

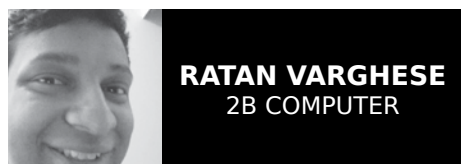
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What Are Your Canadian Values?

Waterloo Hosts A Panel Discussion On World Religions For Canada 150



On Saturday the 4th, the University of Waterloo hosted the 37th World Religions Conference in the Humanities Theatre of Hagey Hall. Confusingly enough, in the newer part of Hagey Hall there was another event happening at the same time. The theme of the conference was “My Faith and Canadian Values”, as a bit of a Canada 150 special. The fact that not everyone approves of “Canada 150” as being worth celebrating came up quite a few times, of course. This event was not solely organized by the University: the main organizer was the Ahmadiyya Muslim Jama’at, whose many objectives include promoting understanding between people of different religions. There were many other organizations involved, not all of which were religious. The Ahmadiyya Muslim Jama’at saw it fit to start the event with a Quran reading.

This event was moderated by Waterloo Councillor Melissa Durrell who once upon a time worked as a television reporter, producer and anchor. She started out by introducing the main speakers of the event: scholars representing seven different belief systems. Then Councillor Durrell introduced the dignitaries visiting the event: the Honorable Bardish Chagger (Member of Parliament for the Riding of Waterloo, Minister of Small Business and Tourism), Mayor Dave Jaworsky of Waterloo (technically Durrell’s boss, as she pointed out), a Councillor of Guelph, Elder Kevin Pearson of the Church of Latter Day Saints (who was visiting the Toronto region from America) and Gehan Sabry (of the Cross Cultures magazine). The Waterloo Philharmonic Choir sang the national anthem, the dignitaries made their statements, and Durrell laid out the rules of the event.

Each of the main speakers would

be allocated fifteen minutes. Some of that time would be spent on a scripture reading, or at least something resembling a scripture reading since not all the belief systems represented had a holy book of any kind. This portion wasn’t actually done by the speaker, except in Amy Smoke’s case. The rest of the time would be spent on a statement where the speaker needed to focus on the theme of Canadian values. Speakers were encouraged to focus on the beauty of their own beliefs, rather than make accusations of other belief systems. In fact, any comparison to other belief systems needed to be purely objective. Councillor Durrell revealed that she was “still a BlackBerry girl” and then let the first speaker take the stage.

Amy Smoke was here to represent the indigenous spirituality. Smoke herself is a member of the Mohawk nation Turtle clan, but took on the task of representing the native peoples of the continent at large. The Mohawk lacked a religious text, so Smoke instead recited the Mohawk Thanksgiving Address, with a few pictorial aids along the way. She later explained that the Address was actually “the words that come before all the other words”. She was a bit nervous since it was her first time speaking her native language in public.

Smoke’s general tone was justifiably pessimistic. She talked at length about her own life struggle, and about the relationship between humans and the environment. Regarding Canadian values, Smoke pointed out that her values were not being represented at all by the government of Canada. The last residential schools were only closed in 1996 and many native reserves are in terrible condition. Anyone who cared about environmentalism would do well asking indigenous people. Unfortunately due to massive efforts to stamp out native culture in the past, in the present much of their knowledge has been lost.

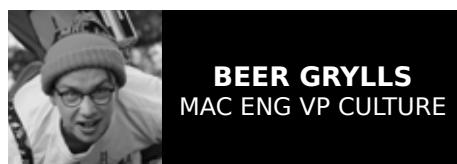
Continued on page 13



via WorldReligionsConference

Waterloo played host to “Canada’s Largest Multi-Faith Event” on November 4th

Mac Eng Is Looking To Get SCUNTY



I hope to fuck this article gets printed in red ink, not just to throw the whole contrast off in this fortnightly publication, but to remind you that redder is better!

My name is Keith Onderisin and your EngSoc President was foolish enough to let us compete in your SCUNT! So one thing has led to another, and here I am: a voice inside your head that’s able to string together these objectively unrelated and

meaningless words into a cohesive story about McMaster University’s Redsuits.

While I could have written about anything else, the primary reason I am writing this, and why McMaster Engineering is competing in your SCUNT, is to fortify the bond between our schools. To enjoy each other’s company now and for the future, and to preserve and spread engineering history and traditions in Ontario.

With respect to McMaster’s Faculty of Engineering, the Redsuits are one of the longest standing traditions there is.

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How To Up Your Beard Game It’s Movember!



Movember is an annual event celebrated every November which involves growing facial hair to raise awareness about men’s health issues including prostate cancer, testicular cancer and includes matters involving men’s mental health. The goal of Movember is to “change the face of men’s health.” The idea behind growing beards and moustaches for charity is to donate

the money saved on grooming facial hair to the cause. While most of us would love to support the cause, growing a beard can be frustratingly tedious and comes with its challenges. To make this process easier and to encourage you to ditch the razor, this article outlines some easy and inexpensive ways to up your facial hair game and donate the savings.

The first thing to keep in mind is to keep your face clean. Wash your face regularly and once the facial hair is long enough, shampoo and conditioner become your best friends. It is also imperative to keep your hair moisturized. Try using argan oil

or coconut oil since they are known to possess medicinal properties and are helpful in healing cuts and wounds which may have been caused by razors or acne. Secondly, have vitamin-rich food. A healthy diet will ensure that your body grows healthy hair. Sea-food, such as salmon and oysters is known to encourage hair growth, while fruits like avocados and nuts are great vegetarian alternatives. Once the beard and/or moustache is long enough, brush it and check for foreign particles that may have embedded themselves deep into your face and made it their home. Exercise also helps in growing facial hair by providing

blood circulation to all parts of the body. A healthy body means healthier hair.

Finally, give yourself some rest. Make sure that you are getting enough sleep and destressing enough.

Continued on page 5



Glamazon via Pixabay

Letter from the Editor

Lessons I Learned As A Man



GABRIELLE KLEMT
EDITOR-IN-CHIEF

You may have started reading this because you thought “What an odd title”, maybe you’re reading it for some other reason, I can only guess. What could I possibly be talking about? Well what did I learn: first that good friends will always believe in you even when you may not believe in yourself; friends are life’s glue. The second thing I learned was that confidence is not a function of how other people see you; confidence is one hundred percent your perception of yourself. Third, I learned that if you choose to you can take dilemmas and turn them into triumphs.

See, what caused this editorial today was the annual first snowfall of the season. There has been and always will be a special spot in my heart reserved just for snow; that delicious white fluffy stuff that falls from the sky like icing sugar, turning the world into a glorious cake. And with the first snowfall comes a twinge in my gut, a niggling desire to listen to Tchaikovsky. I was involved with my ballet studio’s production of the Nutcracker as long as I can remember. Even when I was too young to take part in the show I would sit in the studio during my sister’s rehearsals and dance when I didn’t think people were watching me. I envisioned myself as Clara dancing with her toy, the Snow Queen, and the Sugar Plum Fairy pirouetting under a spotlight.

Despite dancing ballet for 15 years, I never looked the “part” of the stereotypical ballerina, I was always too tall and just a little too chunky. 6-year-old me didn’t realize I would almost certainly never get to play the roles I desired so much. Ballet was like a constant correction, I learned to look in the mirror to see only things that needed to be fixed: back straighter, turn out your legs, stomach in. That’s when you begin making comparisons with the other girls in the mirror. Looking different than most girls in ballet is immediately obvious, from the start you’re told you’re strong, not delicate.

When I was still just a kid, I saw dancing as a means to an end: Nutcracker. When I was 9 my turn finally came around and I got to be a mouse. On the night of the first performance, my friends and I met up at the studio upon receiving a cryptic message from one of our classmates. Her father works for a fancy limousine company and ten minutes later a big shiny stretch drove up! It seemed so portentous, that limousine ride to the auditorium; we were truly going places!

When a place is as expensive to run as a dance studio there’s always funding politics, our school was no exception. When it came to Nutcracker, bitter enemies and rivals were formed over who got what role based on supposed favouritism. Many girls shed tears the day the cast list came up, but every year more auditioned. Of the girls in the

limousine that morning in December eleven years ago, only about three of us made it to Nutcracker in grade 12. Fed up with the treatment, the expectations, or just too busy, many of my close friends stopped ballet. And despite being passed over for roles I knew I deserved, I didn’t stick around because I was a survivor. I was a coward; incomprehensibly Nutcracker meant so much to me I didn’t know how to give it up.

The performances took place in the amazing auditorium at my high school. When I was still young I would look forward to going to the school for dress rehearsals; walking into the lobby smelled like Christmas to me. I knew I’d be going there one day for high school and I anticipated, naively, that every day of school would smell like that. But as always happens in life, school didn’t smell like Christmas, it smelled like school, and the amount of time spent in the auditorium for orchestra rehearsals, musical rehearsals, assemblies, concerts, and hanging out with friends left it feeling homey. What had once felt like a world stage now felt like my living room and I couldn’t take seriously our Nutcracker, with all its pomp and circumstance.

My last year of Nut felt disillusioned from the start. Nutcracker had begun as a magical land of glitter and optimism, every year the paint chipped a bit more, and the varnish lost its shine. It didn’t help that by grade twelve I felt jaded with most aspects of my life and was ready to get the hell out of Toronto and away from the people I’d spent the last 12 years with. When the final cast list came out and I read my roles I just about threw the sheet at the feet of the venerable proprietress of the school and walked out. I kept my calm though and reread the list: 2nd Lead Snow, Master of Ceremonies, Nutcracker. I think that was the moment I rushed to the safety of the bathroom.

A MAN. I got two male lead roles; that was how she saw me? My confidence was shattered. The year before I had endured the role of Snow Cavalier, another male lead role, in the hopes that the following year I would finally be crowned Dew Drop or Snow Queen. To have my only female role be a 2nd lead snow not even a 1st lead! It was a low blow although I can laugh now. I hated that woman with every fibre of my being. How dare she give me such a terrible set of roles in my last year after the blood, sweat, tears, and money that I put into her institution. I almost quit on the spot.

Instead I went home, I called my sister at uni who told me to drop out, as she had, and leave the studio scratching around to find a substitute. My mum said I had to decide for myself and do what would make me most happy, typical motherly response. It was only when I considered the two friends I had left in my grade at that school, the ones with whom I had gone through so much and the ones with whom I would be graduating that spring, that I came to a conclusion. One of them was playing the other Nutcracker and the other would be my Sugar Plum. I decided

to be more of a man and step up to the roles assigned to me.

So yes, here’s where I get around to talking about being a man. The next time I was at the studio, I walked up to the owner and I said “Take your 2nd lead snow and shove it” and she said “Your point is weak,” that’s when I wanted to say she didn’t seem to notice the worse point of the girls to whom she had given major roles. But I didn’t, I simply stopped playing by her game. She had lost all power to hurt me and I was going to do things my way. That was the day I stopped doing pointe forever. It made me sad because I believed the pointe shoes made the ballerina, but I would show her wrong and I would show myself wrong too. It’s not the tutu, it’s the technique.

That fall my two friends and I worked our asses off. I learned moves that I had only seen in books and YouTube clips and when our choreography felt flat or uninspired or if we felt there was not enough emphasis on the ~men~, we changed it to suit ourselves. I decided that I would not let myself have regrets about that Nutcracker. And result was that I had one of the best rehearsal seasons of my life. I got my face on a poster plastered across the city and little girls in the changeroom would ask me, in awe, if I was the Nutcracker. Somehow, I had become an inspiration!

I had always believed that the “Dance of the Prince and the Sugar-Plum Fairy” was the most powerful piece in the ballet, possibly the most beautiful love song in the world. The emotion in this song is so powerful and heart-felt that listening to it almost feels like you’re intruding on a private love-letter. I had never believed that I would get to dance to that song, I was wrong. I got to dance to my favourite piece of music from the entire ballet, and I got to dance it with one of my best friends.

My friend who was also playing Nut and I kept each other sane. We would remember every silly correction given to us and compiled them into a video, “Pupah; How to be a Prancing Prince”, because apparently “pupah” is the sound that you should feel within you as you take a step, when you are a prince. Together we took that role and shaped it into our own unique persona which in turn made the role more important than we’d given it credit for. It’s not called “Clara’s Night Out” or “The Sugar Plum Fairy”, it’s called The Nutcracker and when I stepped out onto the stage I knew I was the centre of attention. When the curtain closed on the last performance, as I backed slowly off stage into a cloud of smoke, a curtain closed on a chapter of my life.

The confidence I gained in myself that fall, as the result of being forced into a position that made me very uncomfortable, changed my perspective on life difficulties. I changed around something I saw as an insult and I made it one of the proudest things I’ve ever done in my life. Stay warm friends and keep changing the world!

THE IRON WARRIOR

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Design Days

Civil and Environmental Engineering



**KAYLEANNA
GIESINGER**
2B ENVIRONMENTAL

On Thursday October 26th to the 27th the Civil and Environmental Engineering faculty hosted the first ever CivE Days. Designed and implemented by Stephen Phillips and Rania Al-Hammoud, with the help of members of the Engineering Ideas Clinic and many other staff and faculty. Students of the second year Civil and Geological Engineering Mechanics course (CIVE 204) participated in a two-day event where they got to design, build, and break a bridge!

Professors aimed to incorporate diversification of teaching methods for an inclusive and deeper-learning environment. Therefore, after a major bridge design project was incorporated into the CIVE 204 curriculum to foster deeper learning through experiential, reflective learning and an integrated design approach of all courses. The following areas of concern were brought up as feedback;

Students have admitted to doing the work last minute due to the demanding nature of all their courses

There have been complaints of students being too nervous to try different methods because of a lack of understanding, time, and experience.

Since students have time to only make one bridge, they do not test the bridge design beforehand. Then on the day of testing often bridge designs fail to do what they predicted to do.

CivE Days was developed to address each of these issues along with improving learning techniques and student-instructor communication.

The breakdown of CivE Days event was two days and four deliverables. The first deliverable was made up entirely of the simulated bridge project design. Each group was given a topographic map with points A



Dylan Dowling

CivE Students Hard At Work in the Sedra Design Centre!

and B on it. Students were then required to connect the two points with a road design and a bridge. In the preliminary design students went through the process of designing a road, doing cost analysis, cut and fill, and environmental assessment. This incorporated their Transportation and Materials courses. The second deliverable was to design and build the bridge. Students then analyzed their design and predicted their failure point, failure load, indicated members in tension or compression, and circled connections which incorporated their Mechanics and Statistics Courses.

On the second day, the fourth deliverable was to test their bridge strength and the

accuracy of their static analysis. After everyone completed testing their bridge, students had time to do group and individual reflection. They were then required to write a reflection report about their bridge design, performance and recommendations. At the end of the day awards were given out and students completed their final event survey.

The consensus from staff, students and faculty have been that CivE days was a success! Students had a lot of fun doing the activity and one student mentioned, "It was a lot of fun because it was a low stress environment, because it wasn't for marks. It wasn't just for goofing off though because it was a competition and we were committed

to making a bridge." Other comments have been that it was a good opportunity to bond with the class and the environment was friendly where everyone was willing to help each other out. Stephen Phillips, the event coordinator, mentioned that, "The event went over really well, especially considering this was the first year it was organized. It was really cool to see such a wide range of bridge designs, and to hear the rationale for the specific design elements used."

Overall the event challenged and engaged students, where from feedback it found that 86% of students who attended wanted to participate in another event like this in the future!

My Boy GSP

Georges St-Pierre Makes His Return to UFC

RYAN SAMLALSINGH
2T COMPUTER

On November 4th, at UFC 217, Canadian former UFC welterweight champ Georges St-Pierre fought for the first time in four years, his first time at middleweight, and dethroned UFC middleweight champion Michael Bisping by choking him to sleep in the third round. GSP says he's better than ever.

A "better" GSP is a scary thought, because when he left the UFC after his victory over Jonny Hendricks at UFC 167 in November 2013, Georges St. Pierre had been the champ of the UFC welterweight division for the better part of the decade, and had only two losses in his professional career spanning back to 2002, both of which were avenged in rematches. GSP's incredible record and spectacular return has prompted plenty of talk of GSP being the greatest fighter of all time, even from other professional fighters. Always-humble GSP has said that his recent popular promotion as the greatest fighter ever is "an illusion" since "[I] can be the best one day, but tomorrow [I'm] not", but the expectations that arise from this banter have harmed GSP before. In a CBC interview in 2014, he revealed that OCD, inflated by expectations to

win, taxed his health and personal life for the last decade. Further, in a recent interview on The MMA Hour, GSP said that he can't stand the pressure of fights, and it showed in the past. In his immediate post-fight interview at UFC 167, GSP almost avoided saying anything about leaving that might disappoint his fans, even though he was visibly fatigued from stress, until his interviewer pressured him to speak and he blurted that he was leaving. The leave helped. GSP says he's refreshed and healthy, and he looked good fighting Bisping.

GSP's ability to win fights is evidently outstanding, so by being "better", he's referring to the way in which he wins. After becoming the undisputed UFC welterweight champion in April 2008 at UFC 83, all but one of GSP's title defence until his leave were decision victories, where judges scored each fighter at the end of the fight. By contrast, the majority of GSP's victories prior to UFC 83 were either submission victories from trapping the opponent in a painful hold, or technical knockout victories by landing too many fast, hard, strikes that weren't avoided. Naturally, many UFC fans found watching welterweight champ GSP boring because he'd win by decision as opposed to by submission,



Pete Sapper via Vimeo

Georges St-Pierre made his return to the Ultimate Fighting Championship this month and dominated his opponent Micheal Bisping.

knockout, or technical knockout. This was most evident at UFC 167 when GSP was announced as the winner and boos rained down on him.

Despite leaving the UFC to boos, hearing the crowd chant "G-S-P" in his return fight at UFC 217 wasn't surprising. He wasn't trying to get a decision victory. He finished Bisping,

a tough middleweight. He is better than ever, and a bigger legend than ever. It's unclear if GSP will fight next at middleweight or welterweight, but he's done enough to be considered the greatest fighter ever. Trudeau said it best on Twitter: "Félicitations Georges! Like you never left. You've made us proud once again."

We Will Remember Them

Marking November 11th



STONE HE
1A MECHANICAL

Why do we Remember on Remembrance Day.

Remembrance Day is a day usually celebrated in Canada and the commonwealth to commemorate their members of the armed forces who have died in combat. I am aware that some students in Engineering are from other countries; some of you may have another name for remembering your veterans, but here in Canada it's known as Remembrance Day.

Every year on November 11, we celebrate Remembrance Day to pay our respects for our fallen armed forces members. For those not familiar with Remembrance Day, or those who would like to read about the day, I will give you some information about this particular date.

The origins of Remembrance Day can be traced back to the armistice at the end of World War I. On the eleventh hour, the eleventh day, the eleventh month, the fighting and World War I has ended. And on this date, it was known as Armistice day. After World War 2 it was changed to what we currently know as Remembrance Day.

Every year, there are ceremonies held during Remembrance Day or the weekend before. Most of these ceremonies have local veteran's groups, military branches, police, and cadets participate in the ceremony. However, everyone is welcome to attend one as these

ceremonies are open to the public. The ones that we had in Waterloo included the on-campus Remembrance Day ceremony on November 10, and the one at Waterloo Cenotaph on November 11.

One important part of the ceremony is the playing of Last Post and the Rouse. The Last Post is a bugle call that usually signifies the end of a day, while the Rouse signifies the beginning of the day starting at sunrise. During the Remembrance Day ceremony, both the Last Post and Rouse were played with a two minute of silence in between. The significance of this tradition is that the Last Post and the Rouse signify both sunset and sunrise: death and resurrection.

As you may have noticed, there were students who wore the poppy during late

October and early November. You may have asked (if you are not from Canada nor the commonwealth), why do people wear a red flower on their chest?

The reason why we wear the poppy is to remember those who fought and died during our past and current conflicts. Why specifically the poppy you may ask? During World War I, the red poppy was the first flower that grew on the carnage-filled battlefields where the graves of the fallen stood. However, there were also other colour variations of the poppy that could be worn during Remembrance Day, each with its own significance. One of them is the purple poppy, which symbolizes the animals that were wounded or killed during war. Another variation is the white poppy, which stands for pacifism and the aim to end all wars. However, these white

seen as often as the red poppies.

According to the Royal Canadian Legion, there are a few protocols to wear a poppy properly. The poppy should be worn on the left side, over the heart. As a sign of respect, there should be no pins or plaques that obstruct the poppy, as the poppy is a sacred symbol of remembrance. After the Remembrance period, or after the ceremonies, the poppy should be properly disposed by laying it on a wreath or on a cenotaph. However, it is totally up to a person's discretion to wear a poppy at all.

It is easy to obtain a poppy in campus during the Remembrance period. They are usually located in stores, and food places all around campus. Also, you may have saw that the poppy boxes ask for donations as well. The donations go towards Canadian veterans and families of veterans in need. By the time this article is published, Remembrance Day has past and there's no need to wear one, right? Well, not quite. The poppy is not just limited to Remembrance Day, as it could be worn on any day of Remembrance, such as Vimy Ridge, Battle of Britain, and Battle of the Atlantic Day.

Remembrance Day is a day where we remember those who gave their lives for our country. Poppies were worn during the weeks leading up to Remembrance Day to honour those who fought and died for us.

Even though Remembrance Day has passed, we should still remember those who fought and died for us and our country. With their sacrifice, we can live in freedom and peace.



SHAWSHANK61 via Pixabay

Veteran's Poppy Wreath

October and early November. You may and purple poppies are rare and are not

It's Been 100 Years...

What Did We Learn From the October Revolution?

JANNY WANG
1A NANOTECHNOLOGY

The Wednesday a fortnight ago was the anniversary of the October Revolution. The image ingrained into popular mythos is that of a frothing hammer-and-sickle mob, rudely intruding upon the genteel fairy tale court of the romantically doomed Princess Anastasia, plus assorted others. This is actually a conflation of two events.



Stephen White via Flickr

Doomed Tsar Nicholas II

Tsar Nicholas had been plucked from his throne nine months prior, in the creatively named February Revolution. History has been kind to him because he was a good father to four beautiful, tragic princesses, and also because he was shot. As a ruler, his autocratic tendencies were mitigated only by his incompetence. Had he reigned five hundred years earlier, he would still probably have met some grisly end; incompetence, cronyism, a weak and vacillating personality and dictatorial attempts are, more or less, the

WebMd symptoms of upcoming Stark Syndrome, and Nicholas did a fair job of checking off all the boxes. As it was, he reigned just over a hundred years after the French had divested their king of crown and head, and seventy years after Marx published his Manifesto; he reigned during a time where the words "revolution" and "proletariat" were on every tongue- and moreover, he reigned with gilded majesty over a starving populace. He was screwed from the word "go".

So much for our doomed tsar.

He was succeeded by the Russian Provisional Government, a hodge-podge of now-obscure leftists whose competence did not necessarily match their progressivism. Nonetheless, one cannot help but admire their ideals; to a feudal police-state, they brought freedom of press, the abolition of all class, hereditary and religious inequalities, and universal suffrage. These grand achievements were tempered by their incompetence. The Russian people wanted peace at almost any cost, a marked decrease in starvation, and to own the land they farmed. The Russian Provisional Government wanted to bury its head in the sand- or any other available material- as long as possible.

Somewhat inconveniently, a rival government- the pithily named Petrograd Soviet of Workers' and Soldiers' Deputies- sprung up almost immediately, and promptly relieved the Provisional Government of control of the army. Such an act ought to, perhaps, be alarming to most governments, but, before we condemn the RPG for its competitive ostrich re-enactment, it is fair to remind

ourselves that they had not quite sunk to Tsar Nicholas' level; they had one achievement- namely, the election of a governing assembly. It was not quite their fault that the assembly convened after the Bolshevik coup and consequently dissolved almost as soon as the deputies sat down.

Red October itself was almost an anticlimax; the Bolsheviks seized the crucial buildings of Petrograd, including the Winter Palace, in a bloodless event, and the leader of the Provisional Government high-tailed it out of Russia, whereupon civil war ensued. The result of that is well known; everyone fought the communists and everyone lost.

Reflecting on the entire debacle cannot but leave one with a sense of Darkness

Induced Audience Apathy; do we side with the autocrats, the other autocrats, or the incompetents? Or do we wash our hands of the whole affair, and dub that entire period a screw-up with no heroes? Revolutions in general tend to produce that sort of feeling; your plucky rebel heroes succumb to paranoia or despotism, and proceed to lop off each other's heads with great alacrity. The French Revolution set a precedent and other Revolutionaries do an unfortunately terrific job of adhering to it.

On the whole, it is tempting to say that nothing good ever comes from a revolution- but then again, revolutions never come from anything good. The real question is- where would we be without them?



via Flickr

Political Demonstration at Petrograd, 1917

Mac Eng Is Looking to Get SCUNTY

Continued from page 1

The inception of the Redsuits came in 1985, where the first Orientation Chairman of the MES, a student by the name of Mark Huttram, dreamed of a group of boisterous engineering students that would dominate the landscape of McMaster campus. He interviewed a group of students, and of those only chose unquestionable leaders in the engineering community to lead the incoming frosh.

At the same time, the MES President Mike Kukhta, who would then go on to become the MSU President the following year, was working away to institute a pub-crawl as an official Frosh Week event. After consulting McMaster security and the local police, it was determined that with a parade permit and a visible group of individuals to control situations that might get out of hand, the pub-crawl could take place. Coupling the two initiatives, it was with this that the McMaster “Frosh Controllers” were born, and if you have the chance to meet any Redsuits, you will see the tradition enduring in the form of yearly Frosh Controller patches from when they were selected to be a Frosh Week Representative. It should also be added that Engineering began the tradition of Frosh Week coveralls and jumpsuits at McMaster, where now every faculty and residence has its own distinctive color or appearance.

Getting into the thick of Redsuit culture now, is one thing of note: McMaster Engineering’s unique choice of red as their color to represent their faculty. Typically purple is recognized by schools across Canada to represent Engineering, easy examples in Ontario being here at Waterloo, but also

at schools like Carleton, U of T, Ryerson, and Windsor. Word has it that McMaster engineering students once tried to dye themselves red, but the results were...rather devilish.

Moving on to another unique aspect of Redsuit culture is the selection process. As of right now, McMaster is one of the few schools where students cannot just purchase their own suit, but must apply and be chosen based on the merit of their leadership credentials and creativity. Tryout season typically begins around the end of January, and recently there has developed an annual prank on campus to signify the beginning of Tryout Season. Students form groups to organize their own pranks, or otherwise creative elements to present before the ‘Committee’, who then decides the Rep team for the upcoming Frosh Week. Students must re-apply every year to rep for Frosh Week. However, when a student receives their suit they are now part of the Redsuit community for life. The Redsuit community aims to retain members year to year, and to be able to give new opportunities to students that have demonstrated their involvement in the community.

Another way McMaster stands out is its choice of mascot. Although schools typically choose inanimate objects, like the Tool here at Waterloo, the Ram at Ryerson, or the Gong at Carleton, McMaster is represented by its Super Plumber and Wonder Plumber. Originally the Super Plumber was chosen as one who was known as brash and brazen among his peers, and otherwise someone who had the connections to help his group of buddies have a good time. Wonder Plumber came sometime after in the 80’s, and is known to be the

responsible counterpart to save the day when Super Plumber is slacking off. Both are symbols of McMaster Engineering’s devotion to being the loudest, proudest, and craziest faculty on campus, and both are on the front line of almost every Frosh Week activity the Redsuits organize. Super Plumber’s founding goes back to the late 1960’s, the etymology of which stems from Engineering’s connection to its military past.

On the topic of Frosh Week, one notable event Redsuits organize and participate in during the week is Bus Pull, which happens every Frosh Week and is led by the original Super Plumber, Romeo Palombella (and let me tell you, this is a man who can tell you a thing or two about the olden days). This event involves both Redsuits and Frosh taking a turn to pull an HSR (Hamilton Street Railway) double-bus each half-way around a predetermined route in downtown Hamilton. This visual spectacle commands police supervision to cordon off sections of Hamilton’s streets, and its main focus is to raise money for Cystic Fibrosis through the Shinerama campaign.

Another notable event organized is

Santa Hog, where students go from class to class singing Engineering themed Christmas carols to de-stress before exams, bring cheer to students, wreak a little havoc, but primarily raise money from students to donate to the Women’s Interval House in Hamilton. Over the years Santa has been selected among both men and women, with last year being the first year to feature a Santa and a Mrs. Claus.

Although there are many other traditions and deeper explanations as to why we do what we do, these are the big ones that can give you a glimpse into what the Redsuits represent. First and foremost, it is the Engineering student body at McMaster University. Outside of that, we are a community of students that are unmatched in our pride and notoriety on McMaster campus. No other faculty can boast the type of involvement we provide for students and for alumni like we do. With that being said, if you have made it out this far, thanks for coming out - mwah!

Note: Thank god to old Frequency archives and somewhat helpful, if not blatantly subjective ESSCO articles. Not to mention, some Dirty Old Men: Eau de Cum & Flaming Commie-kaze.

More Tips on Taking Care of Your Facial Hair

Continued from page 1

Stress can lead to increased cortisol levels which may lead to hair loss. A well rested mind makes way for a healthy body.

Remember that growing a beard takes patience. Do not give up just because it is taking too long. All this hard work will eventually pay off. That being said, if this November, growing a beard

is not something that appeals to you, just take care of yourself either way. Look in the mirror for longer, and sleep until you are well rested anyway. Eat healthier and exercise often because it will pay off. Movember celebrates all men and their physical and mental well-being, so make sure you pamper yourself this month, with a beard or without.



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Point Vs. Counterpoint

Should We Have Daylight Savings Time In Canada?

POINT

COUNTERPOINT

GABRIELLE KLEMT
2B GEOLOGICAL

Ah, Daylight Savings Time, that debate of the century. Some hate it, some love it, most are indifferent (you're wrong, pick a side!). I'm here to argue why we need DST.

My venerable opponent surely does not realize in his tirade against walking to and home from school in the dark that we are in fact not currently in Daylight Savings Time right now, we're "back to normal". If we never had DST, we would still be experiencing sunset at 5pm! Complaining about the end of DST is odd not only for that reason, but also because we get an extra hour of sleep. The sleep-starved student gets one more hour of blessed relief from commitments, why call foul?

I am one of those people who finds it easiest to wake up with the sun on my face (and birds singing in my ear), remind me never to move to Sweden. The end of DST makes waking up without wanting to break something more possible for me. As a matter of fact, since the time change I've been waking up consistently before my alarm to the bright light of a new day shining happily through my window. And let's not forget what we're really here to represent: the start of DST, or "Spring Forward". The flip side of waking up with the sun is that in the spring I start waking up way too early because of the bright light shining on my face like the noonday sun at 6am, robbing me of the sleep that I desperately need. With DST and Spring Forward the clock rests to follow a more comfortable light-setting for all.

And even if we always lived on DST, waking up at 7:30 in the pitch-blackness, we live in Canada my friends. Even in Southern Ontario we experience the rules dictated by the Earth's tilt. The time of sunset is constantly changing and on December 21, the shortest day of the year, the sun is projected to set at 4:49 pm. Living perpetually on DST

would only make the time of that sunset an hour later, 5:49pm, are you really going to use that extra hour of sun to do something? It will be freezing outside and you know it.

It's unfortunate that classes take up so much of our daylight hours, but think about how much more productive you can be when going outside seems like walking into a giant freezer where the lights have broken. Bundled up inside you can do all that work you thought you would do on nicer days when you instead spent evenings outside with friends.

The reason I love Daylight Savings itself, apart from the sleep aspect is because it gives us longer evenings in the summer months. Long evenings after the worst of the day's heat is over and everyone is relaxing without work waiting for you like a dog at the table is something we have DST to thank for. Where would cottage life be without that extra evening hour to chat with friends, sipping drinks before the sun finally sets in a beautiful pyrotechnical display? I would much rather have that extra hour of sun in the summer when I know I'll be able to enjoy it because it'll be a pleasant 15°C outside. In November I tend to aim to spend as little time exposing what little skin is left after I bundle myself up to frostbite and having an extra hour in the evenings would mean absolutely nothing to me. In fact, I spend so much time inside it wouldn't matter whether the sun set at 4pm or 9pm, I still wouldn't see it happen.

Hating on DST is hating on short summer nights and waking up feeling like a person rather than a poked bear. The government of Canada made a change years ago that countries around the world who don't use DST are missing out on. Unless they live near the Equator and experience no change in sun-set times all year. So quit hating, winter is here whether we like it or not. It's time to bundle up and hunker down indoors where we hibernating bears students want to spend our time anyway.

HASAN AHMED
2A NANOTECHNOLOGY

Daylight Savings Time (DST) to me seems like an outdated process that we wouldn't lose out on if we got rid of it. There's a few reasons why I believe this, and I've listed them below. Let's start with an anecdote:

So I'm walking out of class; background, in 2A Nanotechnology Engineering we have class everyday from 8:30 to 5:30, either labs or tutorials in the morning, and ending with lectures. As you can probably guess, this puts a damper in my sleep schedule, especially since learning new material in the afternoon is pretty rough. Nonetheless, pre-DST me would leave around 5:30 to relax and get some food or hang out in the remaining daylight. However, DST then came (which I freaked out about because I forgot about it and was confused how my clock went from 1:59AM to 1:00AM). Anyway, now I leave lectures and it's pitch dark, so I'm pretty much slumping home in the cold, fall, night. Don't get me wrong, I actually love fall and snow, and although it's cold, there's some serenity in bliss of walking home in the snow alone at night. However, it's not the best to be hit with a feeling of gloominess after an electromagnetism lecture. This not only affects my afternoons, but will soon be affecting my mornings. Usually I get up around 7:00AM, sometimes 6:45AM. By the time I get up and leave my house, in a few weeks I'll leave before the sun has even risen. Also, I don't get to be woken up by natural light anymore, which is kind of sad.

Another drawback, which is a bit specific to the Muslims of UWaterloo (and they can vouch for me) is our prayer times get thrown off a whole hour. For those who don't know, Muslims have 5 prayers in the day, one before sunrise, two during the day, one before sunset, and one at night. Although a slight positive is that the earliest and latest prayers get squeezed later and earlier respectively (which means more sleep), the rest get squeezed as well, throwing off our whole schedule

that we were accustomed to. It's also good practice in Islam to pray on time, and not lay it off for a later time, so it can be a tad annoying to rework your whole schedule and routine on a day's notice.

DST was introduced to save energy for war production. I don't know if you realize, but we're not in a war (or at least, not yet?) so it seems oddly pointless to keep. Besides, how much energy are we ACTUALLY saving? Is it enough to warrant keeping DST? Or are we just so used to DST that we keep it? I personally would be willing to revert back to normal timing and get used to that. Besides, we capitalize on a lot of productivity during the night time thanks to newer technologies anyway, so it's not like we're saving too much energy. We've got things running constantly 24/7, and we could save a few lines of code if we just removed DST, thus being even more efficient by an extremely small fraction. In fact, in Spring, we're going to lose an hour of sleep. So in Fall, we gain an hour of sleep, and some of us will stay sleeping until our alarm runs (so I'm assuming we get an extra hour rather than fixing 8 hours of sleep, AKA we get 9 instead of 8). This means we lose an hour of productivity there. However, in Spring, we spring forward, thus we wake up an hour earlier. This can also lead to tired people, losing even MORE productivity. I really don't want to lose an hour of my sleep in the future. I'll admit, the extra hour in Fall is nice, and was helpful for this term, but it's not worth it for me, since I like to enjoy my sleep. It's recommended to maintain a consistent sleep schedule.

Not every state in USA even does DST. Arizona and Hawaii are saying "nah" to DST. A lot of Asian and African countries don't do DST and you don't see them complaining. They're making fun of us like we do at the USA for using imperial measurements. Even my home country, Pakistan, doesn't do it, and that's enough reason for me to say no as well. Thus, I propose we all follow along with our friends in Asia and Africa and say no to DST because it doesn't really do as much as we think.

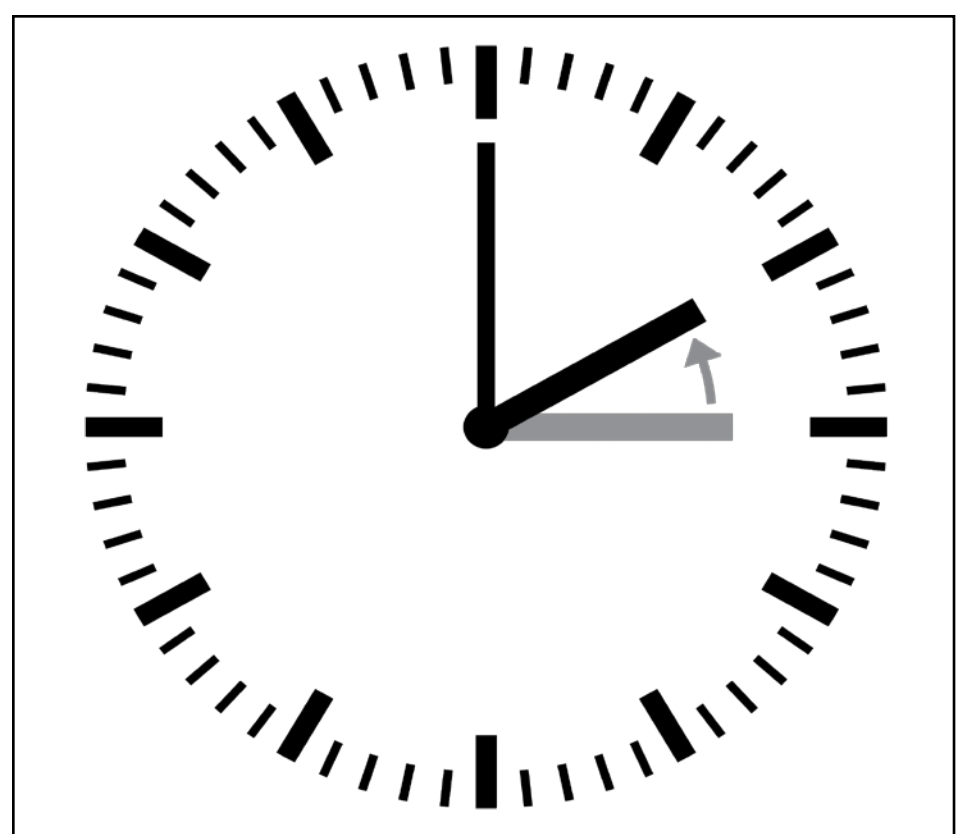


TimeZonesBoy via Wikipedia

Lots of countries don't use DST!

Editor's Note:

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



Daniel FR via Wikimedia Commons

We just fell back an hour this weekend and got an extra hour!

Osama bin Laden Played *Super Mario Bros.*

A Look Into The Recreational Life of One of the Former Most Wanted Men



STONE HE
1A MECHANICAL

On November 1, The CIA released 470 000 additional files from Osama bin Laden's hard drive to the public that was captured during the May 2011 raid where Bin Laden was killed.

Even though most of his files included personal memoirs, photos, and videos about himself and his family, there were also files of Western and Japanese movies and video games, and internet pictures and videos that could show us what he or his family could have been doing during their down time.

It turns out that bin Laden had a collection of animated movies in his computer. The following were found during the

raid on May 2011: *Antz*, *Batman Gotham Knight*, *Cars*, *Chicken Little*, *Final Fantasy VII Advent Children*, *Home on the Range*, and *Ice Age: Dawn of the Dinosaurs*. They did recover one live-action movie on his hard drive, which was *Resident Evil*. These films could potentially be for either him or his family members living with him in their hiding place.

Not only did he have movies on his hard drive, he also had a few video games on his files as well. Some of these games were familiar titles such as *Mario & Luigi: Partners in Time*, *New Super Mario Bros*, *Metroid Prime Hunters*, and *Yoshi's Island DS*, which all were for the Nintendo DS. He also owned other Nintendo DS games such as *Naruto Saikyou Ninja Daikesshuu 3*, *One Piece— Gear Spirit*, and *Battles of Prince of Persia*.

Documentaries about the world around him and himself were also found within

his files. Some of them featured documentaries about wildlife, ancient and modern military forces, and one about animal venom. In addition, he also kept documentaries about himself, including a CNN documentary and comedy documentary *Where in the World is Osama bin Laden*.

Other than movies and video games, he also kept a few random pictures and videos on the internet. These videos include a clip of a viral video "Charlie Bit My Finger," "HORSE_DANCE," and several cute cat videos as well. In addition, he had a picture of a stuffed monkey along with other clipart in his picture collection.

Along with his personal entertainment, the 470 000 files also included never-before seen personal videos and pictures about himself and his family. Some of these videos include his son Hamza's

wedding, which gave the world a look on how Hamza looked like as a young adult. There was also a childhood photo of Hamza superimposed with a photo of the World Trade Center, which was used to mark the anniversary of the September 11 attacks.

Also included were bin Laden's personal memoirs, which revealed his thoughts about Al Qaeda and its place in the world, and the 2010 Arab Spring uprisings. According to the CIA, his memoirs mentioned his plans to exploit the Arab Spring uprisings in some way.

There were some files that were not released to the public due to concerns of national security or that it contained malware, copyrighted materials, and other offensive content. However, we are now able to look at what bin Laden's personal life must have been like during his hiding.

Looking Back at *Iron Warrior* History



HASAN AHMED
2A NANOTECHNOLOGY

THE RUSTY KNIGHT

Hey! Just a description of this column; I'm going to be digging down into the older issues of the Iron Warrior to give a little glimpse of the past of the newspaper and Waterloo Engineering as a whole. This term, I'm going to review issues from Fall 2011. If you really want, you can get ahead and read them yourself (I would recommend doing this for your classes instead of this column) at <http://iwarrior.uwaterloo.ca/>

Fall 2011 issue 3. Exactly 6 years ago, E6 was opened. They celebrated by hosting a reveal with rows and rows of chairs commemorating the building's opening. They even had an edible periodic table of elements made up of cookies, with each element hand-iced into the cookies. Now I don't know about you, but a titanium cookie sounds pretty legit, and painful to digest. In the article, they also mention how E5 was opened just the year before, and it's crazy how time flies, because guess where I'm writing this article from! Today, E5 is filled with design team garages and studios people occupying the very few study spaces on the second floor. E6 is home to a lot of chemical engineering labs, about which I've had the oppor-

tunity to speak with a lot of professors. It's also nice to just gaze at the posters (that I barely understand) and realize how much research is being done at the university. They started building in September of 2009, and cost around \$42 million; I'd have to say that was a great investment.

TEDxUW also happened at the same time 6 years ago. So it's pretty cool to see events like these keep returning to the University of Waterloo. Although I wasn't able to see it in per-

son myself this year, I've heard it's a great opportunity to see some great speakers. Check out our 3rd issue this term to see our writers' experiences at the conference.

Also included in this issue was a shave/no shave PCP, which was done in the interest of Movember. Advocated for the 'shave' side were reasons such as professionalism, cleanliness, and maintaining a positive image. Another reason was "if you have a beard, no one will touch you," which I greatly disa-

gree with, as beards are not primarily for others; they're for you. That's why I'm on the side of no shave. Apart from Movember reasons, this side of the PCP indicated that maintaining your beard is important, and that's how it actually remains clean. Also, winter is coming; the time I'm actually writing this article is Thursday, Nov 9th; which was the first snowfall of the season. I'm now trying to grow my beard as fast as possible so I can retain warmth for the harsh Waterloo winter months (unless these coops take me to warm places, wish me luck). Another good reason suggested was that you are easily identifiable with a beard. This is good if cops need to rule you out as an innocent. I guess this is a double edged sword though if you're guilty. Long story short; don't do crimes my friends. They're illegal.

For my last article, I want to point out the P**5 update posted by our VP Internal (wow, it was called VP Internal a while ago instead of the positions we currently have). I'm posting this because I'm the P**5 director, and you need to DO MORE ACTIVITIES! You win money for your classes if you're in the top 3. So, email ptothehive@eng-soc.uwaterloo if you have more questions (personal plug).

Anyway, that covers the 3rd issue of Fall 2011. Hopefully you'll stick with me for the end of the column. Peace.



Images from *Iron Warrior* Volume 32 Issue 13

Don't Fret The Christmas Fever!

More Reasons to Celebrate Post-Halloween



SAMRIDHI SHARMA
2B CHEMICAL

The month of November brings with it an eerie post-Halloween lull, and the urge to escape a pre-pre-Christmas limbo. Having nothing to celebrate may seem like your only option but fret not! The world is full of so many different cultures, celebrating holidays that one can't even imagine.

All Saints Day and All Souls Day is celebrated every year on the 1st and 2nd of November, right after Halloween, and believe it or not, it is not a coincidence. These days were

first celebrated in May to recognise all the saints of the Christian Church and souls that have passed and gone on to heaven. However, these days were moved to November to downplay the Pagan holiday of Halloween, since it was too popular to ban. The Church hoped that if downplayed, the holiday would die off over time.

A more absurd holiday celebrated on November 15th is Clean Your Refrigerator Day in America. The origins of this holiday are unknown, but it is speculated that it is "celebrated" to make more room in your fridge before Thanksgiving. This leads us to American Thanksgiving, which is celebrated on the fourth Thursday of November and falls on November 23rd

this year. On this day, most families share a meal together, which usually consists of turkey. Traditionally, the meal is accompanied with prayers which perpetuate a sense of gratefulness. Thanksgiving originated as a way to say thanks to God for a good crop by the early settlers.

Another important American holiday that all shopaholics have a love-hate relationship with is Black Friday, celebrated on the Friday right after Thanksgiving. This time it is November 24th. It is regarded as the beginning of the Christmas shopping season and most stores have special "Black Friday Deals" to encourage shopping.

If you need another reason to

celebrate on the Friday of November 24th (and go a little crazy with it), "All Our Uncles Are Monkeys Day" is also celebrated on this day. This is celebrated on the anniversary of the publication of Charles Darwin's book, *On the Origin of Species* in 1859. It is also the anniversary of the discovery of "Lucy", the *Australopithecus afarensis* skeleton, by Donald Johanson and Tom Gray in 1974, a milestone in the study of evolution, and therefore, is also called "Evolution Day" for short.

If all these holidays still don't interest you, you can always celebrate "Stay At Home Because You Are Well Day" on the 30th of November and stay in the spirit of celebration from Halloween, all the way till Christmas.

r/roastme

Let's talk about my failures!



RACHEL MALEVICH
PRESIDENT

Actually though, please don't send me unsolicited messages about why I suck, that would be kinda mean - I'm just going to take this opportunity to roast myself.

It's been sort of a tradition on A-Society to write the second last Prez article about some of the failures encountered. I think that talking about this is pretty important because transparency is key in an organization like EngSoc. With the introduction of goals presentations and the red/yellow/green status attached to them, my team has been pretty successful in this area. However, some of the goals that we campaign with don't always get talked

about (usually because of feasibility), and not everyone pays attention to the council updates.

Let's start with my campaign points. One of my larger goals was to expand the professional development portfolio and have a better organized group to handle the demand of online resume critiques, all workshops, and even some new things like LinkedIn advice. I tried to lift this one off the ground in Winter 2017, but I was unable to provide the right amount of support to this group and it ultimately didn't grow into anything larger. Online resume critiques actually fell off the radar on B-Society for a while, which sucks because it's a phenomenal resource. I think that this area of the Society still needs some work, but we've had some really great directors and visionaries go out of their way to help us in this time of

need, and I'm really appreciative of those people.

Another one of my platform points was focused on communication (like introducing a bi-termly newsletter that would summarize everything that EngSoc has to offer). This is a tricky one. Communication is something that all societies struggle with - reaching students in a meaningful way is difficult. I didn't personally focus in this area because after understanding more of the intricacies of how EngSoc communicates, it didn't make sense to share information in a different (and potentially less effective) way. I do feel that I could have supported the VP Comms more in this area and had this as a greater focus following the Communications Survey.

Now onto the mistakes. One of my biggest fears in this position has been

making the wrong call. There are very few easy decisions in general as President. I've made the wrong call more than once and I'm deeply sorry for those affected by those decisions - please know that I will always have regrets about people that I have hurt (no matter how unintentionally) in this role. For the sake of those affected by some decisions, I'd prefer to not bring the issues to light again. To those reading this article and understanding what I'm talking about - this is for you.

If anyone has any questions about this article or some of my failed initiatives, please come ask me questions! You can find me in the EngSoc office from 1:30 - 3:00 pm on Mondays and 11:00 am - 12:30 pm on Fridays. See you next issue for some things that I'm proud of and a general good time because the Prez transfer countdown has officially begun!

Let it snow, let it snow, let it snow!



SABRINA HUSTON
VP STUDENT LIFE

Happy First Snow Friends!

Winter is coming apparently, so I hope you all are wearing your toques and mittens to stay warm. On that note, we have lots of fun winter themed events coming up that you can look forward to!

The start of the weekend will be Tal-Eng this Friday, where you can come out and either perform or watch your fellow engineers show off their talents.

There will also be a special show from the newly elected executive (stay tuned to council tonight for the results). Tal-Eng has been a tradition in engineering for a long time, and you can read more about our other traditions on the EngSoc website (EngSoc.uwaterloo.ca). The Tool will be present, with the bearers contributing as the guest judges for the performances.

Next, Saturday kicks off the holiday season with the region's Santa Claus parade, which EngSoc will be participating in. Come join us and walk in the parade dressed in your holiday gear, covvies, and a jacket to spread

your holiday cheer! The Tool will also be making a festive appearance, so join in the hype. The next day, join in the volunteering at The MUSEUM and teach some kids how to science! It's a really fun time, and it really helps to get kids interested in science and engineering. They are the future! Sign up to volunteer beforehand so that we know you're going to be there.

Then, to start wrapping up the term we have EOT on Nov. 23rd, which is going to be lit! It's a board game tournament in POETS, but you can also just come out and hang out and meet new friends and watch the tournament happen! The game that we will be competing with is TBA at the moment, come by the orifice and tell the executive your ideas! Then get ready for Holiday Gift Exchange the following Monday. Be sure to sign up beforehand if you're planning on

bringing a gift! There will be a price limit on the gifts, and it's a fun way to meet new friends and bring holiday cheer to your fellow engineers.

That weekend is also EngPlay, so be sure to buy tickets early and come out to see your fellow engineers put on an excellent production. This term has been FULL of fun events, and if you enjoyed them and want to get more involved, keep your eyes out for the directorship applications that should be coming out soon! It's a really fun way to make new friends, gain some valuable leadership skills, and positively impact your student society. Feel like there's an event that's missing from the list? Suggest your new ideas to the incoming executive, we are always looking for new and fun ways to engage the engineering students.

Happy November everyone!

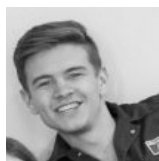


Upcoming Events Calendar

Wednesday Nov 15	Thursday Nov 16	Friday Nov 17	Saturday Nov 18	Sunday Nov 19	Monday Nov 20	Tuesday Nov 21	Check out up-to-the-day event postings on the EngSoc website at engsoc.uwaterloo.ca/event-calendar/
Council Meeting 5:30 pm - 8:30 pm Change for Charity Nov 13 - Nov 17 WiE - Citi 5:30 pm - 7:30 pm CPH 1346	De-Stress Boardgames 4:00 pm - 7:00 pm POETS Change for Charity Nov 13 - Nov 17	Tal-Eng 9:00 pm - 11:30 pm POETS Change for Charity Nov 13 - Nov 17	Santa Claus Parade 9:00 am - 4:00 pm University		Board Games 5:30 pm - 8:30 pm POETS	Charity Grilled Cheese 11:30 am - 1:30 pm CPH Foyer EngiQueers 6:00 - 9:00 pm POETS	
Wednesday Nov 22	Thursday Nov 23	Friday Nov 24	Saturday Nov 25	Sunday Nov 26	Monday Nov 27	Tuesday Nov 28	
Director Appreciation 7:00 pm - 9:00 pm POETS					Holiday Gift Exchange Nov 13 - Nov 17 POETS Board Games 5:30 pm - 8:30 pm POETS	EngiQueers 6:00 pm - 9:00 pm POETS	

Conferences

Your one stop shop for networking, growth, and involvement



DAN ROBERTSON
VP COMMUNICATIONS

So what exactly is a conference? Conferences are an incredible opportunity to learn about different perspectives, EngSocs, and more. They are an opportunity to network with students and professionals alike. They're a great chance to learn and grow as an individual and as a student leader. Some are focused more towards getting involved in EngSoc, Engineering Student Societies' Council of Ontario (ESSCO), and the Canadian Federation of Engineering Students (CFES), but some are geared towards personal and professional growth. We also want to

make our delegations more diverse, so no matter your involvements, we'd love to see your application.

November 3rd-5th was the weekend of Professional Engineers Ontario – Student Conference (PEO-SC) put on by Ryerson Engineering Student Society and ESSCO. This conference is 2 days, and is centered around professional development, and introducing students to PEO and the process of obtaining their P.Eng. license. This is also an opportunity to learn about the PEO Student Membership program which gives students information on obtaining their license, as well as events put on by PEO chapters, and other organizations. Our delegation had a blast meeting students from other schools and exploring downtown Toronto!

This past weekend was the Conference on Diversity in Engineering put on by

McMaster Engineering Society and the CFES. This conference is 2 days as well, but this time focused on diversity, intersectionality, and inclusivity. There were many incredible industry leaders there giving talks on mental wellness, allyship, creating change within the engineering community, and many others. Our delegation met many more amazing people from many walks of life from all across Canada.

So what does this mean for you? The delegates who went to these conferences bring back information to share via word of mouth, in their own initiatives, in EngSoc initiatives, and in the form of blog posts and a conference report. Maybe that still leaves you unaffected, in which case I say apply! You could be the person sharing knowledge and improving initiatives. Are you in first year? Look

out for First Year Integration Conference applications. This conference focuses on developing first years into student leaders, and breaking down the barriers that are present in first year. Want a more intense conference revolving more around EngSoc and CFES? Applications for CFES Congress happening in January at Dalhousie University are now out. Check out <http://www.uwengconferences.ca/> to apply. This conference is a week long and spans January 2nd to 8th, so this does mean you will miss a week of class or work, but I promise it'll worth it. The knowledge gained, and the connections made are so worthwhile. Applications for Congress close on November 19th, so apply soon!

As always, if you have any questions, feel free to send me an email, or drop by my office hours. Cheers!

Failure is good, because we learn from our mistakes.

Some Reflections From Your VPA



ANDREW MCBURNEY
VP ACADEMIC

EngSoc! Hope the term has been going well! I hope midterms and job matching went well, and the semester is winding down nicely!

For this issue, I'd like to follow in the footsteps of my predecessors. I'm taking my last 'serious' Iron Warrior issue to talk about my successes and failures as Vice President Academic, to reflect on my tenure, and to discuss initiatives I wish I carried out, but due to time or other circumstances were not feasible.

Things I'm Most Proud Of

There were many little things I took pride in during my tenure as Vice President Academic, but here are a few which stood out for me:

Helping facilitate professional and career development events such as Resume

Critiques, Interview Skills, and our Fall and Winter Career Fair.

Partnering with external organizations such as Facebook, and Google to run workshops/talks for engineering students.

Being a voice for engineering concerns with regards to new co-op initiatives, like WaterlooWorks, Rate My Workterm, and Co-op 2.0.

Conducting surveys and holding feedback sessions with CECA representatives to provide engineering students with a direct line to voice their concerns.

Dropping the hottest mixtape of 2017, at the final council meeting of Winter 2017.

Things I wish I Could've Done Better

I wish I had the time to focus on more initiatives, such as outreaching to external organizations, mental health objectives, and general engineering outreach within the faculty.

1) Partnerships With External Organizations

Some of our most well-attended workshops were events where we partnered with external organizations such as the Google Technical Interview Skills and Facebook Vice President Infrastructure Talk.

It would have been nice to hold more workshops with external organizations. Given the time, this is something I would have liked to pursue further.

2) Mental Health Objectives

I wish I was able to focus more of my time on mental health initiatives. Similarly, with the workshops, I wish I would have reached out to external mental health organizations to partner on running events and services geared towards mental health awareness in the engineering community.

Furthermore, I wish I could see the engineering referendum on mental health to its completion as Vice President Academic. I hope the foundation has been set so that future generations of engineering students may benefit from the addition of another mental health counselor in the

Engineering Faculty.

3) Engineering Outreach

While I believe I did a decent job at getting feedback from EngSoc council, one thing I wish I did a better job at is outreaching to the engineering faculty as a whole.

While the Engineering Society represents a large portion of engineering students, I know it isn't 100% representative of the engineering student body.

I tried a few different initiatives such as giving updates through the academic reps to be more transparent and encourage communication with students, but I still feel I could have done a better job with outreach to the faculty.

Conclusion

I'm going to miss being your Vice President Academic EngSoc. I hope my contributions made a difference, and hope for the best going forward for the future of the Engineering Society, the Engineering Faculty, and the university as a whole.

Cheers fam, love y'all. <3

Student Options for Funding Initiatives

Where to get the Bucks for your Bang



KATIE ARNOLD
VP FINANCE

Being the entrepreneurial school that we are, it is recognized that many of our students have projects, initiatives and ideas that affect the Waterloo Student community. Be it student teams, outreach projects, or augmenting services, our student community is full of ideas. Unfortunately... we're students. We often don't have the money to front our million-dollar dreams. That's where student funding proposals come in. While I recognize corporate sponsorship and donations etc., this article will focus on the Student-run funding opportunities on the University of Waterloo campus

WEFF - Waterloo Engineering Endowment Fund

weef.uwaterloo.ca

WEFF is our resident Waterloo Engineering Endowment Fund. Chaired by the elected student WEFF Director, WEFF is a committee of

class representatives and they allocate hundreds of thousands of dollars each term to students and faculty. Applications happen once a term and they like to fund LONG LASTING improvements, like equipment. Students can apply on behalf of teams or groups.

ECIF - Engineering Capital Improvement Fund

engsoc.uwaterloo.ca/services/engineering-capital-improvement-fund/

The Engineering Capital Improvement Fund is chaired by ME! The EngSoc VP Finance chairs this committee and decisions are made by the Engineering Society Board of Directors. Applications happen once a term (watch our mailing list and Facebook page) and ECIF likes to fund long-term CAPITAL improvements. We've funded camera equipment for Orientation Week and tools for the bike repair station. Students must apply as individuals.

SLEF - Student Life Endowment Fund

feds.ca/funding

The Student Life Endowment Fund is a FedS Fund targeted for improving student lounges, study rooms, and other student – focused spaces. This committee is chaired by the FedS VP Internal and four other Waterloo Students. The fund prioritises improving accessibility on campus, and applications are open every winter. Students can apply on behalf of groups that have spaces or as individuals.

EOIF – Enterprise, Opportunity and Innovation Fund

feds.ca/funding

The Enterprise, Opportunity and Innovation Fund is a FedS-run fund that exists to help with the start-up costs of new, ongoing projects or unique, one-time projects like conferences. This committee is chaired by the FedS VP Internal and four other Waterloo Students.

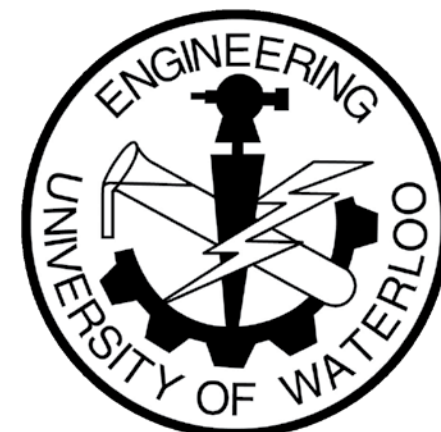
SPF – Special Projects Fund

feds.ca/funding

This is another FedS fund, the Special Project Fund is focused on supporting one-time projects that haven't happened before. (This does not support

Conferences.) This committee is chaired by the FedS VP Internal and four other Waterloo Students. Students can apply to this fund as members of a group or as individuals.

For more information on these funds you can hit their websites, or contact weef@uwaterloo.ca, vpfinance@engsoc.uwaterloo.ca, or vpin@feds.ca. Good luck with your projects my friends, and always remember it's a good practise to ask for more than you think you'll get.



Did You Know About The 2017 American Elections?

Recent Wins For the Left Cause A Stir Internationally



DONOVAN MAUDSLEY
4A MECHANICAL

The American Government is a complex machine which most people only really think about in four year presidential intervals. This isn't 100% accurate. Lots of gubernatorial positions turn over on Presidential off years due to unforeseen circumstances, and there are other positions which have different terms than the President. Early November this year, one year after Donald Trump's successful election, saw a string of these elections take place. New Governors were elected in Virginia and New Jersey, with other smaller positions being filled around the country.

After the Presidential election last year the Democratic Party felt exhausted and defeated. Hillary Clinton, the DNC chosen candidate, had earned more votes than her rival but was still not going to be the President. A wave of fear gripped Democrats across the nation, and the phrase "How to Move to Canada" became the second most searched thing on Google for a few hours.

Rather than spiral out of control though it seems like the Democratic Party has licked their wounds and come back stronger than ever. The Virginia House of Delegates had ridden a "Blue Tide" this year as the election swung

the house from being a vast majority Republican to being split right down the middle. At the time of this writing there is still no definite answer to whether the house will be Red, Blue, or have a purple split in the centre, but regardless this is a huge momentum shift for the Democratic Party and mindset.

One personal win sticks out as being vastly influential. Danica Roem, a transgender woman, defeated the Republican incumbent Robert Marshall

for a House of Representatives in Virginia. This is a huge win as Marshall is a complete conservative and self-declared homophobe. He refused to debate Ms. Roem and referred to her as a man. He was also the Representative that introduced the controversial "Bathroom Bill" to the House of Representatives last year. LGBT people all across the United States have celebrated Roem's victory.

These elections also showed signs

of a newly energized electorate. Exit polls for the Virginia gubernatorial race showed that the turnout at the polls was the highest it has been in over twenty years. Keeping in mind that President Trump deeply wanted his candidate to win here, the President tweeted multiple times endorsing Gillespie before distancing himself after the loss, this is a reassuring sign for the left. The people are sick of Trumpism and are mobilizing to stop its spread.



Ted Eytan via flickr

Newly elected Representative Danica Roem Protesting the Trans Military Ban last July

It's A Threat To The System!

Estonia Reveals Its Cryptovulnerability Is No Joke



RATAN VARGHESE
2B COMPUTER

On November 3, Estonia suspended hundreds of thousands of digital identity cards due to a massive cryptographic flaw.

The flaw, called the Return of the Coppersmith Attack (ROCA) affects a library developed by the German

chipmaker Infineon: RSA Library version v1.02.013, which is used to generate public and private RSA keys on a smartcard rather than a general purpose computer. Generally public keys are meant to be distributed widely to generate messages that only people holding the private key can read. However this version of this library often generates public keys vulnerable to factorization: the prime numbers used to generate the private and public keys can be determined from

the public keys relatively quickly. This allows the private key to be constructed by an attacker. Infineon used a vulnerable algorithm to create these prime numbers in an attempt to boost performance.

Using the private key, a hacker can impersonate key owners and decrypt the key owner's private data. Not all keys of a given size are equally vulnerable, but a vulnerability check only takes 1 millisecond to complete.

This version of the library was re-

leased back in 2012, and complied with security certification standards binding on governments and businesses the world over. The certification process did not manage to uncover this flaw back then. Today, there may be tens or hundreds of weak keys out there, including the unfortunate Estonian identity cards. The Estonian government was notified of the flaw by researchers back in August, but back then the exploit did not seem feasible.

The ROCA exploit was revealed to the public in October and since then, many teams have found ways to make the exploit faster and more efficient. It may be possible to factorize a single public key at a cost of \$1000 or \$2000 using specialized hardware such as GPUs, FPGAs or entire integrated circuits optimized for factorizing. As research progressed, the Estonian government finally acted.

The Estonian Police and Border Guard suspended 760,000 digital identity cards. These cards are used for filing taxes, encrypting sensitive documents and even for voting. That last use is critical: if even 10% of these cards were compromised, that would be enough to flip an election. Every card issued from October 16, 2014 all the way to October 25, 2017 has been suspended. New cards will use elliptical curve cryptography rather than the vulnerable version of the RSA library.

While Estonia has acted, many other players may still be at risk. Slovakia issues vulnerable identity cards, as does a number of private companies. If they do not act quickly, they may find their secrets revealed to the public.

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Do You Want To See The World?

Preparing For An International Experience



CASSIE STEA
2B ENVIRONMENTAL

I have always had the desire to have an international experience as part of my engineering undergrad. Whether it was an exchange to one of the University of Waterloo's many partner universities world-wide or an international co-op work term, I knew I wanted an international adventure under my belt.

I believe that acquiring a global perspective is an important awareness that every engineer should strive to obtain. Being able to see how different countries approach problems, technologies, or simply their day-to-day living allows an individual to become that much more aware, versatile, and well-rounded. The world is becoming more and more internationally connected, therefore being able to work or study in another country is one step closer to staying on the cutting edge of things.

So with all of these opinions and my drive to go abroad, I did it – I researched, I applied, and I successfully managed to secure an international co-op work placement. This upcoming winter, I will be spending four months working in the country known for its windmills, clogs, and famous meandering canals – the Netherlands. Despite these interesting attractions, the real reason behind my strong desire to obtain an international experience in this particular country is that the Netherlands are known for their innovative water management practices. I have always been very passionate about water resources and the environment; this

opportunity could not have been more suited to fit my studies and interests.

For those of you who are as interested as I was (and still am) in going on an adventure and acquiring an international experience, I wanted to share some advice that will hopefully provide some assistance.

First, I think that it is most important for anyone looking to work abroad to determine where in the world you would be open to travelling to, and which countries are actually feasible for you to be working in/travelling to. Going through the job search process with CECA and WaterlooWorks is a good starting place; they often have information regarding the limitations and realities of working in certain countries. Regardless of any restrictions or limitations, you also want to make sure that if you are indeed offered a posi-

tion, you would be willing and comfortable with working and living in the country you applied to.

Second, be confident in yourself and your applications. When applying to international jobs this fall, even as a 2B environmental engineering student with three successful co-op works terms under my belt, I still felt like I had no shot at getting an interview for an international position let alone a job offer. Believe in yourself people! The worst thing you could do is not apply for a job you want because you think you cannot get it. Let the employers figure out if you are or are not qualified.

Third, realize that a lot more preparation is required than your average co-op work term. Be prepared to put in the extra time, effort, and finances needed in order to get organized for your work

term abroad. Extra tasks like acquiring work visas, coordinating and booking flights, getting any necessary vaccinations, takes time and resources that one does not normally have to allot time and money for. However, if you are in the same opinion as myself, these tasks are minor prices to pay compared to the amazing experience that awaits. Nonetheless, they definitely are not something to be overlooked.

Lastly, know that the University of Waterloo has a great system in place to support you if an international exchange or co-op work term is something you want to do. From providing general information, to giving out international experience scholarships/bursaries, to organizing documents one might need, the university is able to assist you in getting ready for your international experience abroad.



Gabrielle Klemm

Vlissingen Harbour where Cassie will be living this winter

Why did the Microsoft worker get confused?

His boss asked him him to "Box one Xbox One X box".

RYAN SAMLALSINGH
2T COMPUTER

"The world's most powerful console", the Xbox One (XB1) X, launched worldwide on November 7 for a \$600 CAD. The console, announced by Microsoft one year ago at E3 2016, promised AAA gaming at stunning 4K resolution and silky 60 frames per second. The XB1 X dwarfs older XB1 models, and all Sony PlayStation 4 (PS4) consoles in hardware specifications. It's most comparable to the PS4 Pro. Both consoles use AMD SOCs with similar architecture, but differ greatly in graphics capabilities; They both employ AMD's 4th generation "Graphics Core Next" GPU architecture, but additional graphics compute cores with higher clock speeds allow Microsoft's console to perform 1.4 times more floating-point operations per second than the PS4 Pro, meaning far stronger graphics capabilities for the Xbox.

The uber-powerful XB1 X became the fastest pre-selling Xbox ever, but was this enough put Xbox back in competition with PlayStation? In June, official PS4 sales exceeded 60 million units worldwide, whereas estimated worldwide XB1 sales were about 33 million units. Combined with the fact that the PS4 is beefier than the XB1, and easier to program because of its unified memory architecture, game developers favour developing for PlayStation; it makes

the most sense financially. The XB1 X may have the best hardware, but why would developers spend time to use of all that power when they could be optimizing for the two thirds of the market on PS4? This compels less people to buy Xbox, creating a vicious cycle of declining developer support and unit sales. Further, since Microsoft guaranteed the release of all Xbox exclusives on Windows, PC gaming is

a viable option for graphics enthusiasts, especially since desktop PCs are versatile, upgradeable, multipurpose machines. A desktop PC outperforming the XB1 X costed Alaina Yee of PCWorld less than \$900 CAD. Cheaper PCs can also offer gaming performance roughly equivalent to the XB1 X, and can be relatively inexpensively upgraded, in time, to far outperform any console. The XB1 X makes sense

as a purchase for Xbox enthusiasts, or those who want 4K gaming right away without the hassle of PC building, who also accept PC is the better platform for graphics enthusiasts. I'm skeptical sales from these groups, plus sales of other Xbox models that the XB1 X launch drives, will be enough for Xbox to start competing with PlayStation in unit sales this console generation.

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(Said Nobody Ever)



TIFFANY CHANG
2B CHEMICAL

Whenever winter rolls around, I remind myself, “It is perfectly fine to be Canadian and fear the cold.”

Truth be told, the most probable reason for my low affinity for the Great Canadian Winter is my high probability of getting sick – multiple times per season.

Bad as my lackluster immune system may be, here are some tips on how to make the most of a long, cold winter season from personal experience. Be you an international student experiencing your first-ever Canadian winter or a long-time Canadian resident, I hope they prove to be helpful to you, too!

Take vitamin supplements, and eat fruit.

It never hurts to boost your immune system with an extra dose of vitamin C, even though researchers are still unsure if it provides benefits on its own or works with other micronutrients. It definitely does help, however, with maintaining clear skin, which never hurts – especially when it comes to preventing the development of stress acne that comes with finals.

Get enough sleep!

Getting sufficient sleep on a nightly basis is integral to optimizing our immune system. For instance, T-cells are special type of blood cell that terminates infected cells or orchestrates an immune response. Their numbers just so happen to peak in the bloodstream when we’re asleep at night and are at their lowest during the day.

Leave for class/work earlier than you normally do.

There’s nothing worse than starting off the day with having to rush to class, and in the process, slip on a piece of black ice. Ouch. Spare yourself the pain and walk at a reasonable, safe pace.

Speaking of traveling between classes...

Take advantage of Waterloo’s tunnels

Stay cozy while still being able to get around campus. There’s an app called WATisRain that provides detailed instructions on how to get from point A to point B with minimal – if any – travel outdoors. However, take note that traveling indoors might double your

total travel time, so save this tip for freakishly frigid days.

Dress in layers. Suffice to say, I’ve felt the heaters on full blast, and other times, I’ve had random chills run down my spine. As good as the idea of dressing in a thick, winter sweater sounds, that might not be the most strategic choice. Instead, try wearing a thin shirt with a hoodie over top. As for pants, I wouldn’t recommend wearing jeans, nor would I recommend wearing pants with a fuzzy inner lining.

Invest in waterproof, warm boots that have good traction.

There is nothing worse than walking to class and thinking, “I can feel the cold radiating out of the ground through my shoes.” Personally, I prefer leather boots because they become more comfortable the more often they’re worn, they normally have some sort of fuzzy inner layer for additional warmth, and they can last a solid number of years – if you’re willing to maintain them.

On a similar note, **invest in a warm coat.** Personally, I prefer down jackets. They might be on the pricier side, but they’re a lot warmer than coats filled with synthetic materials. In addition, many of them go past the thighs, so if you’re the type of person whose legs get itchy whenever an icy wind blows,

a longer coat would suit you well. Stores like Costco and Winners carry them at reasonable prices.

Gloves/mittens, hats, and scarves are winter essentials

Here in Waterloo. I haven’t been here for long, but I find it dreadfully cold in the mornings. Since the human body loses heat the fastest through extremities, keep your head and hands covered! Scarves double as an effective impromptu mask to protect your cheeks from ice-cold winds that slice through your face like knives.

Always carry lip balm and moisturizer with you.

On top of the dryness that comes with Ontarian winters, the heaters propagate it. If you own a Costco membership or know somebody who does, I highly recommend EOS lip balms (which come in packages of four) and Glysomed hand cream (which come in packages of three – two larges and one on-the-go size). If either your hands or lips are extremely dry, apply a thin layer of Vaseline on either area before sleeping.

Wear sunglasses.

The glare due to sunlight reflecting off of snow is deadly for your eyes. Guard them with your life – you’ll only

have the ones you’ve got now!

In general, don’t be fooled by the presence of sunlight. For the nine years that I’ve lived in Ontario, I’ve observed that super sunny days tend to be colder than clear or cloudy days. It turns out that there is a scientific explanation for this. During winter, the Sun lies low on the horizon, so the sun angle is at its lowest out of the entire year. This phenomenon causes thermal energy radiating from the Sun to be spread over a larger surface area. On top of that, thermal energy is more likely to reflect off of the Earth’s atmosphere or surface rather than be absorbed by the Earth’s surface. Who would have thought?

Most importantly, learn to enjoy certain aspects of winter!

This will make your first or nth experience with snow all the more enjoyable. Go outside and play in the snow. Try skiing, snowshoeing, ice-skating, or any other winter activity. Have a snowball fight. Build a snowman. If necessary, watch Frozen, and then go build a snowman – no promises that it will come alive, though!

Winter only comes once a year, so don’t fret – it will be over before you know it.

In the meantime, stay warm, and keep smiling!



Xercity via SketchPort

Leaked Footage of Frozen: 2

Thursday Night Hurtball



DONOVAN MAUDSLEY
4A MECHANICAL

NAVIGATING THE NFL

The NFL plays games on Sunday, along with Thursday and Monday nights. Thursday Night Football and Monday Night Football are massive cash cows for the league, bringing in big advertisements and exclusive footage. The recent *Star Wars: The Last Jedi* trailer was unveiled during half-time on Monday Night Football. Despite the benefits to the league, there

are many players, coaches and analysts who feel that Thursday Night Football, and to some extent Monday Night Football, pose dangers to the players.

A typical week presents six days of rest between games, but this gets cut down to three when teams have to play on Sunday and then again Thursday. Veteran players have complained that they’re not nearly fully rested by the time they’re putting their pads back on Thursday night. Despite this there are actually fewer injuries reported on Thursday night (4.3 to 7.3 injuries per game respectively). This only takes into account the injuries reported during the night though, and not those re-

ported during or after practices following the game.

There is also something to say about the quality of injuries occurring during Thursday Night Football. I’m just thinking through my experiences watching games but it seems like more season ending injuries occur during Thursday Night Football games. Richard Sherman, the all-star defensive back of the Seattle Seahawks, went down for the year with an Achilles injury. Sherman went up to catch a fairly standard pass, but landed poorly and hurt himself. This comes a few seasons after Sherman penned an article talking about the dangers of Thursday Night

Football. Over the course of their game against the Arizona Cardinals the Seahawks lost eight starting players. Seahawks receiver Doug Baldwin said on Thursday that “Thursday Night Football should be illegal.”

Now there is something to be said for the large rest period following Thursday Night games. Some players have said that during the week they curse Thursday Night Football, but on the weekend they love it.

The NFL has recently made strides towards ensuring player safety, maybe the next one is getting rid of the short turnover times associated with Thursday Night Football.

World Religions Conference 2017

Continued from page 1

The next speaker was Doug Thomas. Now, Thomas was listed as representing “Humanism”. Humanism is not strictly speaking a religion (unless you are a fan of Yuval Noah Harari): it is the stance that personal freedom must be defended and that critical thinking and evidence are the best means to learn about the universe. Obviously, not every nonreligious person is a Humanist, and not everyone fitting the Humanist description would call themselves Humanist. Still, the overlaps are strong enough that Doug Thomas represented atheists and agnostics in general.

Thomas pointed out that Canadians shouldn’t be too quick to pat themselves on the back for their values: we might not be following them as well as we like to think. He pointed out a number of laws discriminating against nonreligious individuals and organizations. He also pointed out the exclusionary nature of the national anthem: not just against those who do not believe in God. He was also concerned about the fact that immigrants are treated differently based on their income, and the fact that hate speech is apparently allowed if it comes from a religious scripture.

“We have a lot to apologize for”

The third speaker was Reverend Andrew Asbil of the Anglican Church, representing Christianity. He mainly talked about Christians in Canada assisting immigrants and the homeless throughout history, going as far as defining evangelism as “one poor beggar telling another where to find bread”. He spoke about how the Church of the Redeemer provides housing and food without government assistance, claiming that “being Christian is not being a landlord.”

Reverend Asbil also darkly noted that “We

have a lot to apologize for”, and stressed that it was important for Christians, and people in general, to really try listening to people with differing beliefs and understand their perspectives. Asbil’s statement was followed by the lunch break.

Councillor Durrell claimed the lunch would be purely vegetarian. Luckily, this meant it was pizza. In the older section of Hagey Hall, there were a number of stalls explaining aspects of various different religions, some of which did not have a speaker at this conference.

“My existence is resistance.”

Dr Jaspreet Bai is not an expert on Sikhism, however since she is a Sikh and a PhD she got to represent Sikhism anyway. Her day job is being a professor, so perhaps that is why she was the only speaker to use a PowerPoint presentation. She started out with an explanation of the history of Sikhism, for the benefit of those unfamiliar with the faith. Dr Bai noted that the Sikhs have survived multiple genocides, even saying that “My existence is resistance.”

Dr Bai then explained a principle from Sikhism that she felt would be beneficial for Canada to adopt, the principle of “ekta”. Bai described it as a concept of oneness, as the “ek” in the name suggests. Ekta does not mean that everyone is the same, or should be: Bai claimed it was closer to equity than to equality. Some historical and modern examples of ekta shaping people’s actions were brought up. Bai also noted that “Canadian values” is a very shifting, politicized idea, so Canada might benefit from having an eternal principle to turn to. She concluded with some statements about bringing down oppressive systems, standing up for the marginalized, recognizing privilege and actively working on decolonization.

Dr Daniel Moaz also holds a PhD, and while he

represented Judaism he actually spent the bulk of his time talking about how it was “criminally negligent” to forget the indigenous people of Canada. He had a lot of sympathy for people escaping persecution, and said that helping indigenous people was an important part of “tikun olam”, or “Repair of the World”. He took an interesting approach of determining which values were Canadian: rather than just laws or the government, he referred to a poll by the Canadian Index of Wellbeing about people’s values.

Swami Chidgan-Anand represented Hinduism by laying out the principles valued by Manu, “the great law-giver”. He also stressed that even though everyone might be convinced their own view is best, it is important to “listen attentively” to people of other worldviews.

Imam Intiaz Ahmed represented Islam, and focused on Islamic and Canadian views of diversity. He pointed out that cultural diversity is highly valued in Canada, and also has a divine purpose in Islam. Even though people have many differences, he noted that none of these are supposed to confer “privilege or disability”.

There was a snack break after which all the speakers sat together for a question and answer session. Over the course of the day, attendees submitted questions on forms and at long last, some of them would be answered. Each speaker was individually asked a question, and then they were all asked, one by one, to answer a final question: What do people have to do to maintain and improve Canadian values into the future? Each of the speakers focused on different aspects of the question.

“If you want to change the world, clean up your room.”

Intiaz Ahmed focused on the concept of preserving personal freedom and acceptance of others. Swami Chidgan-Anand focused on getting different religions to collaborate and making a sort of global family. Dr Moaz focused on self betterment, stating that if “You want to change the world, clean up your room.” Dr Bai said that religious organizations needed to start, or in many cases continue, serving the general public outside their own religious group. Reverend Asbil talked about Christianity’s “complicated relationship with power” and stressed the need to allow one’s group to let go of it. Doug Thomas focused on how people needed to acknowledge flaws in our systems and work around them, stating that “Canada works because we make it work.” Amy Smoke was the last to answer, stressing the need for the country at large to ask indigenous people what they want, instead of pushing policies on them without consulting them.

The conference wrapped up with some photos, expressions of gratitude and gifts for the speakers. Finally, Councillor Durrell randomly picked the order of speakers for next year’s conference.

This conference was hosted on University grounds, but not necessarily student focused. There were attendees from many different age groups and backgrounds. There was a general feeling of age: from the limited use of technology, the fact that events from centuries ago were discussed at length and the atmosphere of Hagey Hall. The speakers were all very good, however the topic was not so well-defined: as many of the speakers noted, “Canadian values” have a different meaning for every Canadian. Let’s hope the conference is hosted here next year!

KrackAttacks

A Large Vulnerability in WPA2 Security Protocol



Just over a month ago, researchers at KU Leuven discovered a serious weakness in WPA2, a protocol that secures all modern private networks. It’s been proven to work mathematically, so it should be safe, right? Nope.

When WPA2 encrypts your information, it works between your computer and an access point. Basically, four messages are sent in between your computer, each with random information. In the middle of these transcriptions, another computer can try to access that information, which is generally pretty hard, and there are no big holes or easy ways to get this information. So in layman’s terms, it blocks the third message (just before the key installation) and sends a different message itself as message four. This message tricks a

victim into reinstalling an already-in-use key (Key Reinstallation AttaCK), so that parameters once stored are set to their initial value. Reusing keys is a big no-no. Since this message was never received back by the access point, it will try resending to the computer, which will reset the transmit packet number (nonce), so they can be re-played, decrypted, or forged. This is easy to decrypt because now the attacker has some known content that they can work with, and this can easily make your password and other information vulnerable, all without actually recovering your WiFi password.

So what can you do to prevent this? Well, shortly after, updates were being sent out by companies to patch this vulnerability. So update all your devices and firmwares if possible. Patch everything. You don’t really need to change your WiFi password but it doesn’t hurt to do it. Keep your computer and other devices up to date, no matter how annoying it is to wait for it to fully up-

date.

I’d like to thank krackattacks.com as well as ComputerPhile’s video on the subject to help me write this article. In fact, I found this quote pretty great, as this author found a large issue while procrastinating. “When working on the final (i.e. camera-ready) version of another paper, I was double-checking some claims we made regarding OpenBSD’s implementation of the 4-way handshake. In a sense I was slacking off, because I was supposed to be just finishing the paper, instead of staring at code. But there I was, inspecting



xercity via sketchport

Hey, a Modem

some code I already read a hundred times, to avoid having to work on the next paragraph. It was at that time that a particular call to `ic_set_key` caught my attention. This function is called when processing message 3 of the 4-way handshake, and it installs the pairwise key to the driver. While staring at that line of code I thought ‘Ha. I wonder what happens if that function is called twice’. At the time I (correctly) guessed that calling it twice might reset the nonces associated to the key. And since message 3 can be retransmitted by the Access Point, in practice it might indeed be called twice. ‘Better make a note of that. Other vendors might also call such a function twice. But let’s first finish this paper...’. A few weeks later, after finishing the paper and completing some other work, I investigated this new idea in more detail. And the rest is history.” Perhaps some of your computer scientists out there can explain it better to your friends (or even me, since I still don’t get it).



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Nice To Meat You

Cooking Meatloaf, No Not Eddie



Hello fellow procrastinators! Today we are making that all-American comfort food: meatloaf. I truly believe this stuff has been given a bad rap by pop culture such as Captain Underpants comics, but I'm here to set the record straight: it's actually a very tasty meal. I will admit that I decided to make meatloaf simply because I'd never eaten it before and I was curious about how bad it could possibly be. Ever the good engineer I was skeptical of the one-sided, Captain Underpants-influenced view of the matter and needed to test the hypothesis that meatloaf is the worst food out there.

Following that backstory, let's begin this meal-prep. Oh yes, this is a meal-prep. Look how productive we are being this week, because these meatloaves are mini-sized you can just pop two into a container with some veg and you are set for a week's worth of lunch!

I got this recipe off one of my favourite websites, Budget Bytes, it speaks to me on a special level. Specifically cheapness. Now this recipe also calls for extra lean ground turkey. When I went to the grocery store to buy meat, for the second time this term because I never go grocery shopping and buying meat is too expensive for me, the only options they had were ground lamb from Australia, and a club-size pack of 30% off ground meat that was most cer-

tainly not extra lean. I went for the super-massive meat option and it was still \$10! Very upsetting. The rest of the ingredients you will need are as follows.

Ingredients

Olive oil, onion, garlic, 2 carrots, a zucchini, a carton of mushrooms, 1 tbsp Worcestershire sauce or as Google told me if you don't happen to own any of that, soy sauce, ¼ cup ketchup from your roommate's fridge that you're not sure anyone has used since 2010, a large egg, ¾ cup plain breadcrumbs (or just the rest of the breadcrumbs in the jar), and 19oz of extra lean ground turkey as we discussed earlier.

The recipe also had a glaze that you could make to top your loaves, I did not make the glaze because I didn't want to use any more of the ketchup. I just used some pasta sauce from a jar. The ingredients for the glaze, if that appeals to you, you high achiever, are ½ cup ketchup, 2 tbsp brown sugar that you bought just to make this and

never end up using, and 2 tbsp of apple cider vinegar.

Get shredded

We start by dicing the onion and mincing the garlic. Two things that I will never perfect no matter how many times I do them. I can't be the only one whose hands possess a lingering trace of onion for days after chopping them, can I? While you sauté these with the olive oil in a large pan on the stove, the largest one you can find! Peel the carrots and wash the zucchini and mushrooms.

When the onions are as pale as you were when you got that midterm back, use a large-holed cheese grater to shred the carrots and zucchini in to the frying pan with the onions and garlic and continue sautéing. Now it's time to roughly chop the crap out of the mushrooms. Go wild my friend and let it all out. Be warned, this is an endurance challenge because you will soon realize 8oz of mushrooms is way more than you first realized.

Throw in the mushrooms into the skillet along with some salt and a lot of pepper. You can never have enough pepper. If you're not sneezing, keep shaking. Now you wanna let that sit there and bubble away all the healthy juices from the veggies. When they're "mostly dry" put them in a bowl to cool for about 10 minutes or until you remember half-way into your fifth YouTube video that you never finished making those loaves.

Preheat the oven to 375°F and coat a muffin tray in non-stick spray. If you can't find your roommate's just spend 10 minutes trying to butter the tin, really taking time to get into all the corners. This will turn out to have been a waste of time because the tray itself is non-stick, but you don't know that yet.

Add the Worcestershire/soy sauce, ketchup, egg and breadcrumbs to the bowl with the veg and mix these until well combined. You don't have to use your hands but we're engineers and we prefer hands-on experience. Add in the ground mееeat and fold until it seems adequately mixed.

Divide up your mix between the 12 muffin cups and bake for 30 minutes. Check if it seems cooked through and if you think it needs a little more time, like your degree, go for it. If you want to do the glaze, mix the ingredients and stir till smooth then, when the loaves have cooked for about 15 min, spoon it over them and cook for another 15 min. If you prefer the slightly more sketch tomato sauce version, just spoon that on after cooking when you've transferred the loaves to your containers.

Enjoy your well-prepped meal!



anaterate via Pixabay

Now that's what I call a loaf... or is it a turd? You decide.

Table Reads



Editor in Chief Gabrielle told me about a podcast where the hosts read terrible screenplays that were never made into movies. As it happens, I am a sucker for mean people describing terrible things, so I decided to give Table Reads a listen. It was truly the best kind of terrible, so thanks Gabrielle.

One of the screenplays covered by this podcast is a Spider Man script from 1993 written by James Cameron. This could have been a truly incredible cinematic debut for the wall crawler, mainly because of Doctor Octopus' habit of calling his robotic arms "Waldos" and screaming "Okie! Dokie!". Spider Man doesn't stop any crimes until about halfway through the script, and Aunt May thinks Peter Parker's only priority should be finding a girlfriend and making her some grand... nieces? Was this a passion project, or Cameron's idea of an intentionally So Bad It's Good experience? Perhaps we will never know. Or perhaps I just do not want to look into it.

Now that the level of terrible in these scripts has been established, the podcast proper. The hosts, Patrick Duffy and Shaun McBee, use a wide variety of odd voices to bring the awful, awful characters to life. They also interject with sound effects and very consciously change the background music to set the atmosphere. The scripts themselves often have massive amounts of detail, thanks to stage directions and terribly redundant dialogue. As a result of all this, Table Reads actually give the listener a very complete

picture of what is going on. It is a bit unlike an actual radio theatre, which only include dialogue, music and sound effects. Of course, radio theatre aims to actually move the audience, while Table Reads exists to poke fun at terrible scripts.

The hosts often add "improved" lines to the script, and then go back to correct themselves, so one must listen with a well-tuned sarcasm-o-meter. The hosts also constantly comment on how absurd the situations are. Like all scholars of terrible things, Patrick and Shaun know that people can only consume so much raw awfulness. A little bit of mockery can go a long way towards making things bearable.

In addition to the actual reading, there is an opening jingle, a voice saying "Fade out" at the end, and occasionally some discussion about the origin of the script being scrutinized. Frankly, hearing yet another Uncle Ben death scene made me a bit sick of hearing origin stories, so I skip the discussion portions.

Ultimately there is one fundamental difference between listening to Table Reads and watching someone rip apart a terrible movie on YouTube: the visual component. There is no acting to criticize, no costumes to mock, and no poorly done stunts to laugh at. After all, the whole point of Table Reads is that these movies never got made, and the whole point of podcasts is the focus on audio. Thus on Table Reads the collective mismanagement of entire studios is not under scrutiny: there are only the dreams of naive screenwriters which are doomed to be crushed.

Each episode lasts about an hour, except for "SPEED READS". When the hosts decide on a movie to read, episodes are released on a weekly basis. When one movie is complete and a new one must be picked, the gap is a bit longer. The description claims that every single script

they read is bad, but there is one exception: the Roger Rabbit prequel (inexplicably called "Roger Rabbit 2") is apparently legitimately good. The hosts also sometimes read screenplays they wrote themselves, once upon a time.

Editor's Note: I recommended the Blacklist Table Reads, although I don't mind taking credit for helping Ratan find a new podcast I can't take credit for this one!



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Thor: Ragnarok

A Great Addition To The Thor Series



DONOVAN MAUDSLEY
4A MECHANICAL

I don't think that many people are surprised with how well *Thor: Ragnarok* is doing at the box office. The trailer for the movie broke records when it hit the internet this year, and critics around the globe have been raving about it for weeks. This is a marked departure from the two previous Thor movies. Critics and audiences didn't love *Thor* and were even less enthused about *Thor: The Dark World*, but it would seem that the Norse god has learned from his outings with the Avengers.

Ragnarok adopts a more lighthearted and fun loving version of Thor, which helps turn the tone of the movie from space odyssey to space comedy. Chris Hemsworth credits his cameo appearance in *Ghostbusters* with helping shape his performance this time around. Director Taika Waititi's influence is also widely felt. Waititi, a New Zealand born director best known for the indie comedies *What We Do in the Shadows* and *Hunt for the Wilderpeople*, brings a very specific comedy style to the film. Along with directing, Waiti played numerous small roles, including as the show-stealing rock man Korg (note to self: don't be a scissor man).

And then there's the green elephant in the room. The Incredible Hulk, as played by Mark Ruffalo, hasn't been seen or heard from in 2 years, and it turns out that he's been earning a living as a gladiator on another planet. It's a pretty sweet gig for an angry radioactive muscle man. From the outset the Hulk is less excited to see Thor than Thor is to see him. This version of the Hulk has the most deliberate separation of Bruce Banner and The Other Guy

that we've seen, which is interesting but on the whole underwhelming. There isn't really a character arc for the Hulk which is disappointing but that screen time is effectively used elsewhere.

The emotional weight of the movie is carried by Thor and his brother Loki (Tom Hiddleston). Anyone familiar with the characters knows that Loki has betrayed Thor upwards of ten times at this point, on screen alone. Over the course of the movie Loki's trust is tested again and again, but his deep bond with his brother is shown (the brothers both reminisce on the past, and have a playbook of battle techniques). This

movie finally resolves their storyline in a satisfying way without being too heavy-handed. Odin also plays a large role in bringing the brothers together again. The scenes with Odin helped slow down the pace of the movie, which had been pretty jarring up to that point, and let the audience absorb what had happened thus far.

The other cast members also bring terrific performances to the table. Cate Blanchett, best known to me as Galadriel from the *Lord of the Rings*, is absolutely terrifying as Hela the God of Death. Similarly Tessa Thompson gives an excellent performance as the

former Asgardian special forces agent Valkyrie. Thompson has some pretty solid platonic chemistry with The Hulk (both CGI dude and Mark Ruffalo). Anthony Hopkins is as good as always in his turn as Odin, and Jeff Goldblum adds another awesome role to his legendary portfolio as the Grandmaster. On a totally unrelated note I watched a clip of Jeff Goldblum rating tattoos of himself, which was terrific.

I think that *Ragnarnok* is a great turning point for the Thor series, and the character in general. If you haven't seen it already I recommend grabbing a ticket.



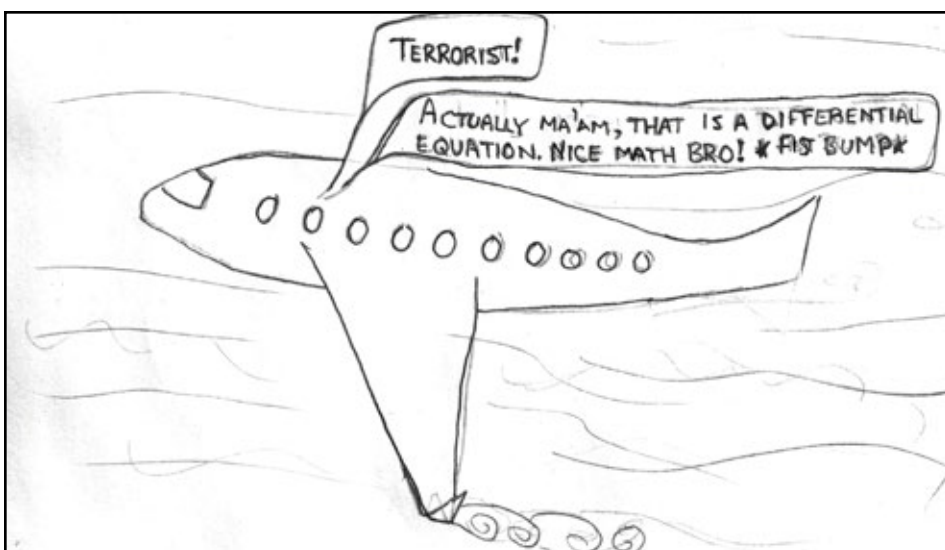
via Vimeo

Thor: Ragnarok is worth the hype and the ticket price!

Real World Uses For An Engineering Education

Leah Kristufek, 2016 Chemical

You Recognize and Respect Math



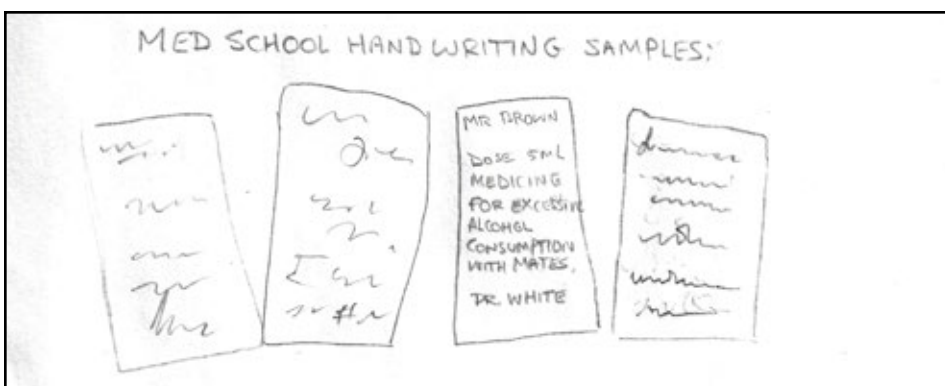
Approximations



Late Night Stamina



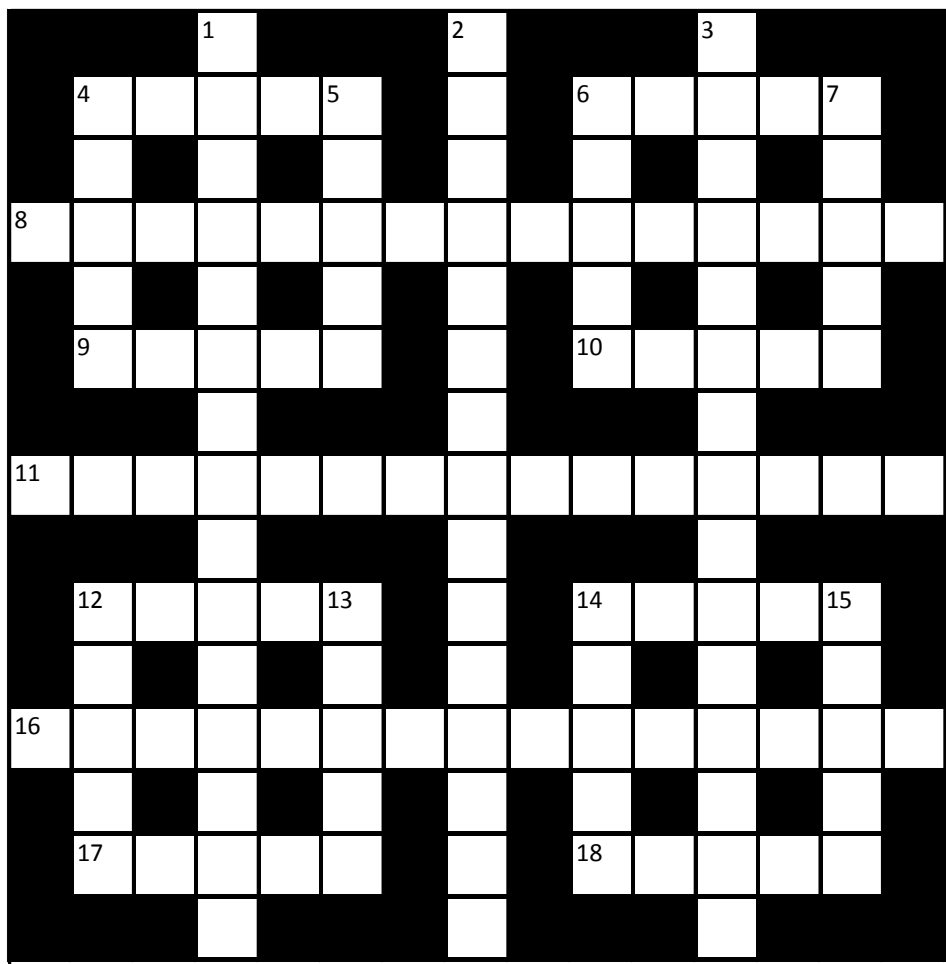
You Write Good (I Mean Legibly)



The Iron Crossword

Videogames

THOMAS DEDINSKY
1T COMPUTER



ACROSS

- 4: Main villain in Legend of Zelda
- 6: Speediest TF2 class
- 8: Type of level found in modern Mario (three words, first word starts with 3)
- 9: Most difficult playthrough type for a Halo campaign (acronym)
- 10: 2008 life simulation game by Sims creator
- 11: Launch title for 3DS, came in multiple versions/animals (two words and a &)
- 12: Mike _____'s Punch Out
- 14: Spiky chili dog enthusiast
- 16: Rockstar's best selling game of all time (four words)
- 17: Video games cons are packed with these Q&A and podcast-like showings
- 18: If he doesn't win the game, he _____

DOWN

- 1: Last PS1 entry of a popular RPG (three words, first word has the first letter cut off)
- 2: 2003 action adventure critical darling, finally getting a sequel (three words and a &)
- 3: Pokémon x Nobunaga's Ambition, 2012 DS turn-based RPG (two words)
- 4: Peter Moleneux's foyer after Curiosity
- 5: Villian of Crash Bandicoot
- 6: Professional space pirate hunter's first name
- 7: Gen 5 tree-like Pokemon (first five letters)
- 12: _____ 2, also known as Deformers, is a 3D car simulator developed by Dénes Nagymáthé
- 13: Codename for Kinect
- 14: Allowed SNES to connect to wifi in Japan (first five letters)
- 15: Moto _____ games were made popular by the MTX and MX franchises

Minute-Scopes

GABRIELLE KLEMT
2B GEOLOGICAL

Scorpio (Oct 23-Nov 21): Take up something unconventional this week, like knitting socks. Stay creative Dobby!

Sagittarius (Nov 22-Dec 21): Use the money you were going to use for gifts for family members to buy yourself a ticket to something. The more pricey the ticket, the more your loved ones will feel special that you were going to spend the money on them.

Capricorn (Dec 22-Jan 19): Stop drinking water in favour of an unconventional herbal supplement drink. Write and then self-publish a book about your new lifestyle, change the world.

Aquarius (Jan 20 to Feb 18): Take up a cause to post incessantly about on Facebook. Get some exercise by shaking off the haters this November.

Pisces (Feb 19 to Mar 20): Invest in some stocks. Get really involved in it. Quit school and become a millionaire. Own the world.

Aries (Mar 21-Apr 19): You will discover, while chatting with some friends, that you are in fact the funniest person alive. Make a video to post on YouTube. Wait for the Internet fame to come for you Bo Burnham.

Taurus (Apr 20-May 20): Take up a secret side-gig. Never tell anyone. Start a revolution.

Gemini (May 21-June 20): You will buy a cat and it will be awesome. You're welcome.

Cancer (June 21-July 22): Get a new passion and start telling everyone about it. People need to know why your glow is so bright or your poops have never been better since you began rubbing rutabaga on your skin.

Leo (July 23-Aug 22): Upon walking to school in the snow and cold you will fall and hurt your elbow. You will get an extension on your next assignment. You go Glen Coco, work the system!

Virgo (Aug 23-Sept 22): A newfound passion for baking, rather than doing school-work, will pay off. After making a particularly delicious batch of mid-November baked goodies and bringing them to school, you will be offered money for a baking start-up.

Libra (Sept 23-Oct 22): A squirrel jumping out of a garbage can will cause you such fright that you will drop all your books in the snow. This isn't middle school, stop carrying your books around. A friendly stranger will help you out and become your new BFF.

Sudoku

#2017-14

GABRIELLE KLEMT
2B GEOLOGICAL

Medium

3		7		5	2	9		
8			4			7	1	3
								2
9				2		6	7	
	1	2		6				8
6								
5	7	1			3			9
			3	5	8		1	6

Hard

	5	6	9		2			
4						8		
	7			4				
	3	9	8		4			
6	8		7		1		4	2
			2		9	3	6	
				1			9	
		4						3
			5		8	6	1	

Very Hard

		2			8	5	3	
				6				7
4			2				6	8
	4						1	3
3			4		1			5
5	8						2	
1	9				6			2
7				8				
	5	3	7			1		

Solutions for previous crosswords can be found on *The Iron Warrior's* website at iwarrior.uwaterloo.ca/distractions.

THE IRON INQUISITION
Samridhi Sharma, 2B Chemical

"I Moustache You a Question: What's Your Favourite One?"



"The invisible one."
Rutuja Desai, 2B Chemical



"I really like the stubble thing... it almost looks too good."
Ami Patel, 2B Chemical



"The Walrus."
Gaurav Lath, Co-op, Computer



"Fu Manchu."
Mish, 1A ECE



"Dali."
Michael Lam, 1A ECE



"Natural."
Billie, 2A GBDA