \$10.

charity, Craig Kielburger at the Impact leadership conference last year, he was moved and realized the importance of education in developing underprivileged communities. He mentions that sales of the album have covered their initial costs and are on their way to raise money for the charity. The hiphop duo hopes to reach the fund-raising goal of \$8500 in order to build a school in Africa.

Letter from the Editor A 1628-Word Self Pat on the Back



SUNNY NG EDITOR-IN-CHIEF

I'm not going to lie, I'm totally exhausted with ideas for my editorials. That might be one of the many reasons that I don't want to be Editor-in-Chief for another term, as suggested by some people. Hell, I even managed to stretch my last editorial topic into two issues. For this issue's editorial, I'm going to write about my reflections during the course of the term when I've been the Editor-in-Chief and how well things have been. It'll be my last chance to boast my self-importance. Hey, at least I'm not trying to be subtle about it. Besides, who actually read these anyway (other than my proofreaders, of course)?

Now that the term is almost over, many people have been asking me how I felt about being EIC and if I actually enjoyed doing it. To be honest, when I finally decided to take on the role of being editor because nobody else wanted to do it, there were still two things I was worried about. First thing I was wondering was if I would actually enjoy doing this, or would it just simply become a chore that I would be stuck with. Secondly, I was worried about whether what I produce would actually be something I'd be proud of. I wanted the paper to have my spin on it and have everything I would envision a campus publication to have. It's one thing to do your job, but it's a totally different thing to do your job *well*.

I am happy to say that with my final issue coming out about now, I can answer "Yes" to both of the above concerns. Frankly speaking, I didn't even expect myself to enjoy taking on this position as much as I actually do now. I had a few goals in mind before coming into the position and I'm really happy that I was able to accomplish many of these with the help with my volunteer staff.

Things I'm proud of...

One of the things I often hear from people is "You look like you do a lot of work with the paper, you seem to write a lot!" or as one of my staff writers, Spencer McEwan states as his favourite game whenever a new issue comes out – counting the number of articles Sunny wrote." Despite not writing much for IW previously, I do enjoy writing especially on subjects that I'm interested in. Contrary to popular beliefs, I actually haven't had to write anything that I didn't want to write this term, and that, I believe, is an achievement. And personally I believe that as a person of authority, if I take on some of the shared responsibilities, I can encourage others to do the same.

When I started my term as editor, I had a few things in mind on how a campus publication should present itself. I previously had an issue with the paper when it tries to take itself too seriously. My first goal of the term was to avoid "real-world news". Let's not kid ourselves here, we are in no shape or form to compete with bigger media outlets that cover a wider scope such as the Globe and Mail, especially since when we are 1) volunteers and 2) engineering

students, 3) none of us are actually in the field of journalism, and 4) our paper comes out every other week. I'm proud to say that we have succeeded with this goal. The only exception I made this term was a story on Bill C-61, only because it is an issue that affects many Engineering students. I wanted the paper to focus more to what is going on on-campus and what is important to students.

Secondly, I wanted to diversify the content of the newspaper. As I have previously mentioned, I wanted to cater to the entire diverse student body that is in Waterloo Engineering. While it is important to cover achievements of students and their teams, it is also important to cover issues that are relevant but they may not normally be exposed to. I also wanted to add some artistic elements to the paper.

Thirdly, as a paper that is supposed to the voice of the undergraduate students, I felt it was important to focus more on issues that are applicable to the common student and things they actually care about. In particular, I felt it was important for students' views to be expressed (rather than the faculty's views) and stir-up thought-provoking discussions. I particular liked the two Point-Counterpoint features that discussed the primary motivation of getting our degrees and WEEF returns.

Lastly, and probably most importantly was accountability. There are two parts to this. First part involves publishing the paper on time and building back the reputation of the Iron Warrior and I think I have done that well. This was not easy mind you, especially since I'm running several initiatives simultaneously throughout the term. This is even more difficult when I had to take over even more responsibilities because others involved in my other initiatives aren't pulling their weight. Thankfully, I don't think my academics suffered too much from this, except for me failing a midterm because it landed on Monday after the midterm production weekend when most of my submissions were received late and I had less than 3 hours to study for it.

Second part of accountability involves the actual content. I wanted to have some kind of quality control and make sure we separate news from opinions, as well as minimize errors. While I'm against censorship, I do believe we need to make sure the content in the paper is actually presentable and not of bad taste. We are the voice of the students, so sensationalism should be kept to a minimum.

I really wasn't planning on doing this at first, but what I did eventually end up doing was conduct one interview for each issue of IW. These five issues led me to interview the Federation of Students execs, Editor-in-Chief of *The Boar*, Director of *Differ/End*, Prof. Rob Gorbet and Acting Dean Leo Rothenburg This gave stories more depth and personality, I learned a lot from this experience, as I actually haven't done any interviews prior to this term. This gave me the opportunity to talk to people I don't normally have a chance to talk to and learn more about issues I don't usually get exposed to.

Adding on to what I mentioned earlier regarding adding an artistic element to the paper, a few rather subtle changes were implemented this term to increase the emphasis on photography. I believe it is an essential part of the paper, because sometimes it is the thing that stops people from skipping over reading an article. The Photo Caption Contest made its return, as well for the first time, we started giving our photographers photo credit. Our photographers work really hard to make sure they get the right shots at the right time, so I think it's important that their work is recognized. Furthermore, I have made sure this term that every picture we place in our paper appears online as well (with photo credits). This traditionally was not the case, so I hope this will continue.

In this issue, I added a photo spread to recap events from this term. As the cliché saying goes, pictures speak thousands of words. This would be a great way to get students to become more engaged in campus events if they know what they are without having to read through an article. Lastly, we have requested funding and were granted money from WEEF to purchase a new SLR camera, to replace the old 2004 model digital point-andshoot camera that we previously owned and used. And by used, I mean we didn't because those pictures often turned out to look terrible, so we ended up having to use pictures taken by cameras provided by our photographers.

Things that could've been better:

One of the improvements I was hoping to get done but didn't get around to was the website. While I truly believe it was done well and looks clean, more interaction could be added such as commenting features would add more reasons for people to visit us online.

Another regret was the lack of interaction I ended up getting from people. To put it into perspective, I have gotten only two letters to the editor this term. Neither was published for different reasons. One was a complaint about my What Grinds My Gears editorial, but it was sent to me after I sent the next issue to the printers. The other was a harsh criticism about the Life in Mechatronics comic, which I thought was too over-the-top to be published. I wonder if it is because people don't realize that I actually want to get feedback either good or bad so I know how we're doing and how we can improve ourselves. I'm out of ideas on how to encourage this, hopefully the next editor can come up with better ideas. But then maybe it's just the Waterloo culture, if it is then there's not much that can be done.

Overall, leading the Iron Warrior has been a tremendously rewarding experience to me. It was also great that many people started to recognized me and know my name since I became editor and I was even featured in a YouTube video (see page 1)! Becoming editor was definitely a decision I don't regret. At this time, I would like to welcome Kevin Ling, who is the next editor replacing me in Winter 2009. He has helped me a lot this term and has many great ideas. I'm very confident that he will do an amazing job!

Thank you for reading,

Sunny

This is the final issue of *The Iron Warrior* for the Spring term.

Thank you for your readership,
look out for Issue 1 of the Fall term in late September.

FIRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

Editor-in-Chief Sunny Ng

Assistant Editor Kevin Ling

Cherry Ho

Copy Editor [vacant]

Photo Editor Michael Seliske

Advertising Manager Savio Tsui

Circulation Manager [vacant]

Web Editor

Michael Seliske

Staff Writers

Rory Arnold
Michelle Croal
Rob Graham
Cherry Ho
Kevin Ling
Spencer McEwan
Dawson Overton
Om Patange
Evelyne Russell
Bryan Sachdeva
Michael Seliske
Savio Tsui
Erica Waugh
Ivan Wong
Sylvia Wu

Contributors

Yousif Al-Khader Angelo Alaimo Sasha Avreline Kevin Choboter Mark Cremasco Patt Gillis Jon Grieman Cat Hay Amanda Hoff Alex James Cara Kennedy Chris Jamieson Daniel Lewis Hilary Lockie Stuart Pearson Scott Rankin C.R. Selvakumar Laura Sisson Sylvie Spraakman Sam van Berkel

Off-Stream Editor-in-Chief

Stuart Pearson

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

The Iron Warrior encourages submissions from students, faculty and members of the university community. Submissions should reflect the concerns and intellectual standards of the university in general. The author's name and phone number should be included.

All submissions, unless otherwise stated, become the property of The Iron Warrior, which reserves the right to refuse publication of material which it deems unsuitable. The Iron Warrior also reserves the right to edit grammar, spelling and text that do not meet university standards. Authors will be notified of any major changes that may be required.

Mail should be addressed to The Iron Warrior, Engineering Society, CPH 1327, University of Waterloo, Waterloo, Ontario, N2L 3G1. Our phone number is (519) 888-4567 x32693. Our fax number is (519) 725-4872. E-mail can be sent to iwarrior@engmail.uwaterloo.ca

COMMUNITY EDITORIAL

Thumbs Up/Thumbs Down



To the MathSoc C&D, which has apparently decided to charge 70 cents for coffee even if you have your own mug, if it's deemed to be "large". Nevermind the fact that the 20-cent discount on coffee with your own mug that is usually offered is supposed to be about discouraging the use of Styrofoam cups, not the extra amount of coffee you get. From now on, I'm sticking to the EngSoc C&D, even if it's completely out of my way.



To the Quantum-Nano Centre construction blocking the path to go to the Student Life Centre. Even worse, could you not have waited 3 more days until Student Life 101 is done before putting fences up?



To Plant Ops (I assume) for putting bike racks on the north side of E3X.



To the meteorologist for forecasting decent weather for a change! Sure is better than rolling thunderstorms and gloomy skies.



To Phillip Street and the need to slalom potholes and debris on the road. If I wanted to depreciate my car, I might as well have driven to African Lion



To the permanent construction on Highway 8. Those orange construction cones taunt the traffic that crawls by them, meanwhile the unscathed pavement on the other side glistens under the afternoon sun.. grr.



Getting woken up by the construction at UWP at 7:30AM.



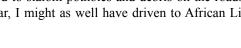
To Rogers who does not put all contract terms on the customer copy--reading the fine print on your paper contract is no longer sufficient.



To the lack of AC in res (shut up MKV).



For Mathies, who have hardly touched the IW stand in MC.



Send in your Thumbs Up/Thumbs Down to iwarrior@engmail.uwaterloo.ca

UWSP/STEP: Night Out at the Bomber



KEVIN LING 1B ELECTRICAL

Chances are you have seen or heard something about the Green Bomber Night over the past few weeks. The advertisements for it have been hard to miss for anyone who frequents the Student Life Centre. But for those of those who didn't know, the University of Waterloo Sustainability Project (UWSP) and the Sustainable Technology Education Project (STEP) hosted their Green Bomber Night event on Thursday July 10th. The evening gave environmentally conscious students a chance to come together to enjoy some great music, learn about sustainability, and have a good time.

To spread the word about sustainability, STEP and UWSP created this social event for students to enjoy themselves while learning about the different organizations on campus that promote environmentallyfriendly practices.

Event organizer Ali Suleiman says they are trying to raise awareness for sustainable development, green energy, and simply to

Correction

In the article International Philanthropy On UW Ground in Volume 29, Issue 9 of The Iron Warrior published on Wednesday, July 9, 2008, the sentence "Orphans were chosen as the focus of this project for a significant religious reason: throughout the Koran, the prophet Muhammad emphasizes the importance of helping orphans." should read: "Orphans were chosen as the focus of this project for a significant religious reason: throughout the Koran, God (Allah) emphasizes the importance of helping orphans."

The Iron Warrior regrets this error.

get the names of UWSP and STEP out there. "We basically want to make it known to all the students that there is a way [to be sustainable]... We have to change our lifestyles, and it's very easy to change our lifestyles."

The musical lineup for the night included Steve Trophen, Radical Choir, Carcadian Rhythm, and Brad Bondy. As well, Assistant Professor Jeff Casello from UW's School of Planning and Department of Civil Engineering came out and gave a short presentation on sustainability and meeting future needs. highlights of the night included green drinks and draws for prizes - the grand prize being a weekend electric scooter rental.

Recent UWSP and STEP initiatives include putting solar panels on Federation Hall and the PAC to encourage the use of renewable energy sources. The next things in their sights are setting up solar panels on top of Village 1 to heat water and establish a wind turbine on campus. While the wind turbine is still in the early design stages, the group aims to have it installed somewhere on UW property. STEP coordinator Lawrence Yeh said that they are actually hoping to integrate the implementation of the wind turbine with the Engineering Faculty so that they can attract attention from fourth year students looking for a design project.

As well, STEP is planning a Green Fashion Show. The event is expected to take place sometime in 2009 and will display all sorts of fashion composed of organic or environmentallyfriendly materials. They also plan to feature some more extreme styles such as clothing made from recycled bottles. Ali Suleiman said they "want to show people that if they want to wear sustainable clothing, it doesn't have to be hemp."



Steve Trophen plays at the Bombshelter for Green Bomber night.

of its kind in the future. Keep looking ly events to come.

This term's Green Bomber night was a around on campus and there will probably access and there will likely be more events be some more fun, environmentally-friend-



You Can Make A Difference.

Interested in a challenging career?

Want to learn more about employment opportunities at Procter & Gamble?

Touching lives, improving life. P&Gwww.pg.com/canada

Acting Dean Leo Rothenburg Reveals Upcoming Plans

Planning for Abu Dhabi Campus, Professional Masters Program Underway



SUNNY NG 4A COMPUTER

On July 1, 2008, Waterloo Engineering Dean Adel Sedra began taking a one-year sabbatical to focus writing the sixth edition of the million-selling engineering textbook, *Microelectronic Circuits*. Leo Rothenburg, who was the Chair of the Civil and Engineering Department took office and is currently serving as the Acting Dean until Sedra returns next year. *The Iron Warrior* had the opportunity to chat with Rothenburg about what he plans to accomplish within his term as the Acting Dean.

Leo Rothenburg says that most of his priorities have already been set in stone as part of the faculty's Vision 2010 plan although they could still be subject to changes. This plan has gone through extensive preparation by the faculty for two years between 2004 and 2006, and is currently on its second year of implementation. Rothenburg says, "The vision of the plan is to maintain [UW Engineering's] place as the premier school in Canada and become one of the top schools in North America." He states that the main current priorities include overseeing the construction of Engineering V, starting the University of Waterloo campus in Abu Dhabi, launching new professional masters programs, restructuring the staff structure of the Dean's Office, designing space plans for Engineering VI and raising funds for Vision 2010 Campaign.

Planning is well underway for a new UW campus in Abu Dhabi in United Arab Emirates. Four programs will be initially offered, including Chemical Engineering, Civil Engineering and two Math programs related to Information Technology. Leo Rothenburg states the importance of having an overseas campus as an opportunity for UW students to gain more career opportunities. "I recently spoke to one prominent structural engineering company, they have an office in Dubai. Right now they have 65 people, they are planning to expand to 300. They told me, 'I wish we had good graduates from your school to rely upon.' We're quite excited about that," says Rothenburg.

Students enrolled in the engineering programs at the Abu Dhabi campus will spend two years there and finish the last two years of their education in Waterloo. Rothenburg

believes the biggest challenge with this initiative is maintaining the quality of education. To deal with this, several faculty members from Waterloo will be moving to the Abu Dhabi campus to teach. The same curriculum with the same accreditation will be taught to students and an Engineering Society will be established as well. "We'll try to recreate the Waterloo culture, half way across the world," says Rothenburg. He hopes that students from each campus will be aware of their cross-campus counterparts as they will be joining together in Waterloo in third year, one way he hopes to do this is to utilize video-conferencing. Rothenburg says that such a program will be a unique experience of students as there currently isn't anything like it. He is confident that the faculty can succeed in maintaining an equal education between the two campuses, as he uses Texas A&M University as an example, which has a campus in Oatar.

He believes the future development of Canada is dependent on what we do across our borders and currently we have the advantage because of "the multicultural fabric" that allows Canadians to work in countries of different cultures. The original plan was to have classes commence at the new campus in Fall 2009. Rothenburg will be visiting Abu Dhabi in August to further oversee this plan. He mentions that depending on the situation, it is possible for this plan to be delayed.

University of Waterloo is currently pushing a campus-wide initiative to increase the presence of professional masters programs and Engineering is no exception. Leo Rothenburg states, "Engineering definitely should take a lead in this as it is the premier professional program of the school." He cites other top technical institutions such as Massachusetts Institute of Technology and Stanford University with their graduate programs for the importance of expanding masters programs in Engineering. Rothenburg explains, "Why would MIT, a premier research institution be involved in such programs? The answer is simple, it provides a service to the engineering community. It provides important links with the industry for the university. [...] And we hear continuously from companies that they want to see advanced courses in one area or another."

Leo Rothenburg dismisses concerns of diluting the quality of undergraduate studies by adding a new focus on masters programs. He says that these programs will be added on a



Sunny Ng

cost-recovery basis, so they will not add any more financial burdens to the faculty. While expansion will happen on the graduate side, Rothenburg explains that it will enhance the operation of the entire faculty as the graduate students will be able to offer a greater variety of undergraduate courses available.

On the hot topic of PDEng (Professional Development Engineering students) courses which are courses taken over work terms as part of the degree requirement for Waterloo Engineering undergraduate students, unfortunately Rothenburg has bad news for those of us who wish it would go away. He states the importance of having such a program to improve students' soft skills and that is what employers are actively seeking. Because of that, he states that PDEng is needed and is here to stay. Rothenburg realizes the pressures the courses put on students during work terms, he hope that with the help of students' feedback, the faculty can improve it to make it succeed and make it a better experience for all of us.

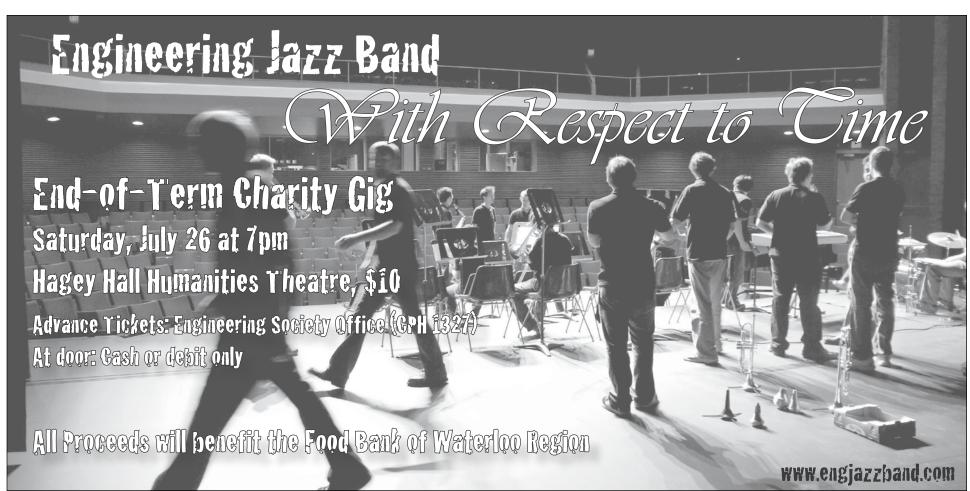
When asked about how he feels about the importance of having more women in the field of engineering, Leo Rothenburg states that having a diverse population would allow different views and ideas to be synthesized, he believes that we are missing out by not having a balance in demographic. He mentions that when he was completing his undergraduate engineering degree in the Soviet Union, the gender ratio was much more balanced there due to the culture and admission policy.

Rothenburg cites a recent study by a U.S. academy on the decreasing number of women

going into the fields of science and engineering. Rothenburg explains, "The conclusion was, when we emphasize engineering, we put a lot of emphasis in technical skills, in the expense of other features of engineering. [...] The main result of what we do is we improve the quality of life. And that is what needs to be stressed when we promote engineering." The study shows that this was found to be more appealing to women than just showcasing the aspect of having technical skills and knowledge in mathematics and science.

Rothenburg is looking forward to be engaged with students like previous deans. He is excited to meet with the Engineering Society executive officers in the near future. He believes the Engineering Society is doing a great job at what they're doing, but he thinks that sometimes students need to become more engaged on their own. Rothenburg also hopes to become more engaged with student teams and knowing what they're up to. He mentions the importance of student teams and how they improve the image of the school outside the university. In other forms of student engagement, Rothenburg also enjoys regular visits for coffee and bagels at the C&D.

Currently, Leo Rothenburg says that UW Engineering's co-operative education program and its reputation created by its graduates is what is differentiating it from other engineering schools. Rothenburg believes that with the help of the international campus and expansion masters program, UW Engineering can continue to stand out from other engineering schools.



Continuing to Celebrate the Spirit of "Why Not?"



OM PATANGE

BA NANOTECHNOLOGY

Continuing in the spirit of "why not" celebrated last year across the UW community, students invited investors, a patent law expert, and entrepreneurs to critique ideas of enterprising members of UW on Tuesday, July 8. Disappointingly, only three members of UW showed up.

The event consisted of UW members presenting their ideas to the panel of experts and a brief networking session. To maintain confidentiality, the presentations were all closed sessions. From my experience as a participant, I was asked questions that made

me think about the final direction of the design project I was presenting. For instance, some possible directions would be to use the project as a learning experience and a launching pad for a more ambitious project, or spinning the idea into a marketable product, or licensing the intellectual property of the product to an existing company.

For most of these instances, it is important to understand the rules of protecting intellectual properties. This is where the advice of Ken Yip, a patent expert with Bereskin & Parr, was beneficial. UW is renowned for letting inventors keep their IP despite using UW resources to produce the IP. However, warns Yip, it is important to seek the help of a patent lawyer if you see real potential in your project.

Typically, in Canada and the US, there is

a one-year grace period following a public disclosure in which time the inventor must file for a patent if the IP is to be protected. However, most other countries require that the patent application be made prior to the public disclosure. Yip warns, "Many of the 4th year ECE students will have to present their design in the symposium, which falls under the category of a public disclosure..."

Among the other members of the panel was Kayla Spiess from Infusion Angels. She advised that there will be a competition called the Infusion Cup happening in January of the Winter 2009 term. Infusion Developments will tour the 4th year Design Symposium looking for the most innovative and marketable project. The winner of the competition will win a grand prize of

\$2000. This should be strong incentive to pull out all the stops for all the 4th years out there.

Perhaps this event could have benefitted from better advertising – I only learned about it through the EngSoc mailing list. It is very surprising that, at a university with a reputation for innovation, so few people showed up to the event. Perhaps it was a case of people not recognizing the value of the opportunity such an event presented. Perhaps it was not apparent how valuable it is to have investors, patent experts, and entrepreneurs all gathered in a single panel attentively listening to you pitch your ideas. Hopefully the event will run again with improvements from the lessons learned from this iteration, and more people will take part in this unique opportunity next time.

Alumnus Comes Back to Give Inspiration



OM PATANGE
BA NANOTECHNOLOGY

Kunal Gupta, founder of Impact and Polar Mobile, and recent UW Software Engineering graduate, recounted his entrepreneurial experiences to a packed room of students on Thursday, July 10. This was the second presentation hosted by the Student Horizons club. Gupta's purpose was to inspire students to pursue their passion.

Gupta's presentation took the form of a narrative, the story of Impact. It started in 2004 when Gupta was a fresh first-year student, when he immediately realized that the intense technical training of Software Engineering was not enough to satisfy his interests. He recalled that the thing he was

passionate about was meeting students. His experience with student council and event organization in high school naturally lent itself to creating an entrepreneurship conference for students.

There was a three step process that Gupta followed to create the success of Impact that he communicated to the audience. The first step was passion—find what you are passionate about. The second step, find people to help—you can't do everything alone. The third step was to find sponsors.

On the last point, Gupta emphasized that results are produced "all through persistence." In the first year of Impact, Gupta was very interested in getting Harry Rosen, a renowned retailer, as the key note speaker. Despite trying avenues of all sorts, Gupta and his team were not able to get Rosen for Impact 2004. However, they did not give up. For the first year, they lined up an A-list of

speakers in the nick of time – and they got Rosen to speak at Impact 2005.

Another important point Gupta tried to drive home was to always dream bigger, to always think, "We did good, we could do better." He attributes the explosive growth of the Impact conference to this can-do attitude.

Building a team was another important topic for Gupta. Recommending strategies to build a team, Gupta suggested tapping on friendships, taking potential team members to lunches, giving team members titles and business cards to promote a team-spirit and confidence. On being asked how to select team members, Gupta advised challenging the potential team member and testing their commitment to the success of the team. He recommended finding people that are better than you in different ways – allowing your organization to increase in capabilities and competence.

Gupta's answer to how he managed his entrepreneurial activities with his academic work load was, "I didn't go to class." He emphasized the importance of being efficient and of hard work. He recalled having many late nights during university and having the passion for what he was doing to carry him through the experience.

Gupta has carried his passion for innovation into his life after graduation by combining it with a passion for mobile technology. While still in school, Gupta founded Polar Mobile with a few classmates. Today, Polar Mobile has partnered with RIM to deliver content from organizations such as Maclean's Magazine, Canadian Business and is in talks with Forbes Magazine, among others.

To find out more about Impact go to http://www.impact.org/home/, Polar Mobile: http://polarmobile.com/, Student Horizons: http://horizons.clubs.feds.ca/.



Sandford Fleming Foundation



DATES

TIME

PLACE

Sandford Fleming Foundation Debates

The Foundation has established the Sandford Fleming Debates in order to encourage the art of debate among engineering undergraduates. Each term there is one faculty wide competition. Please contact Prof. Scott Jeffrey of Management Sciences (sajeffre@engmail.uwaterloo.ca) if you are interested in participating. The overall winning team will receive \$300 each and the runners-up will receive \$150 each.

E2 - 3324

July 7, 8 and 9

11:30am - 1:00pm

FINALS: CPH Foyer (Outside POETS), July 11 at noon

Refreshments will be served at the finals. Everyone is welcome!

Student Travel Grants

Student Travel Grants are available to students participating in technical conferences. Please check our web site for further information.

Emergency Loan Funds

SFF has made available funds for short-term emergency loans, interest free for 90 days. These loans are available to engineering undergraduates, on either an academic or work term. Contact the Student Awards office for further information.

E2-3336, Extension 84008, sff@engmail.uwaterloo.ca www.eng.uwaterloo.ca/~sff

Founder of UW Systems Design Speaks



2 weeks ago, the Systems students on campus were treated to a rather unique Class Professor Hour. Instead of talking about courses or specializations, Professor George Soulis – the founder of what is now known as Systems Design Engineering – came in to talk about the history of the program and how it came to be.

As most of us know, there were initially only four engineering programs at Waterloo – Mechanical, Civil, Electrical and Chemical. This was the case for quite some time, but, eventually, the then Dean of Engineering decided that Waterloo should diversify its engineering programs – to the agreement of most of the faculty. The initial proposal was to create programs for Environmental Engineering and Architecture, but the university's president disagreed that these programs should be run under the Engineering Faculty. A new faculty was created – what is soon to be known as the Faculty of Environment to house these programs, but this firustrated the Dean who was determined to introduce a new

engineering program.

Thus the Department of Design was created. According to Soulis, a large factor in the creation of this department was for the Dean to spite the President who had denied him of the other engineering programs (a rather worrying reason to create a department). This new department taught mostly architectural and industrial design at first, but Soulis was able to convince Professor Kesavan – a professor who was then interested in systems theory – to work with the curriculum. Through this work, the department then transformed into the department of Systems Design - initially only a Master's program, but approved to be an undergraduate program in November 1968. The program would teach engineering design from a systems theory prospective.

So, Systems Design was approved to be taught at the undergraduate level, but this didn't mean that there was a curriculum in place. In fact, Soulis and other professors had to cobble together a suitable first-year curriculum in a very short time frame, and by April of 1969 he was told to start recruiting for the program which was slated to set in September. He had these few short months to get enough students to sign up for the first class of a program which only had its first-year curriculum designed.

This was obviously well before we could just put a bunch of literature about the program on a website and wait for applications – the program was promoted by driving around on a motorcycle with brochures to high schools and talking to students who might be interested. Professor Soulis remarked that they had to be careful to avoid talking to guidance departments, who would never recommend students to join such a program. They talked to the students directly, took down the names of the interested ones, and by the end of the summer they had a solid list of 50 people for the first class of Systems Design engineering.

It turns out this class was very important in the success in the program, and without them, the program might not exist today. Soulis recounts that this first class was a very bright group of students, and that they had natural risk-taking tendencies (you'd have to, joining an engineering program that doesn't even have its curriculum designed, let alone accredited). The first year design project given to this class was to, humorously, design the curriculum for the second year. Nowadays, such a thing is unheard of, but these students took to the task with enthusiasm and created the foundation for second year Systems Design engineering which is in many

ways unchanged today (hopefully a testament to their foresight). Similarly, this class was charged with creating the third and fourth year curriculums in their second and third years respectively. Obviously, this curriculum has gone through modifications and courses have been added and removed in the course of almost 40 years (for instance, students used to have a design project every term), but the backbone of the curriculum still bears the mark of the cleverness of these students

Since then, Systems has continued to attract a lot of risk-takers who have made a name for themselves in industry and academia. The program has been so successful that similar programs have been introduced at American schools such as Yale and Dartmouth, and the program has been "copied" by universities in China and Russia. This success was entirely unplanned – in fact, as mentioned, the program itself was almost entirely unplanned – but through the enthusiasm of the initial Professors and first class, this anomaly known as Systems Design Engineering has become a unique program that has not been fully duplicated anywhere else in the world.

As for the age old question, what is Systems? I still don't know, but they must be doing something right.

Putting the "Applied" Back into "Applied Science"

HILARY LOCKIE
3T CHEMICAL

Have you ever been in a lecture where you asked yourself, "When will I even need to know this?" Do you find that some of your course material is more theoretical than applied? Do you find yourself more engaged in classes in which you study real applications of engineering principles?

The Waterloo Cases in Design Engineering Group (WCDE) is on the job. From our work, students will be able to develop strong design skills throughout their engineering education, and will begin to see more relevant applications of engineering principles on school terms.

Lead by Professor Steve Lambert (Department of Mechanical & Mechatronics Engineering), WCDE is working to develop case studies based on real engineering design challenges. These cases create a connection between theoretical principles seen in class and real industrial problems from work terms and design projects.

In addition to contacting companies directly to find interesting engineering design challenges,

WCDE is using work term reports and fourth year design projects as principal sources of case material. You are able to submit current and older non-confidential work reports to WCDE (email them to design@design.uwaterloo.ca). Interesting reports will be converted into cases by a WCDE staff member, who shares the copyright with the work report author.

If you don't feel that your work reports would be useful to the WCDE team, you can still help by submitting suggestions about any of the following:

- Courses that you feel would be improved, or made more understandable, by the inclusion of cases:
- Difficult theoretical concepts that would be made clearer through studying their applications;
- Industrial (work term) applications or experiences that you felt were especially interesting that could be related to one or more course concepts.

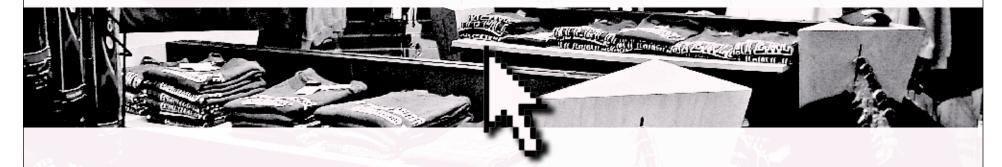
For more information on the Waterloo Cases in Design Engineering Group, you can visit our website at www.design.uwaterloo.ca.

www.bookstore.uwaterloo.ca For textbooks and general books.



FREE SHIPPING on All Online Orders From July 14 to August 31, 2008

www.uwshop.uwaterloo.ca For offical UW apparel, gifts and more.



Shop Online.

BookStore



ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report



AMANDA HOFF PRESIDENT

The time has come. The time is now. It's my last Exec report ever, and I won't lie to you all and say I'm not excited to be done... yes, it's been a wild ride and I have no regrets about the past 16 months, but it's time for me to let go and move on to bigger (and, although it'll take a lot to convince me it's true, possibly better) things. But first, I need to acknowledge a few people!

First of all, thank you to my fellow Exec for working and partying with me through everything that's happened over the past 16 months. Erica - thanks for introducing the "what's new in your life" to our meetings and day-to-day interactions! Thanks for partying hard with me at conferences, and keeping that great balance between work and play. And thanks for the sangria... mmm... sangria!!!

Chris - I know you and I were supposed to be the "Prez-VP relationship" of our Exec... but it never would have worked between us, sorry. Regardless, I've really enjoyed working with you over the past 16 months. And I'm sorry I was so slow in signing all those cheques...

Patt - Thanks for being so level-headed through everything. Even when I was freaking out and losing my mind over things, I knew I could always count on you to bring the voice of reason into every situation, and I've really appreciated that!

Cat - Thanks for always being so on-theball with everything! Your fantastic organizational abilities will no doubt serve you well in your new position.

To Mary, thanks for being so awesome! Your advice and encouragement have been a great resource for me over the past 16 months, and I could not have done it without you! More than that, though, I've appreciated your warm smiles, friendly greetings, and the random conversations we've had over a drink or two. I hope we can continue that even after my term is over!

To all of my directors over the past 2 terms, I couldn't have asked for a better team to work with! We've had 5 (hopefully soon to be 6) fantastic OTs, EngSoc meetings have practically run themselves thanks to some great organization, and the Alumni Golf Tournament is an exciting new initiative that will hopefully continue in years to come. We could not have pulled off so many amazing things without all of your hard work and dedication.

To Tyler and Ruth-Anne, thanks for helping to keep the inter-society communications so strong. I've had a great time working with both of you, and I would love to work with either of you again in the fu-

To my close friends and roommates, thanks for putting up with the roller coaster I put you through... for cooking me meals and giving me hugs when I needed them

Finally, thank you to you, the faithful Iron Warrior readership, and everyone who has ever attended an event or participated in anything that EngSoc has done. I hope we have made it worth your while.

And thanks for reading! At least, I hope someone's been reading... even just a lit-

To the new Exec: Congratulations, good luck, and don't forget to have fun along the

VPEd Report



PATT GILLIS VP EDUCATION

Debt-Load Survey

First off I'd like to thank everyone who filled out and returned the dept load surveys last week. Overall the return rate was a little disappointing at 25% but congrats to the 4A Chemmies for providing the highest per-class return rate at 64%. Look for the summarized results of the survey in the next page.

Course Critiques

Next I'd like to thank everyone who came out to help out with the course critique stuffing party, and remind everyone how important these course and professor critiques are to the faculty. First, on the back of the form where you get to fill in any additional comments is one of the only ways for your professor to receive honest constructive feedback from the students. Second the results from the bottom half of the front, regarding the course material, is taken into consideration by the Faculty every year when they are deciding what courses to keep and what courses may need some adjustments.

Finally, the numbers collected from the top half of the front regarding the performance of the professor are used at every level of a professor's evaluation. Every professor's work at the university is evaluated based on 3 aspects: teaching, scholarship, and service. They are required to prove proficiency in each of these areas when applying for faculty appointment and during their annual performance review. Therefore, as one of the only quantitative

measures of a professor's performance, the course critique evaluations are commonly used at all of these levels. Finally it is important to keep in mind for these evaluations to be credible they must have a reasonable return-rate so as to ensure an opinion of the majority of the class is being represented.

Academic Rep Meeting

I would like to thank all of the academic reps that came out to our Academic rep meeting/ workshop. Information was provided to everyone who showed up regarding the different levels of academic councils from the departments to the faculty to the University levels. Common issues that were raised were an interest in increased student involvement at the 'ground level' of the proposed changes to programs and departments, a common forum to provide communication to PDEng on behalf of students, and increased communication between the EngSoc VPEd and the Class Academic Reps.

Congratulations Sasha

Next I would like to congratulate Sasha Averline for successfully being ratified at the last EngSoc Council Meeting making him your next EngSoc VP-Education!! I've gotten to know Sasha over the past couple of years as he's taken on various VP-Ed directorships, and am excited to see him take on the position as I'm sure he'll do a great job. You're in good hands!

Thanks Directors and Exec

Finally I'd like to give a huge shout out to all of the directors that have made it a pleasure to be your VP-Ed over the past 16 months, and of course to the over Exec who have I have had the pleasure of sharing this little adventure with.

VPF Report



So this is my last report as your VPF on EngSoc. It is hard to believe that it is the end already. I hope you had as great a time over the last 16 months as I have. While I didn't accomplish everything I

set out to, I feel like I have made a positive impact and that makes me happy.

But, life in the society must go on and on that note I am proud to introduce Mr. Scott Rankin, your new Vice-President of Finance. Scott is a very capable guy with a ton of great ideas. There is no doubt in my mind that he will do this job much better than I did. So without further ado, here is Scott with his first IW report.

See you at EOT.

VPI Report



CAT HAY

It's hard to believe my 16 months are over already! It feels like it was just last week that Adam was showing me the ropes for VPI. Since this will be my last article as VP Internal, I thought it would be fun to go over some of the highlights from the

Back in the fall, we started a series of lunch workshops, run primarily through the Arts Directors. These were fun, dropin sessions about anything from cupcake decorating, pumpkin carving, finger painting, drama improv sessions, to a tour of the darkroom. Another lunch event, Enginuity, was revived by combining the points earned in each individual competition to determine an overall Enginuity winner for the term.

First year class reps will remember a series of biweekly workshops about communicating with your class, running class events, collecting P**5 points, setting up class funds and novelties and applying for directorships.

We started a new Halloween directorship, complete with a pie-eating contest, costume contest, Scooby Snacks at the EngSoc meeting, and a trip to Uptown Waterloo for the Rocky Horror Picture Show at Princess Cinemas.

In the music realm, we bought new sound equipment as the grad gift from the class of 2007. We started open mic sessions on Fridays in POETS, a coffee house after the EngSoc council meeting, and a Band Wars competition.

We've also seen a ton of new "year spirit" mixers, including a 2009 Turkey Dinner and Bocce Tournament, a 2010 Poker Tournament, a 2011 Camping Trip, and a

This term we held the first annual alumni golf tournament in Cambridge, followed by a night of PubGolf. Hopefully this will be the first in a series of initiatives to reunite alumni with current engineering students.

None of these initiatives could have succeeded without the continued dedication of my incredible directors. Thanks to everyone for making this position such a fabulous learning experience for me! I will miss working so closely with all of you, but I know we've only got great things to come with Laura as your new VPI!

P**5 Update!

SASHA AVRELINE, PETER consideration. **KELLY, & SYLVIA WU**

P**5 DIRECTORS

Hey all,

It's near EOT which means P**5 will soon be handing \$300 to the class on top of the points count list! 2nd and 3rd place also get \$200 and \$100 respectively. If your class is not in top 3, don't give up yet: The two P**5 contests that we announced earlier are closing soon and you could score a huge amount of points!

- 1. Submit a design/prototype/working model of an original cooling device for those of us not fortunate enough to have
- 2. Submit an original viral video made by your class. Content/popularity (easily tracked on YouTube) will be taken into

The deadlines for these two contests is the day before EOT: July 24, 2008. Send your submission by email or drop it off in the Sexy Box, which usually resides in the Orifice. If your submission for contest 1 is too big, put it in the P**5 mail box or give it to Betty in the Orifice.

Cheers and come to EOT on July 25 for the revealing of the final P**5 standings!

P**5 Standings as of July 18, 2008

1. 4A unCIVILized (22375)2. 2B Mechsicans (21805)3. 2B C1V1L THIS (17605)4. 3A FUChem 2010 (16510)5. 4A Byte Me & RAM It (16490) 6. 1B SparTRONS (13035)7. 2B Knights of NE (11810)8. 1B Comp (11515)9. 4A 60" JOYstick (10050)10. 3A Peeping Trons (8450)



ENGINEERING SOCIETY EXECUTIVE REPORTS

VPX Report



Well friends, so begins my last ever exec report! It has been such a pleasure to be on exec these past 16 months, thank you to everyone who got involved in external events and a big thank you to all of my fabulous directors! Also, thank you to Amanda for being my best conference buddy, to Patt for keeping things relaxed, to Cat for always

being on the ball, and to Jamieson for always promoting going for a beer. On to the news...CFES has put a call out for a new VP Finance and Administration, for more information please contact the VP Communication at vpcomm@cfes.ca. Not much is happening on ESSCO as the new exec are transitioning and getting ready for the year ahead. A big thank you to my Charities Directors for helping out with the Joint Council Charity Breakfast and for hosting the last pancake breakfast. There's really not much to report – good luck to Cara, I know you'll do great!

Debt Load Survey Results

Term Total

Total Responses 559
Number of surveys sent 1396
Response % 40%
Number of Students in core classes 2327

2 Does your family support you financially? (550 responses)

Yes 59% No 41%

3 Average Cost of Living for a 4 month School Term (548 responses) \$9.367

4 Average Cost of Living for a 4 month Work Term (509 responses)

5 Have you applied for local aid or other bursaries to pay for school?

(556 responses)

Yes 42% No 46% Not Yet 12%

Have you applied for OSAP? (556 responses)

Yes & Received 34% Yes & Denied 19%

No 48%

7 Do you have a loan for academic purposes? (549 responses)

Yes 36% No 51% Not Yet 12%

7a How much is the student loan? (266 responses)

 1-499
 7%
 500-999
 4%

 1000-1999
 10%
 2000-4999
 20%

 5000-9999
 28%
 10000+
 31%

8 Has the differential tuition increases caused you hardship?

(545 responses)

Yes 41% No 29% Not Yet 30%

9 How much debt do you expect to be in by graduation?

(540 responses)

No Debt 29% <999 5% 1000-4999 13% 5000-9999 16% 10000-19999 20% 20000+ 17%

10 Do you live at home while at school?

(552 responses)

Usually 7% Used to 1%

No 91%

11 Have you lived at home while on work terms?

(555 responses)

Always 20% Sometimes 45%

Never 35%

12 Average of the weekly salary while on work term (514 responses)

\$659

WEEF Director Report



ALEX JAMESWEEF DIRECTOR

A final Hello to everyone out there,

I am sad to say that this will be my final WEEF director report as my term is coming to an end. It has been quite an adventure and I'd like to thank everyone who has helped be along the way, you guys have been great. I am glad to say that I have a great replacement in Matthew Bester. Matt has been spreading the spirit of WEEF ever since I've met him and with him in the driver's seat I can only see great things in our future.

In more current news, the funding council has come to a decision on funding for this term. As always it was a tough choice, but they have decided to concentrate more on department funding this term. The rational for this is that the department funding af-

fects a wider range of students and that we just gave one million dollars to the new student team design centre. I think everyone should be satisfied with the results (seen below) and I am confident that WEEF is making a huge impact on our campus.

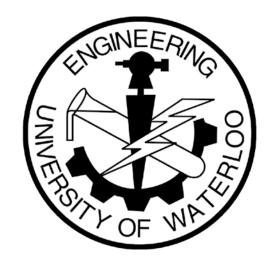
The other big news in WEEF world is that we will be switching offices for the Fall term. The IW and WEEF are swapping offices so that WEEF can be in a more central location, thus allowing us to spread the word of WEEF more easily. The switch will also give the IW some much needed space. The relocation is only temporary for WEEF which has been granted a new office overlooking the student team design centre in

That's it for now, I wish Matt the best of luck next term.

Thank you all,

Alexandre James Ex-WEEF Director

Title	Requested	Allocated
Architecture		
Gis Machine Upgrade	\$3,500.00	\$3,500.00
Workshop metalworking tools	\$9,705.72	\$4,273.80
Workshop hand tools	\$825.79	\$825.79
Total:	\$14,031.51	\$8,599.6
Chemical Engineering Fourth Year Room		
Chemical Engineering Fourth Year Room	\$4,400.00	\$4,400.00
Pressure Regulators For Che 391 Fuel Cell Experiment	\$1,660.00	\$1,660.00
Upgrade Ph And Conductivity Meter For Che 290	\$2,700.00	\$2,700.00
Total:	\$8,760.00	\$8,760.00
Civil Engineering		
Printer for Enviro/Geo Room.	\$820.00	\$500.00
Allegro Cx Data-Logger	\$5,595.00	\$2,767.00
Pressure Calibrator	\$2,070.00	\$1,035.00
Class Communication Board	\$963.65	\$0.00
Desk Repairs Or Replacement	\$10,199.40	\$0.00
Total:	\$19,648.05	\$4,302.00
Electrical and Computer Engineering	713,040.03	Ç4,502.00
CPH-1333 Energy Conversion Lab Equipment	\$2,137.68	\$2,137.68
E&CE Nexus Computer Upgrade	\$6,000.00	\$5,000.00
E&CE Nexus Monitor Upgrade	\$5,175.00	\$3,375.00
Data Projector	\$870.00	\$435.00
Wireless Microphone	\$380.40	\$0.00
Upgrades To The ECE 4" Year Lounge	\$3,000.00	\$1,710.00
	\$129.94	
Replacement Toner Cartridge For Laser Printer		\$0.00
Total:	\$17,693.02	\$12,657.68
Mechanical Engineering	410115	40.000
Superficial Hardness Tester	\$13,115.52	\$6,560.00
Limiting Dome Height Formability Tester Upgrades	\$15,650.00	\$5,500.00
Total:	\$28,765.52	\$12,060.00
Systems Engineering		
Systems Computer Lab PC's Upgrade	\$6,000.00	\$6,000.00
LabVIEW Software License	\$200.00	\$200.00
Healthy Aging and Energy Harvesting Design Prototyping	\$540.00	\$540.00
Total:	\$6,740.00	\$6,740.00
Miscellaneous		
Book	\$3,000.00	\$3,000.00
Clickers	\$6,000.00	\$0.00
Department Total:	\$104,638.10	\$56,119.33
Student Teams		
Uwire Autonomous Robot Racing Challenge	\$3,269.98	\$1,952.58
2009 UW Formula SAE Team	\$5,500.00	\$3,000.00
2009 Great Northern Concrete Toboggan Team	\$7,900.00	\$2,150.00
The Iron Warrior	\$3,000.00	\$1,130.00
Bringing The Ontario Engineering Competition To Waterloo In 2010	\$15,000.00	\$0.00
Funding For Engineering Orientation Week	\$3,000.00	\$2,000.00
University Of Waterloo Robotics Team	\$4,188.00	\$4,188.00
Sustainable Technology Education Project (STEP)	\$567.67	\$250.00
UWAFT Spring 2008 Proposal	\$12,835.00	\$2,000.00
Spring 2008 Clean Snowmobile Team - Chassis, Engine, And Sound Equipment	\$9,616.50	\$2,604.00
International Genetically Engineered Machine (Igem) Competition	\$3,200.00	\$400.00
Warg Construction Supplies, Avionic And Communication Equipment, And Materials	\$5,440.00	\$4,085.0
Liquid Fuel Rocket	\$1,200.00	\$0.0
	\$5,589.70	\$2,000.0
University of Waterloo Nanorobotics Group Proposal		\$1,600.0
University of Waterloo Underwater Technology Team – Construction of Neo II	\$5,112.26	
University of Waterloo Underwater Technology Team – Construction of Neo II Purchase Of Two Coolers For Engineers Without Borders	\$54.80	\$0.0
University of Waterloo Underwater Technology Team – Construction of Neo II Purchase Of Two Coolers For Engineers Without Borders 2008 Spring Term Wombat Funding Proposal	\$54.80 \$6,310.00	\$0.00
University of Waterloo Underwater Technology Team – Construction of Neo II Purchase Of Two Coolers For Engineers Without Borders	\$54.80	\$0.00 \$1,500.00 \$28,859.5 8



ENGINEERING SOCIETY EXECUTIVE ELECT REPORTS

Presidential Elect Report



CAT HAY PRESIDENT ELECT

It's hard to believe my 16 months are over already! It feels like it was just last week that Adam was showing me the ropes for VPI. Since this will be my last article as VP Internal, I thought it would be fun to go over some of the highlights from the last year:

Back in the fall, we started a series of lunch workshops, run primarily through the Arts Directors. These were fun, drop-in sessions about anything from cupcake decorating, pumpkin carving, finger painting, drama improv sessions, to a tour of the darkroom. Another lunch event, Enginuity, was revived by combining the points earned in each individual competition to determine an overall Enginuity winner for the term.

First year class reps will remember a series of biweekly workshops about communicating with your class, running class events, collecting P**5 points, setting up class funds and novelties and applying for directorships.

We started a new Halloween directorship, complete with a pie-eating contest, costume contest, Scooby Snacks at the EngSoc meeting, and a trip to Uptown Waterloo for the Rocky Horror Picture Show at Princess Cinemas

In the music realm, we bought new sound equipment as the grad gift from the class of 2007. We started open mic sessions on Fridays in PO-ETS, a coffee house after the EngSoc council meeting, and a Band Wars competition.

We've also seen a ton of new "year spirit" mixers, including a 2009 Turkey Dinner and Bocce Tournament, a 2010 Poker Tournament, a 2011 Camping Trip, and a 2012 BBQ.

This term we held the first annual alumni golf tournament in Cambridge, followed by a night of PubGolf. Hopefully this will be the first in a series of initiatives to reunite alumni with current engineering students.

None of these initiatives could have succeeded without the continued dedication of my incredible directors. Thanks to everyone for making this position such a fabulous learning experience for me! I will miss working so closely with all of you, but I know we've only got great things to come with Laura as your new VPI!

VPI Elect Report



LAURA SISSON VP INTERNAL ELECT

GO winning by default!

First of all, I would like to congratulate the rest of incoming exec for their success with the election and I look forward to working with all of you for the next 16 months! I would also like to thank everyone who came out to vote for all the other positions that actually had more than one person running.

I'm really excited to start as VP Internal and I'm hoping I won't disappoint!

The first order of business is that directorship applications are open! Go apply now! There are tons of great directorship positions available that apply to tons of different interests. A list with brief descriptions can be found at http://engsoc. uwaterloo.ca/www/directorships.php. I will also be posting descriptions outside the Orifice. If you have any questions about what any of the VPI positions entail, don't hesitate to contact me! The deadline will be July 28th at midnight and you can apply at http://engsoc.uwaterloo.ca/beta/society/forms/app dir i w09.php.

Finally, I would like to thank the outgoing exec for the past 16 months of their time and energy. I know that you all put a lot into your positions and we all appreciate your efforts. You guys did an awesome job and I hope we can live up to it! Patt, Chris, Amanda, A.J. and Erica: enjoy your new-found free time that you will experience in your final part of 4th year!

I hope the rest of everyone's term goes well, good luck with exams and I'll see you all in the

VPF Elect Report



SCOTT RANKIN VP FINANCE ELECT

Hey guys it's your new VP of Finance here and I would like to thank everyone who came out and voted it was a good race. I would like to invite everyone to apply for directorships, specifically the ones directly under me, such as Novelties Director and Financial Director. The Novelties Director is someone who volunteers to sell merchandise at our amazing faculty store Novelties. As Novelties Director you will essentially be

helping me manage Novelties and implementing new ideas. As Financial Director you will have the opportunity to assist me in my financial duties. This will be a great experience especially if you are planning on running for VPF after my

I look forward to reading your applications (Applications online at engsoc.uwaterloo.ca/ beta/society/forms/app_dir_i_w09.php).

Also keep an eye out for my new monthly logo contests for Novelties next term, I look forward to seeing your designs.

Feel free to contact me for anything at s2rankin@engmail.uwater-

VPEd Elect Report



SASHA AVRELINE VP EDUCATION ELECT

Hey B-Soc!

First of all I would like to say thank you to all of those who supported me and ratified me for the position! It is a great honour to be your VP-Education for the next 16 months and I will promise to do the best I can to represent your views on education. Just a reinstatement / update for you guys on what kind of steps I will be taking in the near future.

First of all over the next couple of weeks I will be working closely with the outgoing VP-Education, Patt Gillis, in order to ensure the transition is nice and smooth. and that I have established contact with all of the required people. I have already been in contact with Jeffrey Lipnicky, the A-Soc VP-Education and Andres Fuentes, VP-Education of Feds. Over the fall term, I will be keeping in close contact with Jeffrey Lipnicky in order to keep on top of all issues with PDEng Independent Review and the Co-op Working Group.

The first steps that I will be taking in the upcoming winter term are working with the academic rep advisors in order to compile a list of academic reps from each class and organizing about three meetings in that term with the academic reps in order to discuss general academic issues, co-op and PDEng. I will also be contacting the CECS department to find out the progress of the redesign of the JobMine system. Finally I will be discussing strategies and taking action with regards to the expansion of the exam bank.

I would like to ask everyone to apply for directorships! The applications will be open soon and will close on Monday, July 28, 2008 at

midnight. Please visit http://engsoc. uwaterloo. ca/beta/society/ forms/app dir i w09.php in order to apply! Directorships are a great way to get involved with the Engineering Society. No previous experience is required and no worries if you feel you do not know where to start. First of all, feel free to contact me and approach me in the next week if you have any questions and then come Winter 2009 term I will be there to help you out! Once you become a director you will receive a brochure that will guide you through the directorship, provide tips and experience of previous directors!

Some of the directorships I would like to stress a lot for the upcoming term would include the Educational Assistant, Co-op Representative and Résumé Critiques. The Educational Assistant directorship went unfilled for many terms; however, I would like to see this change in the Winter 2009 term. The role of the Educational Assistant will be to help me with some of the special projects that will be taken on in the Winter 2009 term and I would to love have someone assist me with my work! The Co-op Representative directorship is starting to gain more and more momentum throughout the upcoming term. First of all you become a student representative for the co-op working group. You also get to interact with other faculties' representatives, Feds VP-Education and CECS staff by being a part of the co-op student council! Finally since a lot of students will be looking to find a co-op job for the first time in the Winter 2009 term I am looking for students with excellent writing skills who can help out with résumé critiques!

Anyways, all I would like to say in conclusion is that I'm super excited for the next 16 month and can't wait to see your directorship applications! Till the winter!

VPX Elect Report



CARA KENNEDY VP EXTERNAL ELECT

First of all I really appreciate the support from the election and I look forward to holding the position of VP-External. I also want you to know that if you ever have any input or questions I would love to hear from you. You can e-mail me at bsoc vpext@engmail.uwaterloo.ca or you will often be able to find me in the Engineering Society Office (Orifice) next term.

Alright, with all of that being said, I just want to fill you in a bit more for my plans while I'm VP-Ex. Regarding directorships, I am personally looking forward to all of them but one in particular is FrontRunners. This is a high school engineering outreach program that I plan to expand upon. Instead of visiting solely the high schools

in our area, I would like to coordinate with students who are on coop outside of the region in order to promote interest in our field and our

I'm also excited about our Competitions directorship, both within Ontario and Canada. As I have heard, Waterloo has been underrepresented and since we are one of the largest Engineering schools in Canada I would I like to improve our attendance and success rate at these competi-

These are just a couple of the exciting directorships that I am involved in and if you would like any more information please visit: http://engsoc. uwaterloo.ca/www/directorships.php.

You can apply for any of these positions be-

In other news, I will also be attending my first onference in September and I look forward to representing all of us B-Soccers.

In closing, good luck with exams everyone!

Congratulations to the new EngSoc "B" Exec!

President: Cat Hay **VP-Finance: Scott Rankin VP-External: Cara Kennedy VP-Education: Sasha Avreline VP-Internal: Laura Sisson WEEF Director: Matthew Bester**



Rockin' Your Socks Off

MARK CREMASCO 3A MECHANICAL

On Monday, July 7th, POETS played host to the first B-Soc termly Rock Band competition. Seven teams entered the competition, including: I-Dub, Camper Damper, Tag Pump, Green Grass, Civil This, Scrotum, and Charles. The teams contained players of all different skill levels, ranging from first timers to expert professionals. The rules of the game were simple: on the honour system, play at a challenging level. Two teams would each play the same song, with the best completion percentage winning.

The first round had each team playing twice to decide who would advance to the second round. First round winners included Camper Damper, Tag Pump, and Green Grass, who all won once, and then Scrotum and Charles, who both won twice. With three teams having won once each, a sudden death match between the three was played.

After a gruelling battle, Camper Damper elected to back out of the competition.

With this, the semi-final teams were set: Charles, Scrotum, Tag Pump, and Green Grass. In the semi-finals, each team again played twice, promoting some intense competition. As things heated up, the teams began to crack jokes about the other teams in an effort to throw off their abilities.

At the end of the semi-final round, Tag Pump had secured a spot in the finals with two wins in the semi-final round, while Green Grass and Charles had both won once each. To clear this draw, another sudden death match was played between the two.

After an impressive streak playing almost all match-ups on expert, Charles was defeated by Green Grass. After a short deliberation, Green Grass decided to relinquish their position in the finals, based upon the performance of Charles throughout the competition, and with the inspiration of a trip to Roxxanes in mind.

And thus it was set: Tag Pump vs. Charles for the title. With only two teams left, it was decided that the final round would be a best of two match to the death

- almost literally. The two teams competed all on expert level, playing to Iron Maiden's "Run to the Hills". The match was a death match based upon the fact that neither team would be able to complete the song, and thus the team that could cheat death the longest would be victorious.

Charles, having been the second team into the finals, played first, managing to complete 49% of the song before falling to its wrath. Tag Pump, lead by

the "vocals" of captain Matt Tse, managed to complete 54% of the song, putting the pressure on Charles to match their performance – and match they would. Turning in a score of exactly 54%, Tag Pump would have to really push themselves to take victory

After an impressive attempt, the crowd was silenced as Tag Pump fell to the song



Michael Selisk

at almost the exact time that Charles had. However, when the tally came in, it was decided. Tag Pump managed 55% completion, taking the title as the Engineering Rock Band champs. Congrats to the team members of Tag Pump for their victory, and to everyone who came out. See you all back (and more) next term for more rocking out.

... You Mean Engineers Do More Than Study?....

A Review on This Term's TalEng

MARK CREMASCO

3A MECHANICAL

It is a common belief that engineers do nothing but go to class and study, and occasionally drink themselves stupid. On Tuesday, July 15th, Bomber played witness to the crushing of this myth as a smorgasbord of talents was put on display. Through the course of the night there were a total of 21 performances, totalling close to 50 performers. Acts ranged from full bands to pianists (or keyboardists as was the case), acoustic acts to dancers, and many wondrous things in between. The evening progressed as follows...

After a late start, the band Tibet got the evening started, playing a number of covers to warm up the crowd. This act was followed by Duy Pham, performing an electronic set controlled by his computer and layered with his many musical talents. This was followed up by an acoustic act featuring a wonderful female singer. To get the crowd a little more excited, an M&M stuffing contest followed the acoustic act, showcasing people's ability to put almost an entire large bag of M&M's in their mouth. For those interested, Dustin won, stuffing his gob full – and he can apparently fit A LOT in there. This competition was followed by keyboardist Kosta Tsafatinos (male, if you don't know him), performing his version of "I Kissed A Girl" By Katy Perry. Kosta certainly did it justice, drawing laughter and applause from

Next up was the skydancers, a group consisting of students that attended the EngSoc Skydiving event. They performed a rendition of their travels through the open air running and jumping around (it was slightly fairy-ish even). After the skydancers, two more volunteers were called up to compete with recorders (those awkward flute-like instruments you played with as a kid). After some improvising and attempts to play along to "The Final Countdown", Schooby (the MC for the evening) put his applause-o-meter to good use coming to the conclusion that Matt Hunt had won. Next up, the crowd was serenaded by Kristen H's acoustic performance. Her wonderful vocals and soft guitar tones encouraged the crowd to sing along, as her songs reverberated through the Bomber. Following Kristen, Dustin Verhoeve returned to the

stage, this time with a keyboard and Noel McGregor. Dustin showcased that he not only can stuff a lot in his mouth, but that he is also very good with his hands, playing a very nice piece.

Dustin was followed by Dan Westerbaan, "the guy with the crazy beard". Dan performed an acoustic act that was quite different than most as he also used guitar as something of a drum, tapping on it for effect. Following Dan was the third competition of the evening: maple syrup chugging. Seven volunteers were drawn from the crowd to participate in the challenge, which saw them racing in the BOAT-racing manner. After the 7th contestant backed out, one of the teams was left with only two members, but did not hesitate to finish all four glasses of syrup. After the four person team won, Matt Hunt continued on to chug the remaining half bottle of syrup. Kudos to him for being stupid - it made everyone else laugh.

After the laughter subsided, Cara Kennedy and Noel performed a lovely piece on guitar and keyboard, with both singing. This was followed by Matt Wong, who also performed some acoustic music for the crowd. After forgetting her sheet music, Cara ran off and returned at the end of Matt's set, and returned to the stage to perform a solo piece, which was a cover of Augustana's "Boston." Although shaking and nervous, Cara performed on her own for the first time, and did a wonderful job. Cara was followed by Chris Gunville, one of a select few 4th year students to perform, and played an awesome acoustic set. After Chris, it was time to have some fun. Devin and JD volunteered themselves, not knowing what lay ahead – the answer: two girls and a bag of make-up. Ten minutes later, they were almost as pretty as the girls that had worked on them. After a pause for some intense laughter, Jess and Schooby took the stage. Though it was Jess's first TalEng performance, she absolutely rocked it, singing with sweetness that would make any man (or woman even) wish they were

Following this, the crowd welcomed Sunny Ng to the stage who performed his own version of Britney Spears' "Gimme More". Although laughing himself through much of it, Sunny did a great job and was quite on tune with his backing keyboard music. After Sunny, the Tool Bearers and



Michael Seliske

Don Cherry's Wardrobe performs at TalEng

Tool made a grand entrance, and stopped to watch a few performances. To keep the mood going, a Frank's Hot Sauce chugging competition was done. While most competitions have winners, there is no winning for competitors when chugging hot sauce – the rest of us won by getting to laugh at them. After this had completed, the current EngSoc exec took the stage, performing a skit through which they introduced the new execs. Congrats to Cat (Pres), Cara (VPEx), Laura (VPInt), Sasha (VPEd), Scott (VPFin), and Matt (WEEF) for their success and taking a plate of cream to the face so well (except Cat who felt it appropriate to use MY shirt to wipe hers off).

Following this, the new execs performed a brief skit, and were followed off stage by the exit of the tool. To ensure the mood was kept light, a bongo-off was introduced, and saw two players madly try to play along to "Pour Some Sugar On Me" by Def Leopard. Once again, the applause-o-meter was brought out by Schooby, however it was decided that both contestants were equally as bad, and both deserved to win and lose. Following this competition was the most applauded and one of the most entertaining acts of the night. Peter Kelly, in his wonder and sexiness, performed his attempt at the evolution of dance - and wasn't too bad. Though not quite as practiced as the original, Peter pulled it off quite well, concluding his performance to the laughter and applause of the crowd. Following Peter was one of my personal favourite acts, Justin Lee. While it may seem like his name comes up a lot in my writing, it is for good reason – he is INCREDIBLE. Justin performed a few covers, and after winning the hearts of the crowd, was cheered into an encore performance, which he not only performed, but also secured his position as heartthrob in the eyes of the ladies.

Following Justin was the well-dressed Don Cherry's Wardrobe. The trio of third year Chem. Students performed a number of covers that had the crowd singing along and cheering, especially as they played their song displaying their dislike for PDEng.

To close off the night, Waterloo sensations Baby Buddha took to the stage. Although Rayman had his arm in a sling, he certainly seemed no worse for wear vocally, as the duo put on a great performance. As if to prove that his arm was no match for his talent, Rayman even defeated DJ Fobulous in a battle. The two closed out the night in style. Overall, the night went really well, with special thanks to Schooby for being the MC, Cara and Jen for doing an awesome job as directors, and everyone who came out to the event and had a good time (and did crazy and/or talented things). Get your talents ready, as this event will be back next term.





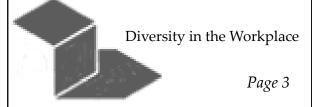


SOLDIER

BRINGING SATIRE BACK

VOLUME | ISSUE ω | SOMETHING WITH 69 IN THERE







Returning to B-Soc after a year-long absence!

Quantum-Nano Centre Nears Completion

New Building Makes History by Completing Not Behind Schedule

SUNNY NG 4A COMPUTER

Preparation is well underway, anticipating the grand opening of the new Quantum-Nano Centre. QNC broke ground a little over a month ago on June 9, 2008. A ceremony was held at the B2 Green to commemorate such an occasion featuring guests such as Premier Dalton "Broken Promises" McGuinty and Mike "I Can Has BlackBerry" Lazaridis. Originally scheduled to be completed in 2011, QNC is nearing completion and classes have already been scheduled to utilize this new building in the coming Fall term.

According to the press release issued by the university, this new state-of-theart building will feature two classrooms that can normally fit 20 students. "Here at UW, we take pride on being innovative. Following this mantra, we are using innovative ways to make the learning experience here unique. We'll be the first university in Canada to fit a class of 80 Nanotechnology Engineering students into a 20-student classroom," says a spokesperson of the University of Waterloo. In addition to the achievement in overcoming fire and safety capacity limit concerns, QNC will also be the first building on campus to not have its own lavatory facilities. "Recently, we've heard people on campus talk about how we need to focus more on sustainability. We want to show people that we actually listen, so we decided to make this compromise. Due to [QNC's] close

proximity to the Student Life Centre, we feel that it would be a waste of resources to create more washrooms when people can just walk to existing ones. Think about all the unnecessary lighting, electricity, plumbing and water that would go into adding new washrooms. Damn, I really don't want to think about that!"

The university administration hopes the QNC would set a new standard on how new buildings should be built. More emphasis should be put on spaces that allow greater enrolment, and less focus should be put into "luxurious" unnecessary facilities like washrooms. Such a vision would create sustainable and minimalist buildings.

UW Sustainability Project (UWSP) is pleased at the achievements of the project. "In addition to not wasting resources on creating amenities for students, the B2 Green is being kept in tact. Now we can go back to lying around there like we used to and do nothing," says a member of UWSP. UWSP was previously worried that with the disappearance of the B2 Green, they would not have a place to do nothing. "We were scared that we would actually have to start doing something productive."

Construction workers are delighted with the near completion of QNC. "And they said we were going to finish after Engineering V. Yeah, my ass!" says a worker who was sipping on a cup of Tim Hortons' coffee as he taunts workers at the Engineering V construction site. He tells the Tin Soldier that he spends his



days rotating between Engineering V, School of Accountancy and the Optometry building to kill time as he makes fun of the slow constructions.

Rumours have been floating on the Internet stating the possible "real" reasons for why the QNC has been scaled down since the plan was drafted. "Considering the [QNC] is no longer named after anyone in particular, I think it's an indication that some funding that were promised earlier may have been pulled," says the anonymous tipster.

"Am I surprised? How am I not surprised? Who gives a shit about BlackBerries when you can get the iPhone 3G now?" says an arrogant UW Engineering student who wishes to remain anonymous. "I mean look, it's a phone, an iPod and an Internet communication device... in one! And now it's 3G, that means it kicks 3 times the amount of asses!" He continues talking about the benefits of having an iPhone over a "boring" BlackBerry, "The best part is the applications. Look at this, a flashlight app! Can your BlackBerry turn its screen into a 3.5-inch widescreen flashlight? Yeah, I didn't think so!"

Acting Dean Rothenburg Comes Out of the Closet

MICHAEL SELISKE 1B COMPUTER

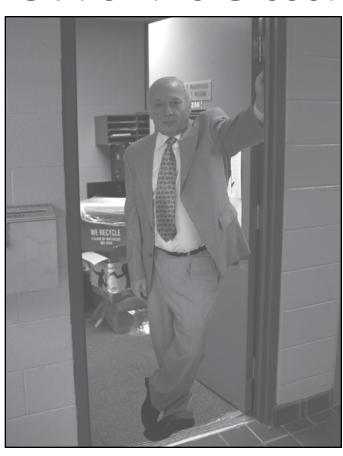
In a surprising announcement released exclusively to the Tin Solider, acting Dean Leo Rothenburg came out of the closet on Wednesday. In a surprise visit to the Tin Solider office, the Dean made an announcement shortly before leaving that he would be coming out of the closet. A small time after this announcement, he took a step outside of the closet that is the office of the Tin Soldier and was relieved to find his claustrophobia subsiding.

When questioned about the visit, Dean Rothenburg had this to say: "It's been something I have been meaning to do for a long time now and finally as Dean I feel it is my duty to do so." Upon entering the office, the Dean immediately began to feel the onset of claustrophobia and had to cut his visit short despite his interest and amazement of the advanced technology used in production. "I felt so insecure being inside know now what must the closet. I just didn't feel like I be done." was being myself," he says. Shortly after the

Many students who saw him enter the office were not surprised by the news, commenting, "if someone goes into a closet, they have to come out eventually" and "I knew it all along, the signs were obvious. A claustrophobic prone person entering a closet is not going to last very long."

The Dean was disappointed by the amount of space allocated by the previous dean for the Tin Soldier's production and has decided to scrap all plans for E5 and allocate all of the new space for the production of the Tin Soldier. He has also promised new printing equipment and an increased budget for full time staff as well as the requirement the paper be converted from once per term distribution to a daily paper. This revelation by the Dean was made shortly after coming out of the closet as he said "I never knew coming out of the closet would be so eye opening, but I

announcement word spread fast throughout campus and many students felt indifferent. "I don't understand why coming out of a closet is big news?" says one student, "There should be no shame." As the excitement subsided, life slowly returned back to normal except for, of course, the staff of the Tin Soldier who themselves would be coming out of the closet in the near fu-



Diversity in the Workplace



Paragraph One: In this section comment on and describe any diversity that you may have encountered in your work environment/volunteer experience/group project. Describe two distinct characteristics of individuals in your workplace, and provide an example of each. In your response, be sure to think "outside the box" as to how people differ - you may not use culture, race, age, and gender as your identified characteristics.

Between my co-workers and me, there exists a variety of nutrition needs and preferences. Maria grew up in Ukraine, and she was raised on a diet of meat and potatoes. For Maria, leafy greens seem a puzzling item to come across at a grocery store. Opposite to her cubicle and her eating habits is David, a strict vegetarian. Next to David works Kyle, whose diet suffers monotony at the hand of plethoric allergies, including peanuts, gluten, and orchard fruits. He suspects his genetic weakness is the result of his parents' kinship duality, as both a

breeding couple and second cousins. His siblings are similarly afflicted. Sarah is not a vegan, but her live-in boyfriend is, which makes her a vegan by association. She often brings in leftover eggless quiches and tofurkey pot pies for lunch. These tasteless dishes are mournfully picked at for a few minutes, until she offers them up to any consenting recipient, usually either David or the garbage can. She finds vegan cuisine bland and insubstantial; however, her distaste for meatless food is overcome by her unwillingness to learn how to cook. Todd easily weighs over three hundred pounds, yet he seems unable to limit himself to one McBurger for lunch. He devours a side of fries and sardonically Diet Coke every weekday noon. The only vegetables that make their way onto Todd's plate (or, more likely, a sheet of wax paper plastered in corporate logos) are those that have been heartily battered and fried. Sharing this diverse workspace are three indiscriminate omnivores, myself included. Another element of diversity is the level of physical attractiveness displayed by each individual: the width of the universe pales in comparison to this range. Sarah is a stone cold fox, whereas Todd is repulsive. Children cry at the sight of Todd.

Paragraph Two: Select one of your characteristics from the previous paragraph and demonstrate how this can be used to improve the working environment.

The aforementioned multifarious eating habits positively impact the workplace by exposing us all to new foods, and fostering amicable relations between co-workers. Moreover, Todd might have died of scurvy by now if David weren't coaxing him into the occasional salad and glass of orange juice. It keeps our office productive to keep everyone alive. Furthermore, it is cost-effective to keep Todd alive. If Todd

were to die, time and capital would be spent on hiring and training a new Mapping Analyst. Todd's death would lead to an unnecessary reallocation of funds. Also, if Todd were to die at the workplace, the office would have to borrow a forklift from the yard to remove his heavy corpse from his workspace, which is also a strain on company resources. Therefore, within the corporate context, it is good that he

is still alive, despite contrary opinions that propose anyone as obese and grotesque as Todd should not be permitted to live in civilised society.

Eidolon Astral Double

ANONYMOUS

I remember, watching crows Some time ago, thinking Why do they gather? What secrets do you tell In your irritating calls?

They never left me alone,
They followed me as long as I remember,
I can't get the memory out of my head.
Even in my dreams, they haunt me.

I remember the first time they came.

They came for me alone.

A menacing flock,

Come to peck at the remains of my mind.

Their dark feathers sharp as razors,

Hatred and starvation in their eyes.

They could have been angels
Come to take me from this life,
But for the sharp talons
And hurtful grace
Grasping, tearing at my soul.
I remember.

//

No. They did not take me
They left me here in the suffering
The pain which they had caused me.
They took from me all my world,
All the joy,
All the worldly possessions.

//

Now, wake up, for they come again. Forget the pain, let it all slip past you The chance for dawn has come,
And is now gone.

Let me sleep. Wake me no more. Let me forget her name.

Afternoon Moon



MOINKEY SELIKSWINE 1B COMPUTER

The Afternoon Moon competed in a cross country race recently with their 100% crude oil powered vehicle maintaining a 3rd place position. Team members were thrilled with the performance although they could not see the car most of the time as the thick plumes of smoke emanating from the rear was very difficult to see past.

The competition is a cross-country trek with teams only being able to power their cars by crude oil they drill themselves or get from local oil fields en route. The University of Waterloo sent twelve students to Vancouver to star the trip – currently a strong contingent of four is maintained as eight of the students were sent to hospital with unknown respiratory illnesses. The car is currently in Alberta where they will fuel up and get ready for the long boring trip across the prairies.

The course which started just outside of Vancouver has taken a somewhat strange route across B.C and Alberta as most cities have banned the cars from driving through stating environmental and health concerns.



The formidable Afternoon Moon in action!

The Tin Soldier caught up with the head of the team and asked why they do this every year, despite the growing trend of green vehicles. "Unrefined oil is much cheaper per unit volume so if you can get your car to run on it while still using the same amount as refined gas, then you are saving money. Who cares about the environment, the world revolves around money and we are just trying to help people out."

The competition is very easy to spot as the thick plumes of black smoke are visible for kilometres all around and will cause any clear day to become cloudy without much effort. The team hopes to gain on the leaders and use any excess oil left over to create oil slicks on the road Super Mario Kart SNES style. *The Tin Solider* will have exclusive coverage of this event as news comes in.

So You Didn't Get A Job First Round, Eh?

AXEL COOLBODY & BLAZE DIXONJUGS
À-LA-MODE-BANDITS

We know that as Engineering students, you folks don't really need any fashion advice, but there's nothing with improving on your solid foundations. Let's really take things up to the next level so that you can score the jobs and land the guys/gals. Kudos, by-the-way, on your continued sporting of free res, campus rec, and event shirts; they really are the best way to show yourself off. Well, onto the fashion advice.

Blaze's tips for females:

So ladies, you want to get all the jobs, all the boys, and ALL the candy?? Look no further! Us here at À-La-Mode-Bandits are here to help you pull out all the fashion stops!

So you obviously don't have a job yet because you did not show enough boobs! Come on girls, we are in Engineering; it ain't hard to attract attention. Choosing an outfit that shows off your ASSets is a sure winner. With enough cleavage, you'll be working the job of your dreams in no time.

Before you start your job you are going to have to make it through the rest of the school term. Everyday fashion is pretty hard to get wrong. Take a look around the Engineering halls? You think these people need advice? I might as well just stop writing! Seriously though ladies, you're really making an impression with your sweatpants but let's step it up a notch. Plaid pyjama pants really send across the message that 'I'm hip and a cool cat!'

Now that you have a job and you're turning heads at school, let's go to the bar! Ac-

tually on second thought, you are already sporting your hip running shoes with your hair in an ever classic pony-tail. Don't forget to trash all your make-up!

Axel's tips for males:

Guys, let's face it, we've got the fashion stuff down. But, how do we really stand out during interviews? Well, that's where Mother Nature comes in. Employers really decide on the best candidates by the size of their packages (oops, I forgot the word application before packages, oh well!) So, you're going to want to wear spandex, and lots of it. I highly recommend biking shorts, since they don't beat around the bush. They really let an employer size you up!

And you know what, you might as well just continue that look into your regular school day. Although, I would recommend wearing your biking shorts with thick army-

boots and shin-high black work socks. As for your top, most of you have been doing the right thing of buying oversized shirts, but you might want to give "I'm with stupid" shirts a try. They're clever, and really help encourage literacy.

And of course, if you're going out clubbing, you'll want to throw on a XXXL hooded sweatshirt on. Wal-Mart brand is best, as you know. It might get a little chilly, so put some ripped jean shorts on over your biking shorts. Make sure that the length of your jean shorts is less than your biking shorts so that you see the biking shorts too! But, what about accessories? Lots of metal!

Putting it all together:

Keep up all your good work everyone! Remember, attract only sexual attention and be sure to dress warmly!

Please Don't Stop the Music

Music is My Girlfriend



SUNNY NG 4A MUSIC SNOB **WANNABE**

As a narcissistic son of a bitch, it's typically expected to hate on everything that is either current or mainstream. The number one rule of thumb when being a music snob is that no matter how good the music is, if it was created within the last decade, it doesn't compare to any music that was created before that (rule #2 is if a song is recent, then if it receives at least one spin on a non-college radio station it can't be

If a song can be heard nightly at a club, you cannot like it. I mean c'mon, as a music snob, do you really want to associate yourself with the common teenager by liking the same music? Gross! By indicating your love for older music, you can both show how knowledgeable you are with music history and how sophisticated your music dictates you to be. By shaking your ass to Lil Wayne's "Lollipop", you show how low-class you are, so stop embarrass-

So now you want to be a real music snob. Don't know where to start? Look no further. This article covers all the bases, so you can look smart and annoy the rest of your music class. For starters, here are some styles and songs you should familiarize yourself with if you want to show off how much you know about music:

Minstrelsy: Stephen Foster "Massa's in the Cold Ground"

In today's world, the only thing that gets people off easier than Brangelina adopting another kid or finally giving birth to one, is being 100% politically correct. By being able to identify and condemn minstrelsy songs as music that Caucasians used to make fun of African-Americans can earn you a +2 in music snob cred!

Honky Tonk: Hank Williams "Lost Highway"

If your friends have a tendency of dragging you to The Silver Spur (or God forbid, Dallas), you might want to familiarize with one of the pioneers of honky honk style music and country music icon, Hank Williams. Williams has made incredible contributions to the genre and as a music snob, it is your duty to recognize that and bash how Gretchen Wilson and Toby Keith were responsible for taking country music 20 steps backwards.

Blues: Blind Willie Johnson "Nobody's Fault But Mine"

The fact that he made himself a guitar with a cigar box and was a pioneer in slide guitar playing is bad-ass. This song was also later covered by Led Zeppelin. Need

Girl Groups: The Ronettes "Be My

Before there were TLC, En Vogue, SWV or even the Supremes, one of the first girl groups to enjoy commercial success were the Ronettes. With the help of producer Phil Spector, the work utilizes the concept of the "Wall of Sound." Before Madonna became a MILF and the rise of the international singing prostitutes – the Pussycat Dolls (in the words of Borat), the Ronettes and other girl groups at the time used sex appeal to sell records.

Surf Rock: Dick Dale "Misirlou"

The next time someone identifies this song as "that song from Pulp Fiction" or even worse, the Black Eyed Peas' "Pump It", quickly correct them and taunt at their ignorance. It definitely would earn you some mad music snob cred points.

Folk: Bob Dylan 'It's Alright, Ma (I'm Only Bleeding)'

It's Bob Dylan, c'mon.

Soul and Funk: James Brown "Please, Please, Please"

Obviously, I was going to mention the Godfather of Soul, what kind of a snob wouldn't? Next time somebody complains that a song sucks only because its lyrics are bland, just cite this perfect counter-exam-

Punk: Patti Smith "Gloria"

Fuck Katy Perry and her faux lesbianism, go for the real deal. With its provocative lyrics, by saying that you like this song, you can get respect from the LGBT community as well.

Hip-Hop: ???

I'll have to get back to you on that one. My Music 140 class with Jesse Stewart is covering this next week, so unfortunately I'm not able to regurgitate the information about hip-hop I got from that course to you quite yet. Stay tuned for my next column for that information!

June and Don Hitched at Last



Last week June Lowe and Don Fraser got hitched. The connection wasn't strong at first, but eventually a knot was tied... around the tow bar to give it extra stability. The link was rusty for the first few days, but

with the help of a little lubrication, friction between them soon evaporated. We asked Don what kind of lunette ring he bought for June, but he informed us that he didn't stick to tradition and instead bought her a tow-ball and bracket to complete the union. They better hope they don't hit any rocky patches, or else their bond might break off, but for the moment it seems to be smooth driving. They sure make a cute couple!



Perspective of a Heterosexual **Engineering Student**



While the following presents an alternative way of life, it is not meant to represent all of the "straight"

Many people think that I'm gay; probably just because I'm in engineering, and I'm a guy. I mean, it's totally to be expected. We're a group of mostly guys that hang out with other guys and love to act really macho. I mean, the public does look to people like Scott Rankin to set examples for other engineers. With his girly ways, how can people honestly fathom the thought of a guy in engineering that actually likes the opposite sex?

Well I have news for you! Although I get really

close to girls, I often have to tell them that it's okay that I touch them because I'm gay. Really, deep inside me, I feel these tingly feelings when I do. Not because I'm actually excited at their new Dolce & Gabbana accessories, but because I want to pursue more than just friendship with them.

Yes guys, I'm straight. There, I said it. I love the female figure. After writing this article, I'm sure people will be very surprised and I'll become the punch-line of many jokes. I expect that most girls will be okay with my decision, but many will act awkward around me since they won't have encountered a straight guy before. Yes guys, this means I don't want to pursue anything more than friendship with you, so please keep your hands off of the goods (yes, Peter Kelly, I'm talking to you). You can thank Cara Kennedy for taking me off the

Our society and legal framework are getting progressive, I have to say. Thankfully, I do have the legal right to get married, and I'm very thankful for that. I'm proud of who I am, and the fact that I am different. I would encourage any guy in engineering who might be questioning to go ahead and follow Katy Perry's advice: kiss a girl, you might like it.

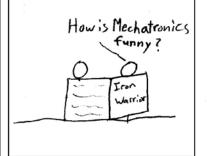


LIFE IN ENGINEERING

Reading the IRON WARRIOR.







Anonymous



THE TIN SOLDIER RECOMMENDS

University

University of Victoria Victoria, BC

A lot more parties there (which really is not saying much)

What you do in one term in UW, you do in one year there

Really easy

It's small

In a warmer climate

Has lots of girls

University

University of Western Ontario London, ON

School spirit
Parties
Beautiful campus
What more do you want?

University

University of British Columbia Vancouver, BC

Large beautiful campus with lots of trees (unlike UW)

Has a nude beach next to it Offers more programs

University

Ryerson University
Toronto, ON

It's in the heart of the city, with Dundas Square, Eaton Centre, Bay Street - very lively and real-life feeling

Students are not excetionally bright, but it provides room for learning to deal with all sorts of people, plus you can look smarter

Less competitive, more group focused Ethnic diversity More girls

University

University of Ontario Institute of Technology Oshawa, ON

School is pretty small, hence its easy to know about everyone in your program,

The profs are there to help you pass, not fail (probably because the students really need it)

Generally nice people Laptop program to help in taking notes Food is pretty bad though

University

Queen's University Kingston, ON

Spirit

Nice looking campus Lots of diverse clubs

University

McMaster University Hamilton, ON

Perfect distance from Toronto Hamilton has GO Transit connection Food is amazing

Flagship health science program Diverse nationalities of students Cheap

University

Wilfrid Laurier University Waterloo, ON

Smaller class sizes

Amazing leadership opportunities

Be on a first name basis with all your rofs

Very short walking distance between classes

Campus Colouring

The E2 fountain is a carnal treasure trove. This semester alone I've seen the carcasses of two squirrels and a bat floating in there. I didn't find all three of them hanging out in there at the same time, but still, those discreet events made me recoil each time. What would you prefer to find in there? Candy and teddybears? Sex, drugs and rock n' roll? The rainbow in plastic balls, à la McPlayplace? Do you want to dive into a pool of gold coins, like Scrooge McDuck? Perhaps you appreciate the morbid theme. Maybe you'd just like to find some more exotic cadavers in there, like deskabears, sloths and skrifters. Bust out some crayons and make your wildest on-campus dreams come true! It would've been a little too tedious to edit out the fountain squirts in Microsoft Paint (image editor of champions), so just work with that. I'm sure you can all come up with clever and unique things that shoot streams of fluid. Anyway, E2 could use its own Manneken-Pis.



TIN TRIBUNAL

"What's in your closet?"

Michael Seliske, 1B Computer



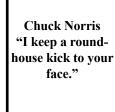
Stick Man
"I'm a stick
figure, what do
I need a closet
for?"



Bert
"Not too long ago
it was Ernie..."



Wendy Williams "R. Kelly."



Every engineering student "My PDEng mentor."







Comp Eng 2012 Run Past Elecs in Soccer Victory



Computer and Electrical Engineering are always coined by outsiders as the same course. In first and second year I would agree that this is mostly true, but the 2012 Computer and Electrical classes wanted to distinguish themselves in more ways then just the courses they take. The two classes are very different and a portion of this was proven on the soccer pitch of Waterloo Park.

On Friday July, 18th the Computer and Electrical Engineering classes of 2012 took to the field to try and prove who was superior. Complete with an official referee and two profs per side the game was well attended by both classes. The Computer Class managed to convince the Colombian sensation MSci 261 prof as well as the analytical mind of their ECE 103 prof to play

for them and the Electricals were able to get their Calc and ECE 100 profs. The game began at an intense pace with everyone hungry for that first goal and when it came the comps were celebrating.

With two 45 minute halves and many subs, both sides tried valiantly to take home the victory. With the score at half tied 4-4, both classes knew they had to turn it up a notch in order to take home the win. The Computer class' cheerleaders, despite lacking a rhythm and any variety in their chants, cheered and

screamed their team to a 6-4 victory over the Electricals. The Computers dashed any hopes of the Elecs getting bonus marks in their ECE 100 class which was promised



by Prof Shat-Shat if they had brought home the win. Both teams had a large number of players and a large cheering section and the organizers would like to thank all of those tle as ECE 2012 soccer champs.

who came out. These two classes look forward to a rematch in the Fall 2009 term where the Comps will look to hold their ti-

June Lowe Throws Party of the Term



Friday July 4th may have seemed fairly quiet in the city of Waterloo, but travel 10 minutes outside of the city and all one could hear was pumping beats and a loud party atmosphere coming from a quaint country house along the river. July 4th was of course the famous June Lowe Summer Strawberry Daiquiri party and the weather could not have been more favourable. The temperature was a warm 26 degrees and the sun was shining brightly on the many students who rode their bikes 18km to her house. About 20 students showed up for the annual event comprised mostly of her first year classes and a few T.As. Don Fraser, Prof Harder, Fiona and June's neighbours also made an appearance, rounding out total attendance at around 30. The Daiquiris were flowing like water with batches being created one after another almost all afternoon. Don had to inspect each one however to make sure they were "Don Strength", with most batches receiving a bit of an extra kick thanks to Don's Secret Stash. The BBQ was fired up shortly after everyone arrived

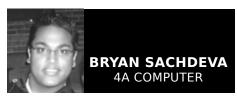
and there were wieners and hamburgers for all, as well as numerous amounts of munchies supplemented with beer. The Potato canon was dug out of the garage and although no one actually hit the target, it provided a few hours of old fashioned fun. Stories were shared about various groups of her students helping her to build her house and how they conquered some of the tougher challenges of building a house on your own.

After meat and roasted potatoes were severed a small birthday celebration was had for George the neighbour who was turning 84 that day. Some students decided it would be fun to traverse the woods and take a dip in the river, but floaties in the water prevented many from taking the plunge. A few did brave the unknown and had a great swim, commenting later: "What is everyone's problem? The water was great!" After a great afternoon many students retired to their respective cars and bikes and returned to campus for semi formal and other Friday night activities that they had already gotten a head start on (DDs were aplenty). If you missed out this year and are around for the summer term next year, make sure to make an attempt to participate in the event of the summer at June's place.

Don Fraser is enjoying his "Don Strength" Strawberry Daiquiri in the sun.

WOAH!

Weekend of Awesome Happenings



Upon first read of the title, most people will reminisce of an early 90's show called Blossom (this may be too old for some of you; which means you're too young for some of me). But really, I'm referring to the plethora of events that took place two weekends ago, starting July 11th. It all started with a GradComm PubCrawl, continued with a scrumptious charity breakfast on the following Saturday morning, the Engineering Society's Joint Council Meeting in the afternoon, a POETS Pantastic Pig Pyre (P**4) during the evening, and the summer Frosh Week Leader Retreat from Saturday night to Sunday afternoon. Needless to say, the weekend was full of fun stuff to do.

We kicked things off with the third and final (official) PubCrawl of the term. This had an excellent turn out, especially considering the number of off-stream friendlies that came-along. Besides the outstanding attendance, stops included the usual but also took us to Mongolian Grill this time as well as much loved Vault. I never thought I'd use the words love and Vault in a sentence together, but I can't help but love them. They gave us a free bottle of Grey Goose with all the fixings. Of course, it was exclusively for fourth-years. If you were a fourth-year and didn't get any, you can blame Ugo Landry-Tolszczuk (he won't remember anyways, and will assume

For those with quick recovering abilities, there was a delightful Charity Breakfast served up by Erica Waugh and her fabulous team of volunteers on the following Saturday morning. They served homemade love in the form of muffins, eggs, ham, bacon, potatoes, and fruit. The money was for the Waterloo Region Food Bank, and besides, who doesn't love breakfast food?

While some chose to go see the CFL game and the Roughriders' eventual win (boo, but at least it was a loss for the Tiger-Cats), the rest of us chose to attend the Engineering Society's annual Joint Council meeting. We made quorum (minimum attendance quota) for both societies, which means that we got to talk about and vote on some important issues. You can read up on what the issues were about in the Exec Reports found elsewhere in this edition, but there were important decisions made about Voting, Honorary Members, the EngSoc Fee, and the future of EngSoc. It was long, but informative and entertain-

Subsequently, there was a boar roast (no, we didn't torch the Arts' magazine or their mascot). We followed the tradition of having a roasted pig brought in and devoured it. The pig alone was great, but the food was fabulous thanks to our tireless chef Waugh (Erica). Her potato salad is enough to turn the most stubborn of frowns upsidedown. It was a fun time in POETS. for students of all ages, and featured fun games like Tumbling Monkeys, Killer Bunnies, and real Bingo.

That night, frosh leader events took place and lasted until Sunday afternoon. It was a great way to integrate the two new colour groups: Light Purple (the winning colour) and Light Brown. It was also a great time to try out plenty of new activities like the "slow bike race", the "100.0 meter dash" and "strategy squares". Of course, there was a trial Scavenger Hunt, as well as even more activities the next day.

Big thanks go out to the A-Soc friendlies, grads, and everyone for coming out to the last PubCrawl of the term. Our endless love goes to Erica Waugh for being a trooper and cooking more food in one weekend than some people do in their entire lifetime.



The roasted pig is being prepared for P**4.

ENGINEERS WITHOUT BORDERS BLOGS

Finance in Africa: Ben's Bus

SAM VAN BERKEL

ENGINEERS WITHOUT BORDERS JUNIOR FELLOW, 2008

"I forgot to tell you the name," he says to me, "it's going to be called Time." In a country where punctuality is rare and most forms of transportation simply leave when they're full, Ben has a vision for something different. Time is the name of his bus and it does just that; leave on time.

I first met Ben when he wandered into my office on business for the local government where he works as a development planner. Ben landed his job by starting as a volunteer completing the year of National Service, which all post secondary graduates in Ghana are required to undergo. When the former planner left for another job, Ben's motivation and willingness to work hard made him a clear choice to fill the position.

Ben dreams of starting his own bus company called Time.

Since our first meeting Ben and I have got together several times, mostly to talk about his dream: Time. To start, Time is a single coach-style bus that holds roughly fifty people. It makes a single one-way trip between the Ghanaian cities of Tamale and Wa (a distance of about 200 km) each day. "There are always people lined up to go," he tells me, "it'll be easy to fill the bus." Currently the route is served by government buses, but service is often limited and passengers can only speculate on when the

bus will depart and arrive.

Government transit (and most transit for that matter) is often erratic and unreliable.

The cost of the bus Ben wants to buy is about 40,000 Canadian dollars. Based on what existing travelers pay, he expects to be able to charge seven dollars for a one-way trip. Even after paying for fuel, maintenance and the driver's salary, Ben estimates he would be able to recover the initial capital cost within a year.

So what's stopping him? "Banks in Ghana won't even consider start-up businesses," he explains, "If I could get the [start-up] money I would start the business tomorrow." Ben, like the vast majority of Ghanaians, has no way of obtaining credit. Although his business requires a relatively large capital input, even the country's smaller scale would-be-entrepreneurs are handicapped because they cannot obtain loans. Those who can obtain loans frequently pay annual interest rates of twenty-five percent or more.

Although the government and NGOs provide a limited number of agricultural loans to organized farmer groups, I've met countless farmers who explained that they did not use chemical fertilizers on their crops because they could not afford the initial cost. Although they knew they would be able to recover the investment at harvest time, the farmers had no way of obtaining the initial capital. Similarly, the women's rice processing group that I work with would be able to produce high quality rice

and sell it at more than double the price they currently receive if only they could afford the right equipment. It's a story that gets repeated over and over again.

I asked Ben why he wants to start his business. He admits it partially has to do with his own financial security, but explained that it's about more than just money. "My business will create employment," he tells me. "I'm going to be helping to employ drivers, ticket sellers, mechanics and accountants." Perhaps even more importantly, he's going to be providing a much needed service: reliable transportation. This service has spin-off benefits for the rest of the economy. Instead of waiting around for a bus that might never show, people will have extra time to devote to work. At the same time, others will find it easier to do business in Wa knowing that they will be able to obtain timely transportation to and from Tamale (a major business centre).

Before coming to Ghana, the idea of starting or investing in a business had never crossed my mind. Business, I thought, was for those who only care about making money. But more and more I'm realizing how much business is linked to development. For now, aid is still critical. It provides the engine for much of the country's social development, including health and education. But business means employment and government tax revenue, both of which are essential if Ghana ever hopes to escape its reliance on foreign aid (and all

that it entails).

Kiva.org, a Microfinance Institution, helps deliver loans to people like Ben so they can start and expand their businesses.

My perception of how Canadians can help the developing world has shifted. Giving money to reputable NGOs and lobbying the Canadian government to end unfair agricultural subsidies and trade barriers is important, but I think doing business in Ghana is equally as important. Those of a more philanthropic inclination can lend their money to micro-enterprise projects through Kiva.org or other organizations, which is a positive start as the growth of small business is most likely to benefit the poor. At the same time, I think there are opportunities for real profit as well. Many are quick to point fingers at those who make money in the developing world, but making money almost always means employing people, and to me that's positive. Everyone is familiar with stories of one multinational corporation or another, committing unspeakable acts in the developing world, but I think these are the exceptions, not the rules.

The developed world is full of accessible capital, the developing world is full of opportunities and ambitious entrepreneurs like Ben; somehow we need to bridge the gap.

(This article has been taken directly from Sam's blog, more stories of his experiences can be found at http://hesghanaway.blog-spot.com/)

Finance in Africa: Banking in Chinteche

SYLVIE SPRAAKMAN

ENGINEERS WITHOUT BORDERS JUNIOR FELLOW, 2008

This post is about how the average rural Malawian can deal with finances. It has a lot to do with the Waterloo chapter's term theme – micro finance. This is just a broad overview of how people keep money, the banking situation, and the loan situation in Chinteche. Feel free to post, email, or call me with questions! Questions can be anything...from where does your family keep their money, to how is the NGO sector benefiting or hindering the rural poor? Alright, here goes...

Chinteche

Population: 4-5 thousand

Features: the midpoint between Dwangwa and Nkhata Bay (which are almost a day's drive apart). Basically truck/bus stop. Lots of bars, restaurants and places to sleep. Also a good-sized market, but things are pricey, since most things (besides some crops that are locally grown) come from Mzuzu, the nearest big city.

Banks in Malawi: NBS, National Bank, and Standard Bank

Nearest banks: There is only one NBS bank between Mzuzu and Salima (which are over 500 km apart), and that's in the

town of Nkhata Bay (40 km away from Chinteche). Mzuzu and Salima both have all three banks.

Cost and time to nearest banks: Mzuzu --- 2-3 hours by mini-bus or coach, MK750. Salima --- 6 hours by mini-bus or coach, MK800 or so. Nkhata Bay --- 1 hour by mini-bus or coach, MK350.

This isn't realistic for most people. That's a lot of time and money spent just to go get money. Also, banks have a minimum amount that you need to keep in them, usually a few thousand kwacha, which is definitely not something most people have lying around.

So who uses these banks? Mainly government and NGO employees. Maybe some businesses that are doing well, but generally small business people don't use banks

Where do people put their money?

Ask the post office to hold their money. I think all trading centres have post offices, and you can ask the post office to keep your money safe. However, they can sometimes be jerks, and if you want to take about more than MK2000, you need to write a letter. Yeah...a lot of people can't even write!

Ask a trustworthy old person to keep your money. The elderly are much respected in village life, so you can trust that they won't have your money stolen. However, the problem here is, if they die suddenly...where did they keep your money?

Keep it in your house and hope for the

How do people get loans?

Informal lenders, called 'catapira' (I may have the spelling wrong here, I'm not sure). They charge usually about 50% interest, which is ridiculous! I would compare them to loan sharks in North America, but maybe involved in less drugs. They're usually just regular people who have saved up a lot of money, quit their jobs and became catapira. They expect to be paid on a monthly basis, and if you miss a payment, then interest increases. If you miss a lot of payments, they'll take your furniture and things.

If they have a job, many places have it set up that employees can ask for loans that are automatically deducted from their salaries. For example, the Vizara rubber-making factory has this set up. For every loan you take, they take MK1000 off your salary every month. However there is a cap for some reason, so you can't take a loan of more than K5000.

NGOs in my area making loans? I only know of one, and I haven't found out very much about it yet. It's called

Thincom, and operates in Nkhata Bay. They do business skills trainings before they give out their loans. They expect 50% interest, and they expect payment on a weekly basis. That's all I know about this organization... I will try to find out more!

Find a friend who has more money than you! This obviously doesn't work well for large loans...but if you need a bit of cash, find someone who has a job, and if they like you, you're in luck! Often, this is more of a form of charity, and the ones giving the money call it a loan so that their friends can keep their dignity.

Challenges: I'm sure you've picked up many, in just reading the above descriptions. It's really hard for people to get a good chunk of money at a decent interest rate. It's nearly impossible. More often than not, when people need money, they go to close relatives or good friends. I feel that the only people able to get loans are people with a bit of money already, even from the NGO sector.

(This article has been taken directly from Sylvie's blog, more stories of her experiences can be found at http://www.sylvieinmalawi.blogspot.com/)

Dangling *Pointers;

Dazzling Dan from Imprint:

Let's make peace and celebrate your partial defection to *the Iron Warrior* at Williams Coffee Pub in the UW Plaza this Friday (July 25) at 7pm. I would love to continue to admire your fine XSi, from where we left off at EngPlay. Flickr me if you are down for it.

Hey prospective cutie who seemed so lost,

You needn't worry about the lack of girls in Engineering. Who needs girls? Fraternity love is abundant in the water at Waterloo. Although FOC tells me that I shouldn't make passes before classes, but there's no harm done in making an earlier-than-usual reservation, is there? I'll be looking for you during Frosh Week and I might even let you wear my leader tag.

THE IRON WARRIOR RECOMMENDS

TV *It's Always Sunny in Philadelphia*



KEVIN LING

I'm not sure if this show has come to Canadian television networks yet, but it's around on the web. The show is about 3 guys and a girl who run a bar. Albeit the show is probably an over glorification of the bar owner's lifestyle, the group runs into some pretty interesting problems throughout the show. For instance, in one episode they decide to start catering the bar to minors and rip-off the high school kids by overcharging on drinks and watering down beer. Somehow through a mess of events they all end up having dates to the prom. In the second season of the show, things get even better with the addition of the father of two of the characters, played by Danny Devito. It's Always Sunny in Philadelphia is full of comic gold and is definitely worth the watch.

CD If You're Feeling Sinister Belle & Sebastian Jeepster



STUART PEARSON 1T CIVIL

Rarely does one find an album these days that is so consistently strong without cheap filler. Sounding a bit like Simon & Garfunkel-meets-90s-Britpop, songwriter Stuart Murdoch delivers

Web ComicWhattheDuck.net



SYLVIA WU
1B MECHATRONICS

What The Duck is the photo-enthusiast's web comic. After a few strips, the shutterbugs in Engineering will be congratulating each other that they chose the path to obtain an iron ring, instead of making a living shooting cranky brides and... drawing web comics. After a depressing 8 hours of academia, a strip of WTD can always boost one's spirit and discourage the thoughts of dropping out of Engineering and pursuing the seemingly-glamorous path of photography. The only drawback of this comic is that the artist seems to be a Nikon-fanboy.

July 18, 2008 marks the 2 year anniversary of What The Duck. Since its birth, the web comic has been picked up by various newspapers across North America, including the Toronto Star. Congratulations!

some of the most wonderful lyrics and melodies that I've ever heard. If You're Feeling Sinister is my favourite album of all time, and feels much like an old friend in that it makes me feel better no matter what mood I'm in. To top it all off, they're Scottish. The album may be over twelve years old now, but it's absolutely timeless and I highly recommend it to anyone with a pair of ears and forty minutes to spare.

Video Podcast

Midwest Teen Sex Show www.midwestteensexshow.com



EVELYNE RUSSELL
3A ENVIRONMENTAL

Fun for all ages! Okay, fine, it's got "Teen" and "Sex" in the title, so you might feel like a creeper watching their videos. I can't see you, reader, but even if you're not a teen, you're probably a virgin. You could learn something from these videos. Regardless, even if you've had more sex than a Vegas whore with beer-flavoured nipples, you'll get a kick out of the myriad expressions for naughty bits.

CD

All of a Sudden I Miss Everyone Explosions in the Sky Temporary Residence



KEVIN LING 1B ELECTRICAL

This album was recommended to me by a good friend after I mentioned that I was really enjoying Mono (the band, although I'm sure the disease is fun too). Explosions in the Sky is classified as part of the Post-Rock genre and is an instrumental rock group which has the perfect

Coffee Shop Chain

The Coffee Bean & Tea Leaf



SUNNY NG4A COMPUTER

For those of us who are lucky enough to work in California for co-op, be sure to check out The Coffee Bean & Tea Leaf. As much as I'm a Starbucks whore, I have to admit that The Coffee Bean's Original Ice Blended drinks kick Starbucks Frappucinos' ass any day! My personal favourite is the Black Forest Ice Blended which consists of coffee extract, Dutch chocolate blended with ice, milk, chocolate-covered espresso beans and maraschino cherries. How awesome is that? Other varieties include Mudslide Mocha, and Crème Brûlée. You can even make any of their drinks "extreme" by doubling the caffeine content and coffee flavour. For the non-caffeine addicts, you can try the Malibu Dream (Strawberry and Banana juice blend) or Pomegranate Blueberry varieties. While they may not be as conveniently located as Starbucks (typically, I had to drive by 4 Starbucks before hitting one The Coffee Bean), the drive is totally worth it.

blend of harmony and rhythm. One of the first things that hits you about this album, which is possibly the basis for the bands appeal, is how smooth and crisp it all sounds. After the initial build up on the first track, comes possibly the most soothing and clean sounding guitar lines ever recorded. This is a great album to listen to while taking a nap or relaxing. Every song paints an image of true beauty which leaves you in a very serene and peaceful state.

The Iron Warrior Staff Appreciation Corner

SUNNY NG

EDITOR-IN-CHIEF

I think I've already praised myself enough in my 1628-word self pat on the back editorial, so it's time for me to save at least a corner of the paper to thank my wonderful volunteer staff. Without sounding way too cheesy, I definitely wouldn't be able to produce such a great paper without them. They came up with many great ideas for the paper that we ended up using. It's been a great experience working with all of them and we've been through some rough times and tight deadlines. So I would like to take this opportunity to recognize their achievements.

Bryan: I really enjoy reading your submissions, you always manage to make everything sound more interesting to read, even when it's about something like Maple. Thanks for taking on writing so many articles, it was nice to

have a different spin on things.

Cherry: Thanks for taking the initiative to come help me out with layout during production weekends when I was really short on time. It definitely saved me some time.

Dawson: Whether it's a serious article or a satire article, you always come through with something that's worth reading. Thanks for making IW more interesting.

Evelyne: It's too bad we were not able to put most of your outrageous ideas on paper because I'd probably get in so much trouble, but at least they made our meetings hilarious and interesting!

Erica: Your fashion articles with Bryan are always fun to read. Thanks for submitting recipes, and introducing me to random things that I wouldn't have otherwise heard of.

Ivan: Despite my constant bashing on anime during our staff meetings, it was nice to have your articles in the paper! Thanks for

> helping me man the IW booth at various events when I needed people!

Kevin: Thank you so much for taking the initiative to help me out whenever I needed, such as staying for production weekends. I look forward to next term to see what you come up with when you take over as Editor-in-Chief.

Mike: You're always around when I need someone to help me out to take pictures and writing articles. Thanks for your hard work. Maybe someday the Editor's Award plaque will get updated, who knows?

Om: It's always great to work with someone who is actually very passionate at what they do, and you are no exception. Thanks for be

Rob: Despite sometimes there were errors in the chess puzzle, you were always there with your crossword. Thanks for helping out when I was desperate for more content!

Savio: Thanks for helping me out with the assigned tasks and writing articles for me when I was short on content during midterms

Spencer: You're full of great ambitious ideas, whether it's for IW or for the school. It was great to have you on board this term. Best of luck with your ESSCO exec position.

Sylvia: You're always the first one to volunteer writing articles! It's nice to have someone who shows as much initiative as you do, despite being really busy. While I found it was odd at first, but it was awesome that you contacted me about doing P**5 stuff with IW even before the term started. Thanks for driving me to buy IW a new printer as well.

As well I would like to thank my off-stream writers for being so reliable especially when I'm desperately scrounging for content, like during midterms.

Michelle: Thanks for helping me out for content with your content!

Rory: Your beer column is a great feature in IW, it was very nice of you to consistently send in submissions despite being on work term. Thanks for always being on time.



Michael Seliske

Stuart: Work term at Fort McMurray must be really dreadful for you, huh? Just kidding. It was awesome to see all my articles proofread shortly after submission deadlines on Fridays. Thanks for helping out! Best of luck at being EIC in Fall!

Lastly, I want to thank the rest of the B-Soc exec: Amanda, Patt, Cat, Chris, Alex – thanks for being so approachable and easy to work with. Despite just coming from A-Soc, I didn't feel out of place at all. Thanks for being on time for most of your exec reports as well, definitely saved me from a lot of stress. And of course, I have to thank Mary for putting up with me when I bug her multiple times per week to borrow the stock room key for jazz band equipment, in addition helping me out lots with IW and every other directorship I have.



ARTS & ENTERTAINMENT

Miscellaneous Fashion

Fashion Tips for When Life's Situations Don't Fit Into a Regular Category



The advice in our previous articles has been very specific in terms of when they apply. But, for most of us, our lives don't just consist of school, interviews, and clubbing alone. There are plenty of miscellaneous times when fashion matters, but the guides don't seem to have any clear indication of what to try. Not to worry of course, we've got you covered. This is our last instalment (for this term anyways), so we hope you love it bitches!

Erica's tips for gals:

Now that we've covered most basic occasions, let's get on to the miscellaneous! Let's start with meeting family of a significant other. Consider what sort of impression you want to make. As you are meeting parents, reflecting your personal style isn't so crucial. They are more likely to notice that you are clean and put together. You are also likely to be nervous so watch what material you choose - no one likes bad sweat stains. Choosing a tank top and cardigan will help this cause. Plain tank-tops are available just about anywhere, choose a bright colour and choose something that isn't too provocative. Matching this with a neutral cardigan is pretty safe. Go for a brown or black and then you can match it with the rest of your wardrobe easily. Wearing big flashy jewellery does not send across a positive image. You are not auditioning for Soul Train. If you choose to wear a skirt or shorts, choose something longer. You will likely be sitting on a couch or at a table for most of the night. Comfy and casual

Now you are meeting your significant oth-

ers' friends. These people will judge you the harshest. They are likely the same age as you and are more observant than parents. Now is your chance to show some personal style. You'll want to reflect your personality without looking slutty. Choosing a unique outfit will reflect positively. DLR on King Street is a great place to find more unique clothes, a little different than the regular American Eagle.

Bryan's tips for guys:

It's only natural to assume that since you've been following our advice, you've attracted positive attention by the bucket-full. Now, let's say that positive attention from a particular person has turned into something more. Congratulations on your new relationship (don't forget to update your status on Facebook so everyone can see)! But, gasp, now you face the prospect of a romantic date?

Well, I highly suggest Ennio's pasta on King St, but what fashion advice do I have you ask? Well think about what the point of the romantic evening is: to spend close time together and share in the moment. To that end, you don't want to make yourself the centre of attention (good nor bad). Look for dark colors, like a nice dark grey (black is fine, but predictable). For example, a plain charcoal pant is perfect. Match this with a simple full or half-sleeve button down, collard black shirt. But, don't be too plain. The brain is aided by prominent images to help it remember events. Since you want your date to be memorable, wear something that will be remembered easily. As I've said before, argyle is your friend. So compliment your grey pants and black top with a grey & white argyle sweater vest. You can find these at Le Château. In particular, if you can find hints of either pink, baby blue, or olive on the sweater vest, this will help keep you from looking like you're in an old-time B&W film. Keep your

accessories to a minimum: watch and belt only. Remember, the goal is to look sophisticated and simple, but have one memorable piece.

Supposing that all goes well, you'll encounter the situation that Erica describes above: meeting of the family and friends of your significant other! Don't fret, we've got you covered. Parents look for security, and are more concerned for the well-being of their child than your personal style. So in other words, dress conservatively. Dark wash jeans, simple collared shirt of light color, and a non-hooded, neutral colour sweater are perfect. Your personal style is best shown in accessories, not pattern or color of clothes. Attract attention with your personality, not your clothes. But, at the same time, you want them to have a reason to talk to you and not stare at your ill-put-together outfit. Friends on the other hand, want to know that you are "hip to the jive" (that you'll fit in with them and their style). Do your work, ask your significant other what their friends are like. Dress your age, and you'll be fine.

Putting it all together:

As this is our last Fashion Police article, here is a bit of a summary. Try to veer away from all neutrals, try a bright colour. Avoid free t-shirts and opt for a basic tank-top or t-shirt. There are fashionable solutions for your favourite comfy staples. Never choose an article of clothing that was designed for a specific purpose other than everyday fashion. Running shoes, gym shorts, pyjama pants, you get the idea. Try a little make-up to wake up your face. Don't be afraid to try something new, look in magazines and at the mannequins in the store fronts. Good luck ladies, may you have the best fashion success!

Love you bitches,

Bryan & Erica

Better Know a Beer: Sunrye & Long Hammer IPA



RORY ARNOLD
3T MECHANICAL

Here's a little tidbit of information you may or may not find useful. If you go across the border to visit our neighbours to the south and decide to bring back beer (note if you're there for longer than 48 hours you can bring a two-four back tax-free) it doesn't matter what province you're bringing it into, rather which province you're from. I almost laughed at my BC native counterparts as I paid almost half the tariffs as they did just because I carried an Ontario driver's license.

The next question you will have for me is, "Rory, why in bloody hell did you buy American beer?" I will look at you calmly and slowly shake my head in disgust. When you think American beer, you think Busch, Budweiser and Pabst Blue Ribbon. But from now on I want you to think Red Hook.

Red Hook is a Seattle, Washington-based brewery which was founded in 1981 by Paul Shipman and Gordon Bowker. They were not met with initial success as their original ale was dubbed "banana beer," for its bananalike taste, by the public and did not sell well. Their next attempt was Blackhook Porter which had only a small amount of success. It was their Ballard Bitter which brought them enough success to

grow. The brewery moved from its initial location in an old transmission shop to previous home of the Seattle Electric Railway. In 1987 the first batch of Extra Special Bitter (ESB) was brewed; this beer would become the brewery's flagship brand. As success grew a second brewery was built in Woodinville, Washington and a third in New Hampshire to expand to the east coast.

I purchased two Red Hook brands, Sunrye, a summer ale and Long Hammer IPA, which is the successor to the Ballard Bitter.

Sunrye is the brewery's seasonal summer beer and won a silver medal at the 2006 Great American Beer Festival. The beer uses two-row barley and specialty malts with Mount Hood and Hersbucker hops. This gives the beer a malty flavour and subtle grassy aroma. It is 4.7% alc/vol.

It pours a golden tan with a fizzy head that quickly disappears. Its refreshing aroma reminds me of the large grassy back yard at the cottage and the sweet, malty flavour make it great for sipping on a hot afternoon at the cottage or beach. It has a lingering earthy aftertaste. Although I found it a little too fizzy, it is easy to drink and slightly refreshing giving it a score of 77/100. Not the greatest beer and definitely nothing special. Its malty taste makes it go best with barbecued chicken.

The Long Hammer IPA is another good beer for drinking at the cottage. Although not nearly as bitter as most India pale ales I've tried out here, it

makes a great beer to try for those who are not familiar with the style. This beer is brewed using two-row barley and Northern Brewer, Willamette, and Cascade hops. Willamette and Cascade are two popular American breeds while the Northern Brewer is an English breed added for bitterness. The United States is the second largest producer of hops in the world after Germany and most is down in the fields of Washington and Oregon. Canada does not brew any hops extensively, which is why every brewer here claims to use imported hops. They don't really have a choice. Typical with the style, Long Hammer is higher in alcohol content with 6.5% alc/ vol. It pours a good bronze colour with almost no head. This beer is best served only slightly chilled as most of the flavour leaves if it is cold. A nice citrusy aroma prepares you for taste with slight citrus and earthy tones. There's a slight bitter aftertaste that lingers after each sip. It goes great with stronger tasting barbecued meat such as sausage or steak. It seems the only purpose of this beer is so you can drink an IPA outside in the summer without being too overwhelmed. So I gave this beer a score of 83/100.

While the two Red Hook beers weren't nearly as good as I had hoped for, they were both refreshing to drink at the cottage. So if you just happen to have a cottage in Washington (stranger things have happened) you might want to pick up a six pack for Red Hook Brewery.

Sciencerific Cinemagic!



The summer before I started at Waterloo I was living with a recent graduate of Aerospace Engineering. We watched Star Wars one night and he couldn't keep his mouth shut, whining about every scientific inaccuracy. Every shot of spacecrafts sailing through a panoramic starscape, he'd remind me, "There's no reason to bank in space; there's no air resistance out there. They can just stay flat and turn." When the Jedis saved the day at the movie's climax, all he could say was "The whole Death Star wouldn't explode just because they shot up the power core, really all that would happen is the lights would go out." He's right, of course, but at that dramatic moment I'm able to overlook a slight flaw in logic. I used to be able to overlook it, that is.

At the time I thought he was such a nerd, but these three years in engineering have warped my mind. I too can no longer enjoy a movie that takes artistic liberties with science. The errors jump out at me, demanding recognition. Why are cars always exploding? I'm pretty sure the good people at Chrysler don't design cars with glass gas tanks and paper towel exhaust manifolds. My station wagon is actually not a Molotov cocktail on wheels.

Laserbeam security systems must be pretty ineffective these days, since lasers can apparently now be seen without hitting anything at all. Someone must be standing in the corner banging together chalk erasers, creating the cloud that makes the bright red beams appear. Good thing the cops have computers that can enhance one pixel into a full-colour image of the thief, probably holding a sack with a dollar sign on it.

Engineering training makes you think about how things are actually accomplished. We know how to set up experiments and run tests. It usually takes longer than five minutes to determine a substance's chemical composition. The Human Genome Project should have gotten in touch with CSI: Miami to borrow their insta-gene machine. Just put a vial of blood in a cold box and press enter for an immediate printout of someone's entire genetic code.

My knowledge of production logistics can get me mocking the most dramatic scene. There was a scene in Superman where Lex Luthor is revealing his master plan of creating real-estate in the middle of the ocean. He shows timelapse maps of countries forming in the Atlantic, while North America crumbles away. Can you picture Lex Luthor sitting at his desk, drawing those maps himself? He definitely outsourced the work. Some minimum wage copy shop employee was printing up these wallsize maps, trying to decide whether to call the insane asylum or the cops on the batty old evil genius. The scene with Lex on the phone with Kinko's - trying to get his World Domination map order shipped to a boat that wanders the east coast and complaining that he'd been on hold for half an hour - must have been left on the cutting-room floor.

Sorry Engplay, No Contest for the Dark Knight

EngPlay Review



KEVIN LING 1B ELECTRICAL

So I trust all of you dedicated Iron Warrior readers who love and support all Engineering Society endeavours came out and saw the EngPlay performance of "Never Judge a Book by its Cover" (NJBC) this past weekend. Well you should have anyway. In case you didn't, what the hell man? You better have a good reason to not have gone.

I'm sure EngPlay was just as good as anything else you were up to Friday night, Saturday afternoon, or Saturday night. You had three chances. There is no excuse... Unless of course you were waiting in line to see the Dark Knight (I waited two hours. So worth it.), in that case you're excused. Let's face it, The Dark Knight totally rocked EngPlay. If I had to choose between the two, it's no contest. I would never have watched EngPlay. I'll let you know why.

Both dramatic pieces open with the portrayal of some kind of messed up and twisted character. NJBC first introduces Sherman (played by Alexander Hogeveen Rutter), the neurotic closet author who is afraid of, well, everything. The entire premise of the play revolves around the fact that Sherman is too much of a nervous wreck to promote his own book and fears that his book will never be successful because of how uncharismatic he is. As a result, he coaxes his best friend into

pretending to be the author of the book in order to promote it. Sure, the performance delivered by Hogeveen Rutter is strong and keeps the audience interested for the first little while, but I don't even know why I'm bothering here; there really is no comparison. Forget the neurotic loser in NJBC, The Dark Knight has a sadistic and masochistic murdering clown! The Joker is possibly the best character in the movie, and I get a little excited every time he is about to mess a G(angster) up.

Usually, I would say that Morgan Freeman pretty much makes any movie he's in (e.g.: Unleashed. Freeman was actually the reason

the cinematic plague that is Jet Li. Li's movies are ter-

rible; did anyone actually like The One?), but this time that torch has definitely been passed on to the late Heath Ledger. Ledger is immaculate in his role. After seeing his performance, it makes so much sense how some could suggest he committed suicide after becoming too involved with the character he portrays. Ledger is the only actor who can make a serial killing megalomaniac

> hilariously awesome. Oscar worthy, no doubt.

> I could go on all day about how hot Heath Ledgers performance was, but he's gone and no matter how hard we try we just can't bring him back... So let's talk about EngPlay!

The well composed, best friend of Sherman, Matt (played by Gary Abbott), who pretends to be the author of the book Sherman wrote is the typical sociable, approachable, and confident character who everyone loves. Shortly into the play he falls in love with Maggie (played by Angela Yang), which creates a screwed up love triangle, sort of. In brief: Matt loves Mag-

> gie, who wants because Matt thinks he's Sherman, who's engaged Nancy (played by Sophie LeBlanc). So Matt pretends to be engaged to Nancy

while trying to get with Maggie, who doesn't care he's engaged and just wants to sex him up. Meanwhile Nancy thinks Sherman is cheating on her and the Maid (played by Carol Huang) keeps walking in at the most awkward moments and just gets completely confused about what's going on in this sick affair. It may just be a victim of practical set design, but at one instance in the play the Maid walks into the room and tells Sherman to "get down from there [and not commit suicide]" when he is simply standing next to a window. Seems like a pretty useless thing to say given the circumstances, especially when she then goes to point out that they are on the first floor of the hotel.

But what's more interesting is what happens in the Dark Knight. The Joker has absolutely no sense of morals and pretty much wants to go around stirring things up. As a result, carnage ensues. Throughout the film you can see the rising terror in the city of Gotham. The highlight of the movie was probably after the car chase when --[This content has been edited to remove movie spoilers]-- and that showed him good. Batman totally kicked his ass.

Now before I forget, every good movie or play has to have a good romance (Which is why 10 Things I Hate About You is so awesome. [Note: Until the Dark Knight, this was Heath Ledgers best performance]) which both dramatic pieces have. However, it was sometimes difficult to see the spark between the characters in the play. For the most part the actors were solid in delivering their lines, but in the 2nd half of the play there were times when the acting strength began to falter. I don't blame them, though. It's hard to

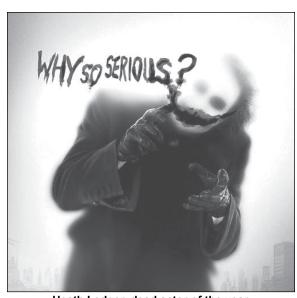
keep up a fake persona for two hours. Unless you're Maggie Gyllenhaal (Rachel Dawes), who is a total fox btw. I never once questioned whether or not she meant it when she kissed so passionately in the Dark Knight, unlike with my ex.

Unfortunately, this year's EngPlay was unable to book a nice auditorium for all their performances. Two of the performances ended up being in the frigid RCH Dungeon (I was at the second... *Brrr*). As well, due to budget constraints they were not able to meet another criterion for a good dramatic piece: Explosions (preferably in the Sky). This is a point where the new Batman movie did not let me down at all. There were times in the movie where I began to wonder things like "Would that even explode?" or "When did he have time to rig an entire building with dynamite charges at key structural points?" But these are all good signs. About 5 seconds later I would forget completely when things started erupting. The Dark Knight truly takes Bud Camp rule #73 to heart: go big or go home.

All in all, Batman was the best movie I have seen so far this year. EngPlay... subpar in comparison. I'm sure it would have been great if I didn't spend the entire 2 hours of EngPlay wishing I was watching the Dark Knight. I think the real victims of EngPlay were the actors. They may not have been properly informed that EngPlay performances were on the same weekend as the Dark Knight's theatrical opening. It's pretty hard to act when you know you could be out watching the Dark Knight on opening weekend, like everyone who's anyone did. Right?



this movie was saved from Sherman (Alexander Hogeveen Rutter) the nutjob author and his fiancée Nancy (Sophie LeBlanc) in

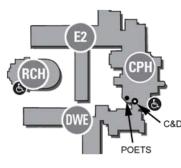


Heath Ledger, dead actor of the year.

MORE THAN JUST COFFEE & DONUTS

The EngSoc C&D has more than just Coffee and Donuts. Stop by for a variety of freshly prepared sandwiches, baked goods, soups, and more! It is run by students for students, so the prices can't be beat!

There are a variety of specialty coffees available - including fair trade. Bring your own mug to help the environment too!



HOURS OF OPERATION MONDAY-THURSDAY 7:30AM - 7:00 PM FRIDAY 7:30 AM - 5:00 PM





Matt (Gary Abbott) falls for writer groupie Maggie (Angela Yang) and she just wants to fornicate with him. Tragic.

Otaku's Introduction to Anime (For N00bs)



IVAN WONG 1B MECHATRONICS

Have you ever walked into class on a Monday morning and heard a couple excited classmates say something on the lines of "OMG! Did you see Code Geass last night? Lelouch got gg'ed hard by Shirley". Chances are you have absolutely no clue what those two are talking about. I assure you, those two weren't talking about a TV show involving secret codes where Lelouch and Shirley are secret agents. Those two were talking about a mainstream anime series.

The popularity of anime (and manga) has grown immensely over the past decade. I've been asked why people like me like to watch anime so much, and after a bit of thinking, I managed to come up with only a few reasons. The first reason is because we like a certain series. Taking myself for example, if I'm going to spend 10 hours watching anime, I might as well find something that interests me. This does not mean watching mainstream anime just because everyone else does. That's what a lot of teens like to do, chase trends.

That brings us to the second reason why people watch anime. People watch mainstream anime to keep up with the anime community. The bulk of the anime community are casual watchers who only watch shonen anime and having some knowledge of it can make starting conversations a lot easier.

The last reason why people watch anime is because they have nothing better to do. After completing hours of drama, they get sick of seeing real people and decide to move onto anime. These people, thankfully, are the minority. If you want to get into anime or just don't want to be left out of the loop, here's a little boost to help you get started.

First, you have to decide what kind of anime watcher you're going to be. Do you want to find a certain type of anime that will interest you? Or maybe you just don't want to feel left out when someone in your class mentions how the number two student in your class sits like an L (you know who you are!). Could it be possible you're bored out of your wits

and just want something to do?

If you're looking to keep up with your friends or just want to be a casual watcher, I can immediately recommend the mainstream series Code Geass. Giant robots (created by Waterloo grads of course), lots of explosions and some busty women should be more than enough to satisfy most engineers. Anything with the word "Gundam" in the title would be similar. There are, of course, the Naruto and Bleach series which focus on hand to hand and martial arts fighting. For fantasy and magic, there's D, Grey-man and Fullmetal Alchemist; however, I wouldn't recommend trying to finish the last four series mentioned anytime soon unless you want Waterloo to be the best seven years of your life. For mystery lovers, there's the (in)famous Death Note.

Skip the Dragon Ball series, that was for high school at best and there really are better things to watch out there. I don't think I need to tell anyone to skip the Pokemon, Digimon, and Monster Rancher series because that was for elementary school. After finishing the above mentioned series (which by the way will take 168 hours) you'll be well on your way to become a casual anime watcher.

Now, if you're already into anime and don't want to follow the crowd, new to anime and just want to find something that interests you, or just bored and need something to eat your time, it gets a bit more complicated. It all depends on what you want to see. Below are recommended series separated by their selling points with a five star ranking system.

Fan service

Love Hina (24 eps) **** Ichigo 100% [manga](19 vol) ***** Green Green (12 eps) *** Mahou Sensei Negima! (26 eps) **** Zero No Tsukaima (13 eps) ****

Zero No Tsukaima: Futatsuki no Kishi (12 eps) **

Clannad (23 eps) ***** Inukami (26 eps) **1/2

School Days (12 eps) -*** {negative

If you want to see F-cup bras and 13 inch mini-skirts this is the place to be. Fan service anime generally involves one lucky bastard surrounded by many girls (aka harem). The protagonist is usually a high school male who accidentally (or intentionally) gets caught in what most of

us would consider favourable situations and later receive divine punishment usually from the female lead. Ichigo 100% and Clannad are both a must. Love Hina and Green Green are both borderline porn. The Mahou Sensei Negima! and Zero series can be considered lolita; you have been warned! School Days was only included for its infamous ending. Watch it if you really want to know what "nice boat" means.

Mahou Shoujo

Mahou Shoujo Lyrical Nanoha (13 eps) ****

Mahou Shoujo Lyrical Nanoha A's (13

Mahou Shoujo Lyrical Nanoha StrikerS (26 eps) **

Card Captor Sakura (70 eps) **** Kamikaze Kaitou Jeanne (44 eps) ** Mai-Hime (26 eps) ****1/2 Mai-Otome (26 eps) ****

To qualify as mahou shoujo, a series needs to have a female lead that can transform and use super natural powers. Mahou shoujo links in very closely with fan service since the girls are typically naked when they transform. Don't think that these series are all fashion shows with girls running around with magic staffs and scream whenever they get hit. Some of these series are very action packed and blood does get drawn. The Mai series were produced by the same company as the Gundam series, Sunrise.

Mecha

Neon Genesis Evangelion (26 eps) ****

iDOLM@STER Xenoglossia (26 eps)

Escaflowne (26 eps) ***

Full Metal Panic! (24 eps) ****1/2 Full Metal Panic! The Second Raid (13 eps) ****

Sky Girls (26 eps) ***1/2

Stellvia of the Universe (26 eps) **** Soukou no Strain (13 eps) ***1/2

There's not much of an explanation needed here. Giant robots can sum it all up. All of the series take place in the future save one, Escaflowne, which takes place in a medieval setting.

Action

Fate/Stay Night (24 eps) **** Elemental Gelade (26 eps) ***1/2 Shakugan no Shana (24 eps) ***** Shakugan no Shana II (24 eps) ****1/2

Rental Magica (24 eps) **** Black Lagoon (12 eps) ****

Black Lagoon: The Second Barrage (12 eps) ****

Blood + (50 eps) ***1/2

Darker than Black - Kuro no Keiyakusha (25 eps) ****

There isn't much of an explanation needed here either. If you like guns, swords, magic, and people getting killed look no further.

Drama

Kanon (2006) (24 eps) ****1/2 Ef- A Tale of Memories (12 eps)

Air (12 eps) **** Rumbling Hearts (14 eps) ****1/2 Fruits Basket (26 eps) ***1/2

Suzumiya Haruhi no Yuutsu (14 eps)

Full Moon wo Sagashite (52 eps)

Drama anime series can be surprisingly popular. One of them even managed to start its own religion. A lot of the drama anime series are actually adoptions from video games called visual novels. Visual novels usually involve a story where the male lead meets many girls throughout the game and chooses which one to deflower in the end. If you like the idea of sitting on your chair with a pillow in your arms and tears coming out of your eyes on the last episode these anime series will do the job.

Sports/Board Games

Hikaru no Go (75 eps) ****1/2 Shion no Ou (22 eps) **** Shijou Saikyou no Deshi Kenichi (50

eps) ***

Initial D (26 eps) **** Tennis no Ouji-sama (178 eps) **** Bamboo Blade (26 eps) *** Over Drive (26 eps) ***

Do you hate quitters? Like to see some determination? This is what all the above mentioned anime series have in common. Whether it's a board game, racing, tennis, or a martial art the characters in these anime series will always strive to become the best.

The anime recommended here is but a mere fraction of all the wondrous (or crappy) shows you can watch. The onus is on you to find out what you like.

Rick & Steve: The Happiest Gay Couple in All the World



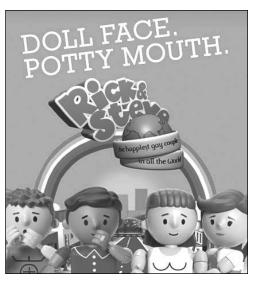
With the exception of Robot Chicken, I don't normally watch animated shows. I was flipping around looking for something interesting to watch on a Sunday night, and saw that Robot Chicken was on. For those that don't know, Robot Chicken is an ADHD-inspired 15-minute "segment" of claymation that makes fun of just everyone and everything in pop-culture. It's created by Seth Green, so enough said. More to the point, the show left me slightly unsatisfied, so I stuck it out on Teletoon to see what was next. To my surprise, it was an LGBT-inspired stop-motion animation called "Rick & Steve: The Happiest Gay Couple in All the World".

The show, as you might guess, is about Rick & Steve, and they are the happiest gay couple in all the world. Refreshplores different stereotypical lifestyles insults". But besides the stereotypithat exist. Rick is an America-Filipino cal, the show features real characters computer programmer (hmm... I'm half Filipino and also a programmer... maybe... oh, never mind). Rick fulfills the stereotype of being obsessed with cleanliness and being open and friendly. Steve, his faithful husband, is a lessthan-bright realtor who is obsessed with going to the gym. Though they are dubbed as being "the happiest" of gay couples, they face problems like any other couple in the world. For example, Steve is looking to spice things up in bed; while Rick wishes Steve would be more tolerant of his lesbian friends.

The show features wonderful supporting characters, such as Rick's best friend Kirsten and her lesbian lover Dana. I enjoy Wikipedia's descriptions for them the best: Kirsten is a "lipstick lesbian", while Dana is a "bulldyke" (note: use of this term is not meant in a derogatory context, see Wikipedia's note on the new positive reappropriation) and also described as "misan-

ingly (though homo-centrically), it ex- thropic, misandric and quick to hurl such as Chuck (voiced by famous actor Alan Cumming), who is a an angry 50 year-old who is both HIV positive and "paralyzed from the left testicle down". Chuck is involved with a 19 year old junkie. Suffice it to say that the show makes for very interesting, and real-life comedy.

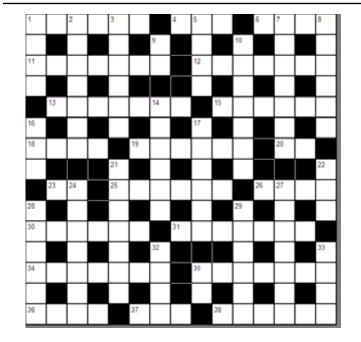
> Yes, as a gay man, I do have a biased interest in the show. But I really do think that any person would find the show funny and amusing. It does explore stereotypes, but also goes a few steps further to break them down. If you are interested in taking a quick peek, the show is on Teletoon as part of their "Detour" group of shows. It airs on weekends at 10:30 pm. Lucky for you, the entire season can be enjoyed in just 3 weekends (there are only six episodes released). I hope you find this just as interesting as I do!



The Iron Cryptic Crossword

ROB GRAHAM

4A COMPUTER



Crossword Clues

Across

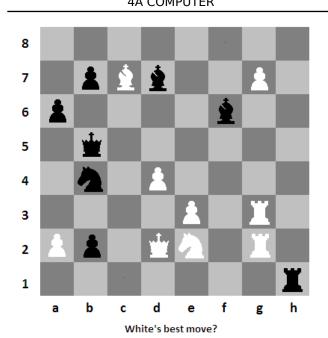
- 1. Wave intermediary cripples (6)
- 4. Leading Chinese historic intricate life energy (3)
- 6. Oddly buoyant craft (4)
- 10. Acquired promotion and selection combination (7)
- 12. Cock from messed up truncated restroom (7)
- 13. Metal bar, path produce tracks (7)
- 14. Go against removing it from contrary (6)
- 17. Internal covert ending (4)
- 18. Non-affirmative mix up of given tea (8)
- 21. Change traceable while removing a wristband (8)
- 22. Third power initially crumbled (4)
- 26. Change populated transfer when missing Fido (6)
- 27. Enlarge mix to produce leader (7)
- 30. Subject removal of swindle in conscience (7)
- 31. Shoreline altering disease (7)
- 32. Relative hearing insect (4)
- 33. Consumed mixed caffeinated beverage (3)
- 34. He melt changed head security (6)

Down

- 1. Authentic Earl changed (4)
- Gas prone containing eastern state (7)
- 3. Small removing cot belittles (6)
- 5. You were not harmed severely (4)
- 7. Result when tagged when arrived (7)
- 8. Campus shop missing mid-
- dle creates festive dinner (6)
- 9. Mammal mashing hold pin (7)
- 11. Chord help returned unit (8)
- 15. Bending billow without ailment (3)
- 16. Clumsy mixed scales includ-
- ed drop of golden sun (8)
- 19. Dinner stirred anal gas (7)
- 20. Slept on an odd breed (3)
- 21. Huge note and charged particle (7)
- 23. Radioactive mixture of liquor within gold (7)
- 24. Preliminary assuring changed to make nation (6)
- 25. Woman fixed charge containing thrashing (6)
- 28. Tune altered baited without identification (4)
- 29. Flesh sounding like rendezvous (4)

Chess

ROB GRAHAM 4A COMPUTER



Congratulations to 4A Computer (4-stream) for completing the chess first and to 1B Systemsfor completing the cryptic crossword first!

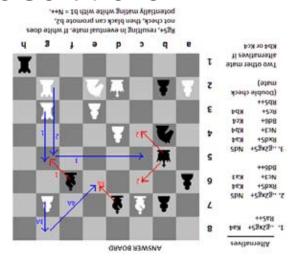
Last Issue's Solutions





This Issue's Solutions





IRON INQUISITION "What Super hero would make the

best EngSoc president?"

Leslie Mac Donald, 2B Civil



Leslie Mac **Donald** 2B Civil "Bat Girl, because she is always there when she is needed"



Dave Halford 3N Mechanical "Is Tyler Gale a superhero? And if he is, great hair would be his superpower."



Marissa Bale 2B Chemical "Isn't Amanda Hoff's Secret identity Wonder Woman?"

Daniel Lewis 2B Nanotechnology "Dance Dude 'cause you can't be awesome without dancing and you can't be Eng-Soc prez without awesome"

Sean O'Neil 2B Nanotechnology "Captain Planet 'cause he's made of all four elements and heart but heart's not an element"



