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THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

VOLUME 27 ISSUE 11 | TUESDAY, JULY 25, 2006



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## Student Life 101: Designer Students and Shiny Cars

FARAZ SYED 3A CHEMICAL

S tudent Life 101, held this past Saturday, was a big, siren-blasting success! For the entire day the field was filled with both current and incoming students having a good time. To those who don't know what Student Life 101 is: every summer term there comes a time when we get to meet and entertain incoming students to the university. This summer was no different, with the EngSoc Student Life 101 directors taking over the B2 green for the day. Despite some weather concerns (it rained lightly for part of the event) the day was pulled off without a hitch.

The exciting main feature at the B2 green was the design competition organized by the Student Life 101 directors (Cat Hay, Jeff Kao, Kyle Collier and Vladimir Naoumov). A number of class teams took part in the competition, now in its 3rd year. The competition took a slightly different form than the previous competitions - it consisted of two separate 2-hour design challenges during the morning and afternoon. Celebrity judges included the EngSoc executive council. As always, the students were limited to using tape and recyclable materials such as plastic straws and newspapers. The morning challenge was to build a contraption that could roll when given a small push. Congrats to the winners, which



Frosh learning what it takes to be an engineer in Waterloo at the Student Life SL 101 Engineering Design ShowCase last Saturday.

were the 3A Electrical and 3A Systems Design teams! The afternoon challenge involved building bridges from newspaper and tape. Hilarity ensued when people (and sometimes multiple people) were used to test the strength of the team's creations. Congratulations to the winners, the 3A Systems Design and the 1B Mechatronics teams for their impressive

newspaper bridges.

The directorship made sure there was never a dull moment on the field. On hand supplying everyone with wicked tunes was DJ B-Money (Ben Whan). A mix of heavy reggae beats and pop, along with megamaphone-wielding directors filling the air with siren noises and friendly yelling at mathies with pink balloons, kept everyone entertained.

Student Life 101 also saw many clubs and automotive teams sending members to represent them. Among the clubs present were Engineers without Borders and Women in Engineering. Many of UW's automotive teams were also out displaying their vehicles and speaking to incoming students. The WOMBat Mini-Baja team, the Midnight Sun solar car team and the University of Waterloo Alternative Fuels Team (UWAFT) were present with their vehicles on display. The automotive teams drew significant attention by driving through campus to get to the B2 green and their entrance on the field was equally impressive. The shiny vehicles and random engine revving kept attracting the attention of all passer-bys throughout the day.

The engineering jazz band, With Respect to Time, put the finishing touches on the event by performing for incoming students despite the rainy weather. In their final performance for the term, the band played many of their well-known pieces such as "Mamma Mia!" and "My Funny Valentine".

It's going to be tough to beat this year's Student Life 101. The day was fun-filled and memorable for everyone involved. Thanks to all the organizers, competition participants, jazz band, automotive teams and clubs for showing up and making the event a big success!

# Case of the Missing Papers

DAN ARNOTT IRON WARRIOR DISTRIBUTION MANAGER

There has been much controversy of late about the disappearance of the  $\frac{1}{2}$ Iron Warrior newspapers from the halls of Engineering shortly after they were distributed on Wednesday, July 19, 2006. What happened to them? Why were they removed? Are they coming back? These are just a few of the questions on everyone's mind. This article should answer a few of them. The newspapers were distributed on Wednesday as usual. Issue 5 (the last of the term) contained two opinion letters from Peter Szabo (3A Systems) and Kristen Yee Loong (3A Systems). These letters were very critical of EngSoc, citing reasons such as cliquishness, favouritism, drunken rowdiness, and misplaced priorities. One individual in particular was cited, and although never named in the article, EngSoc felt his identity was made sufficiently clear.

A meeting between EngSoc representatives and Iron Warrior staff took place on Friday, July 21 to discuss this issue.

The central reason for pulling the papers is based on a technical ambiguity. The Iron Warrior has one 'Editorial' (written by the Editor-In-Chief), which can be taken as the opinion of the newspaper, and usually several opinion letters which represent only the opinions of the writers. This is stated at the bottom right corner of page 2 of every issue. However, because the pages containing both the editorials and the opinion letters were entitled 'Editorials and Opinions', EngSoc interpreted the opinion letters as being the official opinion of the Iron Warrior, which they in fact were not.

### Life as an Exchange Student happened during the lecture, I had ample

3A SYSTEMS DESIGN

 $\mathbf{N}^{\text{ew}}$  cultures, new experiences and memories for a lifetime - that's how I'd characterize an exchange abroad. Born and raised in Kitchener, I wanted to try something different for a term, go somewhere (anywhere!) less familiar than Waterloo. After considering everything from Germany to Australia to Hong Kong, I finally settled on the Université de Technologie de Compiègne (UTC), in France My reasons for choosing UTC were mostly academic - there are biomedical courses here that UW doesn't offer - though I soon realized that course material is only a small fraction of the overall exchange experience. In a different education system and a foreign language, the mentality of an exchange student is entirely different from that of a local student. Exchange students are generally encouraged to take a lighter course load, plus our grades are transferred back to Waterloo as a simple pass or fail. Outside of class hours, beyond the time spent translating French to English and trying to understand what actually

happened during the lecture, I had ample opportunity to just enjoy being in a new culture, interacting with French, Brazilian,

Continued on page 6, see Karen

EngSoc consulted the Iron Warrior policy manual and then removed the papers without notifying the Iron Warrior staff because the newspapers were found to technically violate Iron Warrior policy. Other reasons were also given for the removal. EngSoc removed the papers based on the assumption that EngSoc pays for the Iron Warrior's publication, and did not want to be paying for the publications of negative opinions of them. It was clarified during the meeting that the Iron Warrior gets its revenue exclusively from advertising, although it currently has a

Continued on page 6, see Iron



Exchange students and the Eiffel Tower in Paris

### From the Desk of the Iron Chief



Good day, engineering! Since I have only have three independent projects, one assignment, and five exams all due to hit in a few days, what better way to kill off my time than to give my fellow comrades another edition of their favourite newspaper?

Last week, we published S06 Issue 5, but it went on an unscheduled vacation for a few days. Slightly sunburnt, it returned again very recently. And a lot of people spoke to me regarding this vacation. And all of them were unhappy. To many, the EngSoc executives made the worst decision in reaction to the editorial letters published in this term's Issue 5. On the other hand, some students accused IW of endangering the school's reputation by publishing the letters. Although EngSoc had cited that Issue 5 had violated a grey area, IW does not believe that it grants EngSoc the authority to confiscate the paper. Indeed, Iron Warrior may be the exclusive platform for the Engineering Society, but both are separate organizations. According to popular opinion: at best, EngSoc breached its jurisdiction; at worst, EngSoc used a false-pretext to pull the paper, Dubya-style.

Some may have been offended by the seemly lax use of swearing in the Tin Soldier's special report. That is not the case. Please visit www.fucking.at for more info.



#### Engineering Society Executive Response to "The Story of an Engineering Society Rep: Why I Love EngSoc" and "Who's Showing the Ropes of Engineering"

#### **EXECUTIVE COMMITTEE** ENGINEERING SOCIETY B

#### Dear IW Readers,

In the previous edition of the Iron Warrior, two articles were published regarding the Engineering Society. Some of the statements made in these articles require clarification. This insert has been created to address these statements. The Engineering Society apologizes for the delay in the release of the Iron Warrior, and would like to make note that the reason for this delay was to address the fact that the publishing of these articles put the Iron Warrior in contravention of its policy.

#### Article: "The Story of an Engineering Society Rep: Why I Love EngSoc"

Statement: "There was an incident within the last year of a female engineering student...A formal apology was stated by EngSoc, and then in the initiative and the person's presentation. The Engineering Society would like to make note that genuine interest was shown towards this student's presentation, as evidenced by the asking of questions, and intent listening. The student received \$225.00 toward her initiative, and was not heckled out of respect for the presentation. Peter Szabo was contrasting quiet listening of this presentation, with cheers and heckling towards class representative feedback, which are two distinctly different portions of the meeting.

Statement: "All they do is get piss drunk and act immature."

Statement: "Every EngSoc meeting starts off quasi-respectable, but always ends up a drunken yell-fest of offensive insults to each other."

Clarification: Engineering Society meetings follow a close structure focused on six areas. All directors report to the corresponding executive member for each area, and all relevant issues for EngSoc members can be categorized under these six areas: tant and serious matters are dealt with in the early portions of the meeting, while less serious topics such as class representative feedback are left to the end of the meeting. While the flow of the meeting is from serious to non-serious, it is unfair to imply that meetings go from sober to drunk. Furthermore, the speaker's job is to ensure the flow of the meeting and to remove any individuals not showing respect to other members present. This model has been followed as closely as possible by the present executive and speaker. Outbursts have been handled by the speaker with an offer for the individual to be quiet and respectful, or to leave.

#### Article: "Who's Showing the Ropes of Engineering?"

Statement: "[Why] do Student Life Engineering Showcase Directors not even have a photocopy account?"

#### **IRON WARRIOR**

The Official Newspaper of University of Waterloo Engineering

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Offstream Editor-in-Chief Jaclyn Sharpe

Apply for Iron Warrior

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rejected by the student."

Clarification: The formal apology issued on behalf of the Engineering Society was accepted by the student.

Statement: "The [society member] is now the speaker of the house at all EngSoc meetings this term, a position given to him after the election results"

Clarification: The current speaker applied for his position, was subject to the same application procedure used for all directors, and was selected based on his ability to perform the duties of speaker of the Engineering Society.

Note: Peter Szabo has apologized to the speaker of the Engineering Society, for the references made to him in this article.

Statement: "A valid presentation regarding a donation request for an engineering student going overseas to help poverty-stricken people resulted in...crickets chirping."

Clarification: This statement implied a lack of interest on behalf of the engineering society

- External: Any news pertaining to external organizations, such as the PEO, charities, or student conferences and competitions
- Education: Academic matters are presented, as communicated by the dean's office, or organizations such as the Sandford Fleming Foundation
- Internal: All issues regarding internal social events are presented
- Finance: Provides updates on the Engineering Society budget, donation proposals, and Engineering novelties WEEF: Any information regarding the usage of the Waterloo Engineering Endowment Fund
- President: All issues that do not specifically fall under one of the above five mentioned categories fall under the president

The meeting is structured such that impor-

Clarification: This statement was made in reference to the fact that the Student Life directors were not on the hard copy of the approved photocopying list, when first trying to photocopy posters. This incident occurred because the directors were attempting to make photocopies based on an obsolete procedure (posters are now approved and printed with the use of an online poster service). The misunderstanding was dealt with on the spot, as the VP-Internal was present to add the directors to the hardcopy of the list. The executive were not aware that the hardcopy of the list was not up to date. To prevent similar misunderstandings from occurring in the future, the executive will be reviewing the hardcopy list at the start of each term.

Statement: "Why was I told by a certain VP that "We are trying to cut down the number of directorships within EngSoc because people don't actually do anything"?"

Continued on next page

#### Staff Positions Today!

http://engsoc.uwaterloo.ca/ www/engform/ app\_iwr\_i\_07w.html

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

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

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

### EDITORIALS AND OPINIONS

#### Continued from page 1

Clarification: This statement was taken out of context. The intention of this statement was to inform that both Engineering Societies (A and B) have been working to reduce the number of redundant and outdated directorships available for application (e.g. combining directorships like "Diversity" and "Multiculturalism", and removing directorships such as "Electronic Services" which was responsible for photocopying exams for the hardcopy exam bank (new exams are instead added to the online exam bank)).

Statement: "Why are the SL101 Engineering Showcase directors receiving very little support from the Engineering Society?"

Clarification: The Engineering Society executive would like to make note that they are in full support of the Student Life 101 Engineering Showcase. Support by the Engineering Society could be seen at Student Life 101 by the fact that nine teams participated in the event. Furthermore, directors were provided with a significant budget, and have been approached by the executive on numerous occasions to offer additional support and resources for the event. In addition to the Showcase, the Engineering Society is involved with Student Life 101 by providing panellist speakers and barbeque volunteers.

#### **General Comments**

In the previously mentioned articles the major problems discussed were the general feeling of an EngSoc "clique" and the lack of decorum at EngSoc meetings. The Engineering Society Executive takes these problems very seriously and is very interested in working with Society Members to make things better.

On these issues, as well as any other issues people might have with the Engineering Society please do not hesitate to contact any Executive member with your concerns. During a meeting with Peter Szabo the Executive were asked something along the lines of "Well didn't you know these were problems already?" (this is not a direct quote, and is put it in quotations merely to distinguish it from the rest of the text). The Executive feel that it is worth clarifying that yes, in fact we did realize that these issues existed.

On the issue of the perceived EngSoc "clique", members of the society in no way wish to be exclusive or limit the participation of new people at Engineering Society events. Many of the heavily involved Engineering Society members spend significant amounts of time together organizing and participating in EngSoc events and, as such, become very good friends. The Executive are constantly attempting to broaden EngSoc participation and make all people feel welcome at all EngSoc events. We primarily focused our efforts this term towards increasing participation in all events - not only those associated with alcohol as seems to be the perception of some society members. This semester the executive made first year classroom visits to encourage first year students to attend EngSoc meetings and events. If anyone has any suggestions on how to improve diversity in participants at EngSoc events we would love to hear those suggestions. With regard to decorum at meetings, the Executive was not aware that some meeting attendees were unsatisfied with the level of decorum this semester. It was the opinion of the Executive that this semester's meetings had been quite professional and respectable and that meetings seemed to be enjoyable to all. We are now aware that some meeting attendees were not satisfied with the way meetings were run and they did not feel they were able to speak-up about this. While the meeting structure itself (order of reports etc) will remain the same, next term we will be making an effort to improve the

meeting atmosphere. Again, any suggestions people have to improve meeting quality are more than welcome.

Finally, many of the negative incidents on which the articles were based did not occur this term, but instead happened during previous Asoc and B-soc terms. The Engineering Society executive would like to note that the authors did not attend the majority of this semester's meetings. This is the first on-stream term for the current executive, and while society members ultimately stay the same across different semesters, the dynamic of the society is governed by the executive in place. The current executive has set goals to make the society more inclusive and professional, and we feel that we have made significant strides towards achieving these goals.

As always, please feel free to contact us with questions, concerns, suggestions and criticisms at bsoc exec@engmail.uwaterloo.ca. We look forward to hearing from you.

Addendum to "The Story of an **Engineering Society** Rep: Why I Love EngSoc"

#### PETER SZABO **3A SYSTEMS DESIGN**

#### Dear Iron Warrior Readers,

The purpose of this article is to make several corrections to my previous article which appeared in the Iron Warrior Volume 27 Issue 10.

The first issue to address is with regards to the female engineering student who was offended by comments and actions at an EngSoc meeting last term. Firstly, the issue involved several students not one. Secondly, a formal apology was written by EngSoc and it was in fact accepted and not rejected as I had previously stated.

The second issue of concern is with regards to the Speaker at EngSoc meetings. After discussion with several EngSoc Executives, they have assured me that the current Speaker applied for his position, was subject to the same application procedure used for all directors, and was selected by the Executives based on his ability to perform the duties of Speaker of the Engineering Society. I have formally apologized to the Speaker for the references made to him in this article.

Finally, I would like to reiterate the fact that this article was not intended to be an unwarranted personal attack; it was based off of my own personal experiences across the attendance of nine EngSoc meetings. My opinion does not reflect those of the Iron Warrior.

speaker position as everyone else and had the exact same opportunity to get the position and I was given the position because of my qualifications, NOT because I am friends with some of the exec members. I would also like to point out that the incident that Peter talked about in his article ("a female engineering student who was seriously offended by an insulting comment during an EngSoc meeting") occurred last term on A-Soc, this incident in no way reflects the way B-Soc meetings are run. In addition this student has personally approached me to tell me that she thought I did a great job this term keeping meetings appropriate.

Now that that's out of the way, I'd like to tell you my experiences with EngSoc over the last 3 or so years. I started, as everyone else did, as an impressionable first year. I heard about this "Engineering Society" thing during frosh week, and since I had never really been involved in any sort of student council organization in high school I thought it would be a good thing to try out. At the urging of many of my frosh leaders I attended the first EngSoc meeting of term. I was expecting something boring, that's what meetings are supposed to be right? Boy was I in for a surprise. The meetings were anything but boring. Karim Lallani was speaker at the time and did a great job keeping the balance between complete tomfoolery and a session of parliament \*yawn\*.

I was also encouraged to pick up directorships. In my 1A term the Santa Claus Parade directorship was empty, and the VP-External at the time asked me if I could do it, since no one else would. So here I was, a week into school and in charge of planning the engineering float at the Santa Claus Parade that November. I'd be lying if there weren't a few times when I stopped and asked myself what I was doing. Wasn't I here to focus on school? Why am I doing all this extra stuff that does nothing but take up my time and probably hurt my grades. But I realized, that if all I ever did was go to class and study I would go crazy. All work and no play make Evan a dull boy. So I continued, I've had at least 2 directorships every term since then and I've loved every minute of it.

I sometimes worry that people see the Engineering society as too clique-y. I've put some thought into this too over the years. I'd like to think of the Engineering Society more as a family than a clique (hence the EngSoc Family photo). Yes the people with authority tend to be friends with each other, but I think if they weren't it would make their jobs much less enjoyable. EngSoc meetings are open to everyone and we try to make them as welcoming as possible. If I am speaker again next term, I would like to have some sort of feedback forum on how EngSoc meetings are run. If people don't like the way things are going on, I want to hear about it. I try to make them appeal to the widest range of people possible and will do

previous issue even have been put back in our (the students') hands?

I am an avid reader of our engineering newspaper, and I have read the previous issue that is surrounded by controversy. In the past, I have read plenty of controversial articles about abortion, the Middle East, religion, and numerous other hot-button topics.

But, out of all the strained and contentious viewpoints ever expressed, this was the only issue you deemed offensive enough to warrant forced and uninformed removal.

I understand that the statements made in the controversial issue were plain and direct, but there is a proper recourse and forum for rebuttal. Even the readers who disagreed strongly with a piece done two issues ago took the proper recourse and voiced their opinions. They did not decide to simply take the papers away and remove differing opinions from the record.

And while you may not agree with the inflammatory and possibly hurtful opinions that were stated in the past issue, these individuals deserve the right, just as any other to express their opinion be it positive or negative.

After all, with any sort of public debate comes disagreement. When people voice their criticism, feelings may be hurt. But at the very least, these individuals were courageous enough to speak out and submit their thoughts to the debate. And individuals should be courageous enough to take the opinions of others in stride.

I believe that we all have the intention to do the best we can to improve the state of Engineering at Waterloo. Only with public discourse and reflection can we move forward despite the inevitable scrapes between strong personalities and bruising of egos that will occur along the way.

Instead, stifling and censoring the people who disagree with your opinions results only in alienation and disenfranchisement, even among those who have not yet been censored.

Your censorship tells me that you have lost faith in the capability of Engineers from the University of Waterloo to form their own thoughts and not blindly follow stated opinions

I do not claim to stand on some sort of moral pedestal; only, I too believe that it's important to stand up for the rights of the individual. If I do not speak now, who will be there to stand up for me when my own rights to speak out on an issue I feel strongly about are violated?

To the others who are reading this and also feel passionately about this issue, I encourage you to read the articles and viewpoints presented and decide for yourself.

Decide not only on the opinions presented, but decide on what is more wrong: a controversial opinion (of which we all hold a few) or the decision to exercise some sort of perceived authority to silence those who criticize?

Sincerely, Peter Szabo

#### Why I \*Actually\* Love Engsoc

#### **EVAN MURPHY**

**3A COMPUTER** 

I had considered writing this article as a rebuttal to the article written by Peter Szabo in the last Iron Warrior entitled "The Story of an Engineering Society Rep: Why I Love EngSoc" instead I decided to spend as little time as possible dwelling on this, just clear up a few points, and then write an article about why I Love EngSoc.

For the record, Peter has personally apologized to me for making his article personal and including me, and I have accepted this apology. Some other facts I would like to clear up: I went through the same application process for the whatever I can to make everyone happy.

In conclusion, I'd like to encourage first years reading this article to keep an open mind when it comes to EngSoc. Come to meetings and make your own opinions. If you have any questions about EngSoc meetings you can email me.

An open letter to the individuals who pulled the last issue of Iron Warrior:

#### JEFFERY KAO

#### **3A SYSTEMS DESIGN**

Why was the Iron Warrior withheld from us last week? And from where do you obtain the authority to remove individuals' rights to free speech?

Finally, if the Iron Warrior staff had not been incensed at the violation of basic democratic rights of freedom of press, would the j2kao@engmail

Do not let the ill-planned and ill-conceived actions of a few individuals in restricting free speech tarnish what the EngSoc executives and directors have accomplished this term. They have done so much in adding to the student life of this faculty and the well-being of this community. As for me, despite my disappointment, I will still apply to be an EngSoc director next term, because I believe that the work done by EngSoc is important despite what anyone's opinions are, and I applaud the decision of the EngSoc executive to release of the Iron Warrior issue as it was originally intended by the editorial staff

I myself too am prepared to face your opinions, be it positive or negative. For as once was attributed to Voltaire:

"I disapprove of what you say, but I will defend to the death your right to say it."

Jeff Kao 3A Systems Design

### **ENGINEERING SOCIETY REPORTS**

### WEEF gave out \$80 000



Tey Everyone! So, this term is almost Hey Everyone: So, uns term a me done eh! But before you go, I want to give you one last bit of update on WEEF. The Board of Directors met up last week on Thursday July 20, 2006 to approve the WEEF funding decision. The decision table should be around this article somewhere. I would like to clarify that WEEF allocated \$80,000 this term instead of \$75, 000 as advertised initially. Once again the funding council was faced with a difficult decision. Points such as benefit to larger population of undergraduate students as

well as immediate need of the funds and long term gain were kept in mind. Funding council is fond of supporting new initiatives. Everyone who submitted a proposal should have received an e-mail from me with the funding decision. If you have any questions or concerns, please send an email to weef@engmail.

I would like to take this opportunity to thank everyone who supports WEEF. WEEF's principal is currently sitting at \$6.8 M. In past 15 years we have nurtured an endowment foundation which is the biggest student run endowment foundation in Canada. It is truly a great achievement and initiative that we all should be proud of!

I would also like to thank my awesome assistants without whom it would have been very difficult to run this foundation.

I wish everyone best of luck with their finals! I'll see you all next term!

#	Proposal	Requested	Allocated
	Architecture		
1	Rome Architecture Studio Library Books	\$2,500.00	\$2,500.00
	Chemical Engineering		
2	Preistaltic pump and Digital hot plate stirrer	\$4,197.70	\$4,197.70
	Civil Engineering		
3	Jar Tester, 6 paddle Stirrer (2 Units)	\$3,971.00	\$3,971.00
4	Dissolved Oxygen (D.O) Meters	\$1,544.00	\$0.00
5	Strain Gage Input Module	\$1,637.50	\$1,637.50
	Electrical and Computer Engineering		
6	Gatevision Software for ECE427	\$7,000.00	\$7,000.00
7	Printed Circuit Board Software	\$1,799.52	\$0.00
	E&CE'30'Series 'Projects in Semiconductors and Electronic		
8	Circuits'	\$10,300.00	\$10,000.00
9	Equipment for the 4th year ECE room	\$1,100.00	\$800.00
10	Enterprise 4500 Servers for ECE / SoftEng / NanoTech	\$5,417.38	\$0.00
	Mechanical Engineering		
11	High Resolution Digital Camera for Image Analysis System	\$3,095.00	\$3,095.00
12	Automated Beverage Retrieval Robot	\$510.00	\$0.00
	Nano Engineering		+ • • • •
13	Equipment for the NE-141 lab (Electromagnetics)	\$12,448.00	\$3,200.00
10	Systems Design Engineering	¢12)110100	<i>\$0,200100</i>
14	Assistive Technology Design Prototyping (for SYDE 361)	\$500.00	\$280.00
15	Systems Design Undergraduate Study Room	\$1,150.00	\$0.00
15		φ1,150.00	φ0.00
16	Memory upgrade for Computers in SYDE undergrad teaching Lab	\$600.00	\$600.00
17	PCI DAQ Cards for Control Systems Lab	\$2,600.00	\$1,300.00
18	USB Cables for FPGA Boards	\$400.00	\$120.00
10	Miscellaneous	¢ 4 200 00	¢ 4 200 00
19	Engineering Student Machine Shop	\$4,300.00	\$4,300.00
20	Power Transformers	\$1,000.00	\$1,000.00
	Department Total	\$66,070.10	\$44,001.20
21	UW Robotics Team	\$2,050.00	\$1,600.00
22	Mini Solar Car Contest	\$750.00	\$0.00
23	SailBot 2.0-UW SailBot	\$1,670.00	\$910.00
24	WomBat	\$5,985.00	\$1,670.00
25	2007 Concrete Toboggan Team	\$8,160.00	\$2,000.00
2	Artificial Memory_Based Intelligence Research Group-	¢700.00	¢700.00
26	Embodied AI Systems	\$788.00	\$788.00
27	Autonomously Guided Robot-3A Mechanical Robot Racing	#0.1 <b>0</b> .00	<b>*2</b> 00.00
27	Entry	\$843.09	\$300.00
28	FSAE 2007 - Early Development Aid	\$7,000.00	\$4,500.00
29	H2D[ee]P: Hydrogen Diver Propulsion	\$1,400.00	
29 30	Request for Thruster Components	\$1,300.00	\$750.00
29 30 31	Request for Thruster Components RobotRacing Competition Equipment	\$1,300.00 \$1,900.00	\$750.00 \$300.00
29 30 31 32	Request for Thruster Components RobotRacing Competition Equipment SWARM Intelligence Project	\$1,300.00 \$1,900.00 \$1,890.00	\$750.00 \$300.00 \$1,890.00
29 30 31	Request for Thruster Components RobotRacing Competition Equipment SWARM Intelligence Project The Midnight Sun Solar Race Car Team	\$1,300.00 \$1,900.00	\$750.00 \$300.00 \$1,890.00
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# Six for the Price of Five!



Ti everyone, and welcome to my bonus **I** report of the term (just when you thought I was finished writing until January). The theme this week will be – can your VPX write this article in five minutes?

Student Life 101: Thanks to everyone who participated in SL 101 over the weekend. Special thanks go out to your Student Life Engineering Showcase directors, who put on a splendid design competition, with nine teams participating in total. Also, you can be proud of your Engineering Society, as we had the largest representation of volunteers than any other faculty at the Student Life Barbeque; as such will be getting the largest representation of barbeque profits - woohoo!

B2 Green Party: On September 22nd there will be a large going away party for the B2 Green hosted by the UW DJ Club, before the field is occupied by the incoming Nanotechnology building. If you are interested in helping to organize this event, please contact me at bsoc vpext@engmail. uwaterloo.ca. The event promises to be an awesometacular time, with a good variety of Waterloo-based musical talent.

And the time is...4:58! I made it! See you all in the Winter, same paper, same place.

### Thank You EngSoc!

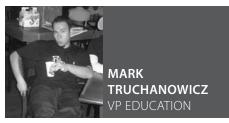


ear all engineering society members, Dear an engineering this past week has been absolutely amazing and jammed pack with many great events! From the hilarity of the EngPlay, to the competition of Genius Bowl, to the grace and social elegance of the Semi Formal, the past week has gone to show the true involvement of the engineering society and its members. In addition to

these events, the B\*\*5 bowling tournament, EngSoc Potluck, end of term Pyjama Party, and involvement in Student Life 101 events all went off with tremendous success.

On a personal note, I have truly enjoyed my first term as on-stream Vice President Internal, and am already looking forward to my second term in Winter 2007. I have enjoyed interacting with all of you on both a professional and social level. Thank you all for your hard work and dedication to your society. I could not be more proud of the accomplishments that we as a society have made this term. With my deepest sincerity, thank you all so much, you are what encourage me to be involved in this society.

### **Classy Talks from Klassen**



Well I'm back for one final report and the only thing I've got to talk about is regarding an absolutely fantastic and informative information session given by a Waterloo Engineering alumnus.

This past Friday, July 21st, the Engineering Society was honoured to host a talk entitled, "Maximizing Wealth through Investments and Avoiding Credit Pitfalls". The speaker, Tim Klassen (Electrical '95), did a career switch from Engineering to mortgage and investment management. His talk ranged from what we as students can do to build credit to how our current actions will affect us in the long run. The presentation was well received and many students made use of session by asking questions both during and after the talk.

For those of you who didn't get a chance to see the presentation, the Engineering Society will be hosting another talk by Tim Klassen in Winter 2007, and I hope to see you all there! Best of luck with finals and have a great work term!

# Get Expense Statements in now!



Well, it is the end of the term now, time for people to start freaking out over final examinations! Before you dig that hole inside the library and set up shop to study for the next two weeks I would like all directors who have spent money on their directorships to submit their expense statements. Expense statement forms can be found within the Engineering Society near the poster of Ol' Albert Einstein. Please attach the expense statements with all receipts for the expenses you are claiming.

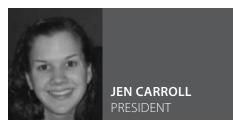
those who have expressed their interest in TOOL Boxers and EngSocks as I have finally received a quote for the amount that they will be sold. I will attempt to put out the order and hopefully receive the order during finals so that people who have ordered can receive their shiny new boxers and socks. If you would like to get in on this order please contact me at bsoc vpfin@engmail.uwaterloo.ca. We also received a new order of the infamous novelty "Engineering Sucks" t-shirts as well as sports t-shirts adorned with checkered flags and the Engineering Society logo.

Finally. Mark Truchanowicz. VP-Ed. and I worked hard to get mortgage specialist Tim Klassen, ELEC'95 grad, to come in and speak with the Engineering Society students about their finances.

I have many leather-bound books and With regards to novelties, I will contact my apartment smells of rich-mahogany...

# ENGINEERING SOCIETY NEWS

### From the Desk of the Prez



As many of you have noticed, the most recent issue of the Iron Warrior was taken away from outside of the IW office on Thursday morning. This removal occurred because two articles printed in the issue in question were in direct contravention of Iron Warrior policy. Facts presented in the articles in question ("The Story of an Engineering Society Rep: Why I Love EngSoc" by Peter Szabo and "Who's Showing The Ropes of Engineering?" by Kristen Yee Loong) were untrue.

The Engineering Society Executive decided to remove these issues until such time as clarifications could be made. The original plan was to remove the issues and then reissue them with an insert clarifying facts. The editors of the IW have graciously offered to publish a 6th issue for this term allowing not only the facts to be clarified but also allowing responses to be made.

The Engineering Society Executive would like to extend our apologies to all other contributing authors and editors of the most recent issue of the IW for

not allowing students to read the newspaper. Apologies go out to all students of the Engineering Society for holding the papers back this long.

As mentioned in our executive response to the articles in question, we would love to hear from any of you with any questions, concerns, suggestions, or criticisms you have. We take the happiness and general satisfaction of our society members with regards to the society very seriously and are very willing to listen and help. Even though we are all heading off on work term now you can always email us over the work term - we'd love to hear from you!

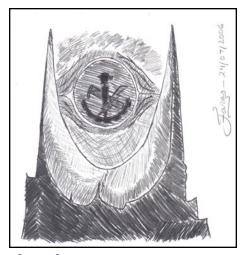
Have a great work term everyone, see you in the winter!

### Irongate Scandal

Continued from page 1

loan from EngSoc to cover the previous term's costs.

In order to release the newspapers on Monday, July 24, 2006, EngSoc proposed that a clarifying insert be prepared and inserted into all newspapers. This insert would have been signed by EngSoc president Jen Carroll, Iron Warrior editorin-chief Gabriel Chan, and article authors Peter Szabo and Kristen Yee Loong. However, upon reading the content of the proposed handout, the Iron Warrior decided not to sign it. Several reasons were given. For one, many of the 'clarifications' contained not only facts but also opinions which would have been better-suited to a regular-edition editorial. Also, the handout would be seen as legitimizing EngSoc's



One of many reactionary cartoons circulating around inboxes.

confiscation of the papers in the first place, something which the Iron Warrior still does not condone.

Therefore, we now bring you an unprecedented special edition, Iron Warrior Spring 2006 Issue 6! This edition contains opinions and articles on the so-called 'Iron Crisis' or 'Irongate', as well as much of the fun IW stuff you've come to know and love. Enjoy it; this is your paper.

# Student Life 101: Showing the Ropes to Engineering



President of EWB (Engineers Without Borders), Stephen Young, speaks to pre-frosh and families at Student Life SL 101 Engineering ShowCase





1B Mechatronics are building bridges (with old newspapers) at the 2nd design competition of the Student Life SL 101 Engineering ShowCase



*Faraz Syed of UWAFT (Alternative Fuels Team) with its Hydrogen Fuel Cell Car at Student Life SL 101 Engineering ShowCase last Saturday.* 

The Midnight Sun Solar Car VIII catches some sunshine at the Student Life SL 101 Engineering ShowCase last Saturday.

Applications for Engineering Society Directorships due TODAY: http://engsoc.uwaterloo.ca/www/engform/app\_dir\_i\_07w.html

### ENGINEERING NEWS

# Karen's Exchange Adventures

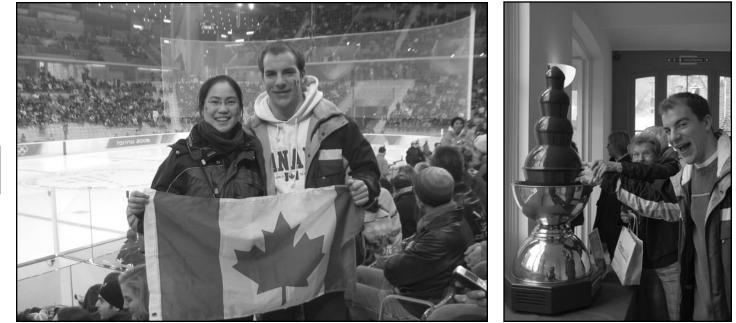
Continued from page 1

American and German students, as well as travelling through Europe and seeing the sights.

Of course, my classes were an experience in themselves. At UTC, profs don't use textbooks. Half of my profs distributed course notes; the other half simply came to class and talked for two hours. Homework was rarely assigned and any practice problems were done during tutorials, which were also led by the prof. Labs were four hours long, done with a partner, and reports were due at the end of the session.

So, while I will be returning to Canada with five course equivalents, I will be taking home so much more. The sense of accomplishment in finishing a thermodynamics lab when, at the beginning of the term, I hardly understood what was being asked. The thrill of watching the World Cup final on the streets of Berlin, cheering on the Tour de France cyclists as they ride by, and soaking up the Olympic atmosphere in Turin. The memories of eating chocolate in Belgium, gelato in Italy and salmon in Norway.

All past exchange students that I have ever met have said that an exchange term abroad is an opportunity not to be missed, and I wholeheartedly agree. It doesn't matter where you go, but if you can, go!



Above left: Dan and I at an Olympic hockey game in Torino, Italy; Above right: Dan dipping his hand into a chocolate fountain at a chocolate festival in Brugges, Belgium; Below: Exchange students and a Castle in Chambord, France.



# Jazzing up the Summer 06 with Engineering Jazz Group



A nother term is coming to an end and the engineering jazz band, With Respect to Time (WRTT), finished with a bang. Swinging into our third term, we have representation from all over engineering: 1B Comp, 1B Elec, 1B Mech, 2B Chem, 2A Systems, 2A Mechatronics, 2A Mech, 2B Mech, 3A Chem, 3A Systems, 3A Electrical, 3A Mechatronics, 4A Mechanical, and honourary members from 3A Bioinformatics and 4A Physics. The turnover rate was low this term with half the band being new members, but that didn't stop our talented musicians from rehearsing every Sunday to tackle ten pieces of repertoire, our most yet!

The ten pieces were accumulated over the past year since the first term (Winter 05) the band came to life. Many of our pieces are chosen with input from the band to ensure that it is challenging enough, and fun to play! This term, we decided to have vocals on 'My Funny Valentine' with the band accompanying Dan Taylor (1B Comp). In case you missed us this term, here is a quick re-cap of what we worked on this term (see Table 1 below).

WRTT played a total of four shows this term: TalEng, three EngPlay intermissions, and our last gig at Student Life 101, welcoming first year engineers and hopefully reminding them that they shouldn't give up the things they loved in high school so easily. If you're interested in playing with us on B-soc, send me an e-mail at engjazzband@ gmail.com. If you're on A-soc and are interested in assisting me on starting this up on your stream, please also send an e-mail!

Song	Solos					
A String of Pearls	Kate Ross (4A Physics), alto sax					
	Jaisal Chauhan, (3A Electrical), trumpet					
A Night in Tunisia	Jaisal Chauhan (3A Electrical), trumpet					
	Justin Eichel (3A Systems), trumpet					
Downtown						
Evil Ways	Dan Taylor (1B Comp), guitar					
-	Nicole Valdez (3A Bioinformatics), alto sax					
	Brandon Tulloch (2B Mechanical), trombone					
	Jordan Harris (1B Mechanical), trumpet					
Harlem Nocturne	Jason Li (2A Systems), alto sax					
	Ally Chan (3A Chemical), alto sax					
In The Mood	Ash Charles (3A Mechatronics), trumpet					
	Ally Chan (3A Chemical), alto sax					
	Ian Barkhouse (3A Systems), tenor sax					
Mamma Mia	Ash Charles (3A Mechatronics), trumpet					
My Funny Valentine	Dan Taylor (1B Comp), vocals					
	Ash Charles (3A Mechatronics), trumpet					
Night Train	Dan Taylor (1B Comp), guitar					
	Jeff Kao (3A Systems), bari sax					
	Jordan Harris (1B Mechanical), trumpet					
The Chicken	Ian Barkhouse (3A Systems), tenor sax					
	Brandon Tulloch (2B Mechanical), trombone					
	Brandon DeHart (2A Mechatronics), bass					



Figure 1: WRTT playing at their last performance during SL 101

Table 1: WRTT Repertoire and Soloists for Spring 2006

### **GENERAL NEWS**

# Tech Report: Fighting Against Censorship in China



ny authority sufficiently distant from Aits constituency finds it acceptable to ensure that only "proper" opinions and facts are shown to its people. This happens when the authority refuses to recognize that its mandate does not match the people's wishes. Over the ages, many authorities have censored their people with a sense of righteousness. But righteousness leads to impunity, and the road to hell is paved with good intentions. Thus eventually they all fail, albeit at an unfair cost to the people.

As is well known, the Chinese govern-

ment has a dim view of free speech. Try visiting Google.com, clicking on Images and typing in "Tiananmen Square". Do the same with Google.cn (the Chinese version of Google) and compare the results. In the first you will see images of the government crackdown of students in 1989. In the second you will only see rosy images - no mention of the crackdown. The government is ensuring that its citizens see only how it should be, not how it really is.

But no authority can stifle the need for the people to hear opinions and facts that do not conform to its own brand of reality.

And so people around the world and in China are working on circumventing the controls of the government. Chinese bloggers are given protected anonymous access to foreign web space to publish free speech without fear. Computer scientists are working on finding vulnerabilities in China's great firewall, a giant automated system



of censorship. And internally the voice of dissent stays alive via forums and covert websites, thanks to the tireless efforts of those who refuse to stop fighting tyranny no matter what the technology.

The lesson to be learnt from this is that attempts to stifle the people's right to be heard without qualification will never succeed, particularly in the communication centric world of today.

## Thought-Provoking Journalism: An Institution Under Attack



anadians are a sheltered people. Our quality of life is the envy of the world and the Canadian society at large has evolved to a point where its wars are resolved on ideas and not violence. We have gotten to this stage because we value and protect freedom of speech. In some ways, a country's development can be gauged by the freedom of speech it cultivates. However, we must be mindful that

we are the exception to the rule, and we live photojournalist who was brutally tortured in a world that is rampant with violence and disrespect of the rights

of others. The media is

under constant attack,

through one form or

another, in many parts

of the world. Journalists

in oppressive countries

are always in danger

of being hauled in and

disappearing without

notice. It is fitting, in

light of recent events,

to focus on the case of

"Reporters Without Borders estimates that at least two hundred reporters have been killed in the last four years, while thousands more have been arrested illegally."

and died in Iranian custody for taking

pictures outside a prison during a student protest. Under Iranian law, it is illegal to take pictures of Evin Prison, notorious for its political prisoners wing. Throughout her detainment she insisted that she had never taken pictures of the prison and focused on the protest instead. Nineteen days into her detainment Kazemi died

with obvious signs of beating and torture, including a skull fracture, two broken fingers, evidence of rape and various other

bruises.

The Canadian government called on Iran several times to investigate Kazemi's death. A year later, the official "verdict" of the trial was that Kazemi's death was an accident, resulting in the acquittal of the accused killer. Furthermore the Iranian government also refused to allow a forensic examination of Kazemi's remains.

Kazemi's story is far from unique. Many daring journalists are being held today in foreign jails without charge and denied their basic rights. Reporters Without Borders estimates that at least two hundred reporters have been killed in the last four years, while thousands more have been arrested illegally. July 11th marked the third anniversary of Kazemi's death.

a Canadian journalist who was denied her basic rights and died in custody abroad. Zahra Kazemi was an Iranian-Canadian

# Driver Training Weekends In Memory of Sir Adam Beck



C tarting late spring of this year, the team Shas been busy organizing driver training sessions every weekend. The sessions provide the team an opportunity to prepare a new generation of drivers for upcoming

improved.

In addition to training new drivers, the weekly driving sessions also provide us with an excellent opportunity for testing new mechanical and electrical components. On the mechanical side, we have been able to gain a better understanding of a new type of tire. These tires have proven themselves to provide excellent reliability and slow wear.

However, they are significantly less efficient than the tires we usually use for races, but still an excellent choice for training new drivers. We have also been able to improve the wheel-door mechanisms. These doors compose a section of the outside shell of the car next to the front wheels and open up during turns to provide the front wheels with the space necessary for wide turns. On the electrical side, the team has replaced the Battery Protection System with a new version which improves the reliability of the components. We have also enhanced the smooth functioning of our telemetry system which remotely reports information on the car's status such as current speed and battery capacity of the car. This data is now also available through a new interface which provides enhanced real-time analysis of the performance of the car and the driver giving us the oppurtunity to strategize accordingly during races.



n Memory of Sir Adam Beck (June 20, 1857 - August 15, 1925). Young Adam Beck was born on June 20, 1957 in nearby Baden, Ontario to German immigrants. He made his mark by establishing a cigar-box manufacturing company in Galt (now part of Cambridge), which he later moved to London, Ontario in 1885.

ity in Niagara Falls. Originally called the Queenston Chippawa Power Station, it is now known, in his honour, as Sir Adam Beck Generating Station or Beck I.

In 1954, a second array of generators was built on the Niagara River, and was dubbed Beck II. A tunnel currently being dug underneath the city of Niagara Falls, Ontario, will supply water to a new, larger generating station that people in industry call Beck III.

A well-rounded man. Sir Adam Beck also founded a sanitorium in London, now known as the Children's Psychiatric Research Institute. While serving in office, he donated his salary to charity. Today an elementary school in Etobicoke and a secondary school in London are named after him. You can also see his statue in downtown Toronto at University St. and Queen St. West. This August 15 marks the 81st anniversary of his death. So don't forget to take a moment, while you sit in an air-conditioned room after your exams are all done, and think about what a great man Beck was and how much the people of Ontario are indebted to him for our comfortable standard of living.

#### races

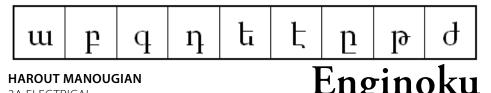
We conducted the training sessions in a large empty parking lot at the university. which allowed new drivers to gain their first experience with the car in a safe, controlled environment. The experience will prepare them for future on-road driving and helps drivers accumulate enough driving hours to comply with new regulations from the Ministery of Transportation in Ontario. The regulations stipulate a minimum amount of off-road experience for all solar-vehicle drivers before driving on public roads.

By setting up a series of courses composed of sharp turns, the drivers incrementally learned the limits of the braking and steering capabilities of the car, allowing them to better control the car under dynamic conditions. We followed these exercises with a course composed of long, straight sections, aiming at improving the control of the accelerometer. By maintaining a constant speed throughout an on-road course, the driving efficiency can be vastly

We intend to continue the driver training sessions until the end of fall to improve the skillset of our drivers. At the same time, we continue to use the car as a test-bed for further technological improvements.

In 1900, he was elected mayor and MPP of London. It was as a minister of Premier James P. Whitney's Conservative provincial government that he began his advocacy of publicly owned electricity grids. Beck's ally, William Peyton Hubbard, a Toronto City Councillor and son of a freed slave from Virginia, helped him fight for province-wide public ownership of electricity infrastructure. Coining the phrase "Power at Cost", Beck was instrumental in the formation of the Hydro-Electric Power Commission of Ontario and was appointed its first chairman in 1906. In 1910, transmission cables had been installed and power was being delivered to towns across southern Ontario. Beck was knighted in 1914 by King George V for his public service. In 1925, the year of his death, the largest generating station in the world (at the time) began producing electric-





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#### Error in last edition!

As an afterthought, the Enginoku puzzle had a type-o in it. In the bottom left big 9x9 square, in the middle 3x3 square of the top row, the right-most square in the middle row should be the letter that looks like an f. In the published version, it's the one that looks like omega.

#### Solution to this week

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#### Solution to last edition

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# **Reaching out to Young Minds**



The Engineers Without Borders High School Outreach program at Waterloo is by far and wide the most successful and active youth outreach initiative throughout EWB chapters across Canada.

HSO has had several large events already this semester, involving upwards of 1500 students (a modest estimate). On April 26 2006, the group of volunteers visited Park Manor Senior Public School and in the spirit of Earth Day, had a huge event for the whole school, totalling 240 students in grades six through eight. Presentations were done in small groups so that the students could have a more interactive experience with focused attention. To make the event even more amazing. we had two guest speakers Sarah Lewis and Ginny Li – past EWB overseas interns

who were there to add support and enhance the experience for the students. "Water for the World" and "Let Them Eat Cake" workshops were presented where students learnt about issues surrounding sanitation and water and food resources.

The HSO volunteers returned to Park Manor Senior Public School the following month on May 31, 2006 for a Global Citzenship Event. At this event, we had the honour of having our guest speaker Tony Maas attend. Two different workshops titled "Food for Thought" and "Shop Til You Drop" were presented.

The largest HSO event of the term took place at Centennial Public School where we reached out to over 560 students in a full day event. Stephen Young, a past overseas volunteer, also spoke about his work in Tanzania last summer.

Currently, there are still ongoing presentations for the high school Shad Valley program and the Engineering Sceince Quest (ESQ) program. There are plenty of opportunities to volunteer so if you are interested, visit www.uwaterloo.ewb.ca for details!

### Club DC spices up Lunch Menu



On Saturday night, unidentified pranksters help UW Catering show what is for lunch at Davis Centre, declaring in fact, that "Pen is for lunch [sic]".

# <sup>ª</sup>Iron Inquisition

#### What do engineers do to prepare for final examinations? presented by the Iron Inquisitors

**≇IRON WAR** 







**1. Reading Iron Warrior** 

### 2. Chilling at K-Zone



3. Boat racing

4. Boat racing



5. Doing design projects

6. Clubbing...

7. YouTube.com

8. Go home!