# #IRON WARRIOR

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## Government Shutdown, Trouble on Capitol Hill

\*\*Author Note: This is a large, complicated, and dynamic situation. I have little doubt that portions of this story will be out of date by the time the paper goes to publish. However, it is my hope that this article will give a brief introduction to the nuances of the US Budget process in general, and the situation as of the morning of January 21 in particular.\*\*





On January 20, 2018, the Government of the United States officially shut down. The shutdown occurred because lawmakers—specifically the Senate—was unable to reach a deal that would prolong the government budget, hopefully until a permanent solution could be reached. As of Sunday, the effects of this shutdown have been minor; however, come Monday many thousands of government workers were placed on furlong as non-essential services stop.

## The Normal Budget

The process of passing a budget is a difficult and tedious multistage process that must ultimately end with the collective approval of the President, House, and Senate. Typically, the budget process starts in February when the President of the United States issues their budget request. This year—as in many years where the president is new to the post—the budget was delayed until mid-March, with a "skinny budget" being released in late February. This presidential budget becomes a non-binding starting point for Congress to adapt, change, or discard altogether.

Within Congress there are two chambers: the House and the Senate. Both of these bodies must agree on a budget but, given the enormity of the task, the process is broken into steps. First, each chamber independently makes a high-level budget resolution, in which they allocate money to different agencies, but not projects within those agencies. After each chamber

passes a bill they are satisfied with, representatives from the two must meet to reconcile the different budgets. Eventually, this process leads to a consistent budget resolution that passes both houses. The budget resolution is not presented to the president and does not become law.

Once a consistent budget resolution is achieved, various appropriation subcommittees from each chamber create appropriation bills. These subcommittees and bills each deal with different areas of focus; for instance, the Legislative Subcommittee has jurisdiction over the budget of Congress itself. After individual appropriations bills (or, in some cases of political deadlock, an Omnibus Bill of several appropriation bills combined) are approved by each chamber, the same difference-reconciliation process occurs again until both the House and Senate pass the same legislation.

After the House and Senate pass a consistent budget, it is sent to the President to sign into law or veto, ideally before October 1 when the US financial year begins.

Frequently, the process of passing the budget is delayed. As a result, Congress can pass a continuing resolution which provides government funding for some period of time while a full budget is hashed out. As with the full budget, a continuing resolution must pass the House, Senate, and President to become law.

### Budget 2018

This year, the budget has been bogged down for a variety of reasons. On the one hand, President Donald Trump is trying to get money for his border wall. On the other, Democrats are trying to extract concessions on the "Dreamer" issue—the status of illegal immigrants who came to

America as children—since their status is due to become perilous when the Deferred Action for Childhood Arrivals (DACA) program, started by ex-President Obama's executive order, is terminated by President Trump in March. (Trump's argument is that such a program should have legislative, not executive order, approval.)

As previously mentioned, the 2018 fiscal year started on October 1, 2017 without any budget. However, until this point the government has been running using three consecutive spending bills. The last of these three bills was due to expire on January 19. A number of last-minute efforts by legislators failed to pass a continuing resolution failed in the Senate, resulting in government shutdown on January 20.

Unsurprisingly, hardliners on each side of the political divide are blaming each other for the shutdown. Republicans blame Democratic senators of trying to leverage the situation for political gain, suggesting that the continuing resolution should be about keeping the government running. Democrats accuse the Republican legislatures of being unreasonable. They also gloat that this is a Republican problem since, for the first time ever, the government has shut down despite having one party control both Chambers of Congress and the President. While this is true, the Senate vote requires a super-majority and, therefore, the support of some Democratic senators.

Blame is also being placed on the President, who has been inconsistent in his statements, resulting in promising deals being torpedoed. For instance, he changed his mind on supporting a continuing resolution containing re-authorization of the Children's Health Insurance Program, a compromise Republicans had been using

to satisfy Democrats.

As a result of the failure to find a continuing resolution, government agencies are trying to ease the transition to shutdown. Unlike in the previous shutdown in 2013, open air parks and monuments will remain open when possible. Non-essential White House staff can come in Monday for four hours to close up their work or transition it to staff who will continue working. Essential services such as the mail will remain in operation. Some services, such as access to the Philadelphia Liberty Bell and New York Statue of Liberty, have been suspended but the worst of the shutdown won't occur until Monday when thousands of federal employees are forced to stay

Meanwhile, legislators are desperately seeking a solution. Representatives in the House have been advised to stay in Washington—as opposed to travelling home for a planned recess—in case the Senate manages to come to an agreement. There are also a number of moderate senators from both sides who have been trying to piece together a deal that will let both parties save face and move forward. There are talks of compromising between the Democratic wish for a few-day continuing resolution and the Republican desire for a 4-week bill.

It is possible that a compromise can be reached soon, minimizing the shutdown. It is likely that, even if the shutdown drags on, the effects will not be catastrophic. However, as the push to re-open the government drags on (in addition to the need to pass a 2018 budget), the start date of the 2019 budget process looms; in an ordinary year, President Trump would be expected to release his budget proposal in early February.

## **Letter From the Editor**

## So This is Who They Left in Charge...



A special greeting going out to all of Waterloo Engineering. Allow me to introduce myself. My name is Nick Owens. Some of you may remember me from a series of nonsense based articles about electronics that usually ended in a long winded description about how everybody is in on some kind of complicated conspiracy to take over the world. Well, I hope that you are tired of all the "Fake News" out there, because guess who's your new Editor in Chief for winter 2018?

I would like to take the chance at the start of this term to say that, although I have had my fun in the past, I am one hundred percent committed to bringing the news, written by the engineering community for the engineering community. This particular issue is a big one to start off the term. For starters, this is Abdullah Barakat's final term as President of Eng Soc. Be sure to read his article on the announcements coming straight from the ton

On the topic of Eng Soc, the elections are coming up soon. We have two full pages, outlining all of the candidates for the different positions and their platforms. Elections are coming ups soon so make sure that you read all of the profiles before you decide who you want representing you. Positions up for election include president, VP finances, VP communications, VP academic, VP student life, and WEEF director.

Our articles this week pertain to a wide variety of materials. If you're interested in the ongoing tensions between North Korea and South Korea, you may be interested in reading the article on the subject by first-time author Jimmy Wang. In more sporadic news, we have an article about a certain miscommunication that panicked all of Hawaii. Have you ever noticed that people are starting to drink less alcohol? Well, you're not the only

one. We've got an article for that too. For all of these interesting stories, and the other great articles that I unfortunately didn't have the time to mention, just keep turning those pages.

Our columns are sure to be just as good. If you missed the witty exploits about life inside the Whitehouse, then you won't want to miss this week's issue of Dammit Donald. Space Cam is back, and just as lively as ever to bring you updates on the cataloging of New Earth Objects. Don't know what those are? You'd better ask Space Cam. Vince Magas has brought back his own, Hit Replay and of course we have the Iron Inquisition. Lastly, Donovan is back with Broskies on Brewskies. Unfortunately, Electro-Nick will not be making an appearance this issue. Apparently, he gets a little antsy in the new year in case the Y2K virus comes back around. Don't worry though, he'll be

Now, this is my first time writing an editorial, so you will have to forgive me if I do a bit of an amateur's job. In fact, for the longest time, I wasn't even completely sure what I should write about. I haven't had a long journey here at the Iron Warrior and only started writing a year ago. But somehow it already seems like a part of me that I would have trouble doing without. Admittedly, there were a few weekends where I suddenly became 'busy' while Vince, the editor for the spring term, was looking for copy editors, but from day one, I enjoyed writing articles for this paper.

I guess that you could say that when I first showed up here, I was kind of like a log. Now, a log is a symbol that I always like to go back to because of what it represents. Pure potential. When you first think about it, it may seem like a log is just a dead piece of wood. However, there is nothing that a log cannot become. It can become a chair, a desk, a door, a fire, anything that you want it to. So when you look around at anything around you, you therefore have to recognize either what it once was or what it might become. That sculpture that you're looking at was once a big, ugly rock, just like how that big

ugly rock might one day be a beautiful

But, as I'm glad to see, this metaphor does not only apply to myself. When I host the meetings for the newspaper, I can't help but think of this while talking to the first year students who have only started writing for us. I've noticed that they've just started applying for their first co-op position and that they all have that same glimmer of both hope and nervousness in their eye. I know that I don't have much more experience than any of them, but I'd like to let them all know that they should keep the log in mind. One thing, given the right work, can go much further than you might think. You may be nervous about applying to your first job, but trust me, you'll be walking into interviews with confidence in no time.

And of course, I'm glad to see some of the Iron Warrior veterans returning. It's been nice to see our very own Raeesa Ashique back and this will be our last term with Cameron Soltys and Vince Magas. Admittedly, there isn't much advice that I can offer to either of you. You've both been through everything that I'm going to go through and I'm sure that throughout this term, I'll be bugging you for advice more than enough.

So that's pretty much all that I can say for now, to first years, my colleagues in second year, third years, and fourth years. I've always found value in recognising the potential of something. Especially in those down times, it's always good to know that there is nothing that you can't become with just a little bit of work. And if you doubt my logic, just remember what I said the next time you walk past anything made out of a dead piece of wood.

On one final note, I would like to finish by taking the time to thank Gabrielle Klemt for the wonderful job that she did as EIC for fall 2017. I'll have to put out another thanks to both Cameron Soltys and Vince Magas for all the help that they've supplied in helping me get used to this new role. Hopefully, I'll be able to do the positions some justice this term. If not, I'll claim that I'm still just a log.

I hope that you all have a great term.

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Send your submissions for the next issue to <a href="mailto:iwarrior@uwaterloo.ca">iwarrior@uwaterloo.ca</a>.

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## IRON WARRIOR

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

All submissions, unless otherwise stated, become the property of The

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# Nicklebrook Mystery Pack



**DONOVAN MAUDSLEY** TRISTAN KUEHN **4B MECHANICAL 4B SYSTEMS** 

BROSKIES ON BREWSKIES

Welcome back to Broskies on Brewskies, your local craft beer column done by your favourite fourth years Tristan and Donovan. I mean, we think we're your favourite fourth years but that's totally up to you. Anyways, we've been off-andon roommates since first year and friends since way before then. We've been tasting and reviewing craft beers for the Iron Warrior since 2B, and have (hopefully) entered our final "season". 4B, am I right?

For our inaugural issue this term we decided to review a mystery beer pack from the Nicklebrook Brewing Company. The Burlington based brewing company recently had a promotion where they packaged four new craft beers together in a mystery pack without labelling which beer is which. The four beers were a Sour, a Session IPA, a New England Style IPA and a Stout. Nicklebrook was looking for their next star beer, and was hoping to get feedback on everyone's favourite beers from the mystery pack.

Our first beer was definitely the sour. It was mostly just sour all the way through and had neither of us really enjoyed it very much. It had a light feel to it and felt like it was meant to be an easy drinking

summer beer. It missed on almost every point, and we ended up giving it a 2/5.

We think the next beer up was one of the IPAs, probably the Session IPA. This beer was SIGNIFICANTLY better than the sour. It was citrusy and fruity, with a nice feel. The beer had a perfect amount of bitterness to it, which complimented all of the other flavours. There was however a fair amount of sediment in the beer. We didn't overly mind this, but would have been more accepting of it if we were at the brewery. We gave this beer 4/5.

The third beer was definitely the other IPA. We thought that this beer was even better than the last one. This beer had an excellent malty flavour to compliment its hoppy bitterness. It had a full flavour and honestly just built on what made the previous beer excellent. This beer also had a bit of sediment in the bottom. Hopefully they figure out the sediment issues when they scale this one up, as it was our favourite and what we ended up voting on. We ended up giving this beer 4.5/5.

The last beer was the Stout. I'm a big fan of the Stouts, but Tristan isn't. The stout had a weird aftertaste to start with, but I got used to this as I got through it and Tristan didn't. There was the classic stout creaminess with an undertone of chocolate, but was uncharacteristically bitter for a Stout. We eventually settled on 2.5/5 for this bad boy.

Overall I think this was a great idea for a brewery. It lets them try new ideas, and see what works and what doesn't.

# **Reflections Upon First Term**

Adjusting to Waterloo

## DANIEL MCCORMICK

**1B COMPUTER** 

This fall, I finished my first term of Waterloo ECE. There were many ups and downs on the roller coaster of a term. However, what's more important than the ups and downs is learning along the way.

One such lesson was that friends are never all that hard to find. Going into Waterloo is an alarming prospect, especially when you know one person in your program and he's a second year. It sounds truly intimidating, and you'd think that a school like Waterloo would be full of geniuses who you'd simply never compare to. As it turns out, the average person at Waterloo is fairly... average. They aren't necessarily smarter than you are; however, an awful lot might work far harder than you do. Regardless, making friends is a daunting prospect. Luckily, they tend to appear in your life. Because of having all your classes in common with people, you can easily make friends. Unfortunately, in computer engineering they mixed stream 4s and stream 8s, so you won't see half your friends (well, two thirds) again until fourth year. Ah, well.

Another lesson was cooking. Cooking seems quite easy when your parents do it, but it's a lot harder when you must do it yourself and have no idea what spices they use. Each trip to the grocery store is going to take the better part of an hour, if not more, so it's a major commitment for each trip. Luckily, both recipes I knew weren't too hard to

cook, but another problem is that all the food near campus is expensive. Unless you know your bus routes, you can enjoy paying \$17/kg for ground beef from Sobeys. Luckily, with some time and a pile of spices, you can often make at least a few meals of your choice. You also eventually learn your bus routes and end up buying your food for half the price of the most local, convenient store.

The final main lesson was time management. People did say that exams were worth a lot, but unless you take time to think, you might not realize that your exams are worth, at the bare minimum, the same as the rest of your course. This means spending an hour challenging that fraction of a mark. On the other hand, the pride you get from getting 100 instead of 96 on a quiz worth around 1.5% of your final mark makes the hour and a half you spend waiting worth that 0.06% boost. Honestly, the professors are overall quite reasonable, though some are stricter and others less so. Perhaps spend that hour studying for the final instead of challenging over something worth comparatively minuscule isn't worth it but, then again, that perfect quiz mark is a matter of pride. Let every person be captain of their hour, eh?

While of course other lessons were learned along the way (such finding the right restaurant, going from CPH to STC without going outside, sleeping during exams, discovering that people actually do sleep in MC comfy), a lot of university so far isn't as much learning as it is rolling with it. Maybe later it'll make sense.

# We Are Less Hedonistic than Our Parents but Way Lonelier

**TONY KAPPEN** 

1B ECE

Hey! You! Did you go drinking last night? Last week? Last month? Well if you did, the chances are that you drank less than your mom and dad did when they were at the same age. That's right: people in the developed world have been developing more moderate drinking habits for the past 20 years. So the chances are that when you went out for a pint, it was far more controlled and regulated than when your parents went out to do the same.

The statistics don't lie. Across the developed world, the number of kids that are drinking less and later in life than their parents is going up. They are also doing fewer drugs and having less sex than their parents did. So what gives, what is pushing this trend? A big part of it is stigma and changing attitudes. Turns out it's just not as cool these days to get black out drunk and act as a menace to society. Kids these days (amirite?). Another role is better parenting. Well perhaps not better, but at the very least more involved. Your dad and mom very likely spent far more time with you than their own parents did with them. Dads especially have seen their involvement rise, with more 15-year-olds reporting have an easier time talking to their fathers than those that were asked the same question 15 years ago.

Another possibility for the trend could be that teenagers and young adults today are far more likely to be more focused on school than they were a decade or two ago. The number of 25 to 34-year-olds with a tertiary degree in the OECD countries rose 17%, from 26% to 43%, between 2003 and 2012. During the same period, the number of teenagers with paid work collapsed. For Americans aged 16 -19, the rate of paid work during July (i.e. the summer) dropped to 43% in 2016 from 65% two decades earlier. This drop in summer work has corresponded with a rise in summer

Finally, the most popular theory to explain this trend points to changes in technology. Teenagers are heavy internet users and the ubiquitous presence of smartphones has only increased this trend. By their own admission, 15-year-olds in the OECD countries spent an average 146 minutes online per day in 2015, up from the 105 in 2012.

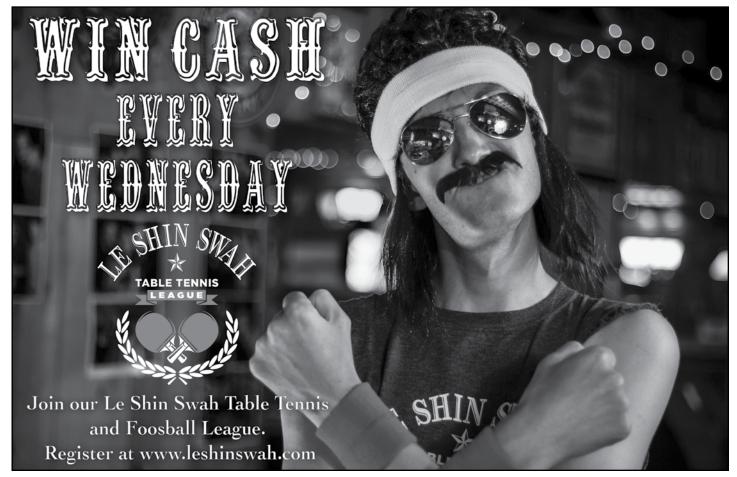
Social media allows you meet up with friends without actually meeting up with friends. What's not to love! Teenagers can meet up online and no bottles have to be opened. In America, surveys known as Monitoring the Future have recorded a decline in unsupervised hanging-out, which has been especially sharp since 2012.

Even if it might mean less alcoholic teenagers, the rise in social media and smartphones do present trade-offs. Firstly, hanging out online is not how you build deep lifelong relationships, because you need verbal and non-verbal cues to truly bond with someone. Secondly, there are rising fears of how this rising technology is affecting teenage brains. Are we just replacing one harmful substance such as alcohol by another? Last November Chamath Palihapitiya, formerly a Facebook executive, said that his children were "not allowed to use that shit." So far, hard evidence that social media is rewiring teenagers brains remains to be published. Any link between increased internet use and general unhappiness seem to be weaker than how, say,

food or sleep might affect your mood.

Still, something is definitely happening; whether it is more involved parenting, more career focused teens, or social media remains to be seen. The number of 15-year-olds who say they make friends easily has dropped in every country in the OECD.

We are a weird generation - molded by changes so rapid and strange they would make anyone feel a bit of whiplash. Yet here we are. We drink less than our parents do but are also lonelier and have a harder time making those lifelong connections. Maybe we can have the best of both. Put down your phone and close your textbook and go talk to someone. You'll be glad you did. Probably.



## 12 Months Later, Still a Keener



ABDULLAH BARAKAT PRESIDENT

Hey everyone! Happy New Year, and I hope the start of your term is going well. My name is Abdullah Barakat, and I'm here doing what I love to do, representing you as your Engineering Society President. This is my final term as President, so I want to make sure I leave the biggest impact that I can before I have to retire my precious white hard hat. With that said, I thought I'd use this issue of the Iron Warrior to discuss what my goals are for this term, as well as give you some updates on what I did over the co-op term.

First of all, I plan to create a transition document for our lovely business manager, Mary Bland, that will encompass everything that she does for the Society. The goal of this is to inform future presidents of how much Mary means to the Society and what she does in her role,

as well as to be prepared for future succession planning. Furthermore, I plan on working with Mary and Michael to create a transition plan for when Engineering 7 opens in September 2018, especially given that we will have space for Ridgid-Ware and a new C&D on the main floor and we need to be ready.

Speaking of space, one thing in which our campus is unfortunately lacking is student study space. Because of that, I have been working with the Undergrad Office to create a plan for recognizing the underutilized areas within the Engineering buildings on campus, with the hopes of identifying potential uses for those spaces to introduce more study space. Until then, however, I plan on converting POETS into a study space every Tuesday for the duration of this term, which will hopefully promote a sense of community within Engineering and remind students that the stress and struggles of academics are not things that they have to go through alone.

Mental health has been a topic of discussion for the longest time, and the wait times to see a counsellor have not been going down. To combat this, I plan on running a referendum this term to introduce a \$5 fee that will go towards funding a new Engineering Counsellor. More information to come with regards to this initiative in the coming weeks.

Lastly, the EngSoc website has been needing a revamp for quite some time now, so the amazing website team has been working really hard on it. The hope is to have it completely done by the end of the term.

With regards to what I did over the coop term, I revamped all of our governing documents in an attempt to modernize them and make them more professional than their previous incarnation, which has been presented to the EngSoc Council this past week. Furthermore, I have had the privilege of sitting on many committees discussing the new Faculty of Engineering Strategic Plan, which will hopefully mean a new, positive direction for our Faculty. A lot of planning has gone into this term's EngSoc Executive Elections, so I have been working to support the CRO (Simon Grigg) and DRO (Sarah Madigan) in running the election, and they've been doing a fantastic job! I also had the opportunity to sit on a panel with other Engineering Society Presidents from across Ontario, where we discussed the engineering undergraduate experience at our respective schools to a group of high school students interested in pursuing a career in STEM.

I will end things off by letting you all know that the Dean of Engineering's Office has sent out a survey to all engineering undergraduate students that will impact the Faculty's new strategic plan. They are asking students to rank what they believe the Faculty should consider a priority moving forward with the implementation of their new strategic plan, so please make sure you fill it in! It should only take a couple minutes of your time, and the Faculty will be taking the results very seriously when considering future initiatives.

That is all I have for now, but if you have any questions for me, please don't hesitate to ask. Till next time;)

## AaaAaAAAAAHHhhHH



MICHAEL BAUCHEMIN VP FINANCE

Hey everyone! Now that I'm beginning to settle into the term, it's time to let you all know about what I've been doing and what I hope to do. I spent the first week of the term at CFES Congress in Halifax, and I learned a lot of stuff that I hope to bring back to everyone.

From a strictly VP Finance portion, I have finished the budget and Council has approved it! Also, there are sushi and new sandwiches in the C&D!

For my personal/Finance goals, now: I want to bring cheers to fourth years this term, so a lot of my goals focus on POETS and bar services. Fourth Year Fridays are kind of a final hurrah for the oldest among

us, an echo of the First Year Fridays of yester-year. Fourth Year Fridays will include licensing, because Fourth Years like to have Spirit(s). Licensing POETS has been approved by the Dean, so the first Fourth Year Fridays will have Bar Services starting the 26th. For the weeks we can't do it, the First Years will have an opportunity for First Year Fridays. As a second part to the final hurrah for fourth years, I have just secured the return of Warrior Lager for every licensed event in POETS. For those who don't know about Warrior Lager, it's an easy drinking beer that just so happens to be the BEER OF CHOICE FOR MOTHER\*\*\*\*ING PO-ETS. The label, exquisitely crafted, harkens back to the doors of the Lounge itself, and... I have convinced Bar Services to allow people to keep a commemorative bottle, with its label, as an eternal memory of the suffering we all endure together,

for which we find solace in POETS.

In the next couple days, I will be releasing a survey to help focus my aims for Novelties, RidgidWare, POETS, Student Deals, and anything else that might fall under me.

As well, I will be supporting the Student Design Teams a lot more. Sponsorship is due the 25th of February at 11:59pm, and proposals can be submitted online to engsoc.uwaterloo.ca/services/sponsorship-2. The Sponsorship committee will be meeting on March 3, and committee selection will be happening at the council meeting on February 7.

Events are happening more in POETS!! This Friday is the UNProfessional Photoshoot, where you can come to POETS from 4-6 and take photos (not for Linkedin) in all the poses you couldn't use in the E5 bridge, and you can hold up your Warrior Lager bottle. It's a chance, especially

for 4th years, to cut loose a little bit, and not worry about the stuck-up-ness of a professional photoshoot. POETS is also running Poker and Euchre tournaments, Board Games, and Genius Bowl!

Last week, I had a promising meeting about RidgidWare moving into E7, and I hope to be able to share more details in the coming weeks. Big news though, so if you see me around POETS, ask me what's up.

Finally, I would like to take this chance to thank everyone running for executive positions. It takes an incredible amount of effort, passion, and drive, and everyone running should be proud. I am particularly happy that someone is running for VP Finance. Please everyone take the time to read through platforms and follow your minds, not hearts, when you vote. EngSoc is growing a lot right now and it deserves the best candidates.

					Upo	coming Eve	nts Calen <u>da</u>
Wednesday Jan 24	Thursday Jan 25	Friday Jan 26	Saturday Jan 27	Sunday Jan 28	Monday Jan 29	Tuesday Jan 30	Check out up-to
Professional Photoshoot 12-1 PM Engineers Read Things They Wrote as Kids 8-11 PM POETS	Hot Chocolate by EWB 11:30 am - 1:30 pm CPH Foyer Exchange Info Session 4-5 pm RCH 103	UNProfessional Photoshoot 4 - 6 pm POETS	EngSoc at TheMuseum – Round 1  9 am - 3 pm TheMuseum  Tubing Trip 2:30 - 7:30 pm Chicopee Tube Park		Charity Grilled Cheese 11 am - 2 pm CPH Foyer  EngiQueers 6 - 9 pm POETS	Board Game Bonanza 4:00 - 6:30 pm POETS	the-day event postings on the EngSoc website engsoc.uwaterlo ca/event-calenda
Wednesday Jan 31	Thursday Feb 1	Friday Feb 2	Saturday Feb 3	Sunday Feb 4	Monday Feb 5	Tuesday Feb 6	_
Lets Talk Mental Health 4:30 - 5:30 pm EngProv 7 - 9 pm	Hot Chocolate by EWB 11:30 am - 1:30 pm CPH Foyer EngProv 7 - 9 pm			Dungeons and Dragons 1-4 pm POETS	Charity Grilled Cheese 11 am - 2 pm CPH Foyer  EngiQueers 6 - 9 pm POETS	Board Game Bonanza 4:00 - 6:30 pm POETS	

# Winter Doesn't Have to be Sad!

## MARIKO SHIMODA VP COMMUNICATIONS

Winter 2018 here we are! New year, new us! Let's make this year different, and make this the year we go to more EVENTS!

We have already had a fantastic coffee house (don't worry if you missed it, THERE'S MORE) and a super fun ski trip. Coming up we have a TUBING TRIP! WHO WANTS TO SLIDE DOWN SNOWY HILLS IN A SUPER SPEEDY TUBE??? Only \$15 in the EngSoc office. TAKE ADVANTAGE OF THE SNOW, don't be miserable in the winter! Go enjoy nature!

We have so many more social events to look forward to too: Semi-formal, Engplay, Paint Night, and more! You can always check our Facebook page for the latest events, or the EngSoc website as well!

We also have lots of trips to look forward to: Mac Eng Musical, Rock Climbing, Volunteering at the MUSEUM!!!

But we need to take care of ourselves in the meantime! We have puppies coming in for finals season! We will share our secrets anonymously through POST secret service! We will talk about mental health in a safe space (Let's Talk Mental Health)! We will read each other's stories and struggles in the Mental Health Blog! We will look out for each other this term!

If you feel off this winter season, come to an event, talk about mental health, take some vitamin D, pet a dog, sing a song, dance a dance, MAKE A NEW FRIEND.

I am looking to getting more feedback on our events, so if you see an event survey please fill it out. Or shoot me an email at *vpstudentlife.a@engsoc.uwaterloo.ca* 

Myself and some of the terms directors and commissioners attended an inclusivity training workshop, so we can make our events more accessible for ALL students.

Lastly, Fall Out Boy's new album came out and you should all listen to it for a rad time.

Let's make this a great term for every-



# Acronym Bingo: The Iron Warrior Edition

## **CÉLINE O'NEIL**

VP COMMUNICATIONS

Hi everyone! I'm Céline, your VP Communications. I focused heavily on external relations over the co-op term, so I'm going to use this update to keep you up-to-date on how I've been representing you to other organizations, as well as touching on my plans for the rest of the term.

Since the spring term, I've represented Waterloo A-Society at two Canadian Federation of Engineering Students (CFES) conferences. The CFES represents Canadian undergraduate engineering students at a national level to organizations like Engineers Canada, the Accreditation Board, and engineering's National Council of Deans. This coming year, they will be focusing on advocating to these organizations about the connection between student mental health and heavy workload, in addition to other stances including student input on accreditation and engineering internship quality.

For those of you with an interest in engineering competitions, good news! The CFES is working with American and European engineering student organizations to start the first International Engineering Competition in 2020. And if connecting with students across Canada interests you, but the existing set of CFES conferences isn't a good fit, keep your eyes peeled for the first Canadian Conference on Sustainability in Engineering, which will be hosted in Prince George, BC, in 2019.

At a provincial level, I've been engsoc.uwaterloo.ca.

working through ESSCO (the Engineering Student Societies Council of Ontario) to collaborate with other schools on an investigation into the cost of engineering tuition. ESSCO is also hosting the upcoming First-year Integration Conference (FYIC) in Thunder Bay. I'm looking forward to taking eight Waterloo first-years to spend a weekend at Lakehead University developing inter-school connections and leadership experience.

Though I intend to continue working with ESSCO and the CFES on provincial and national advocacy relating to student issues, I'm hoping to spend this term focusing a bit more on internal communications. If you've noticed that you get tagged on Facebook in EngSoc photos a bit more often, I hope we're going in the right direction. I'm hoping to use social media to include as many engineering students as possible in our online image of the society, (and get as many people a nice new profile picture as possible). Thank you to our incredible EngSoc media directors for putting in a lot of work to make this possible! Still don't have a great profile picture? I suggest making it out to "Unprofessional Photoshoot" on January 26 to get some photos better suited to Facebook than E5 LinkedIn

Lastly, on January 19, we hosted a PEO Speaker panel with a focus the experience of being an engineer-intraining post-graduation, working towards a P.Eng. If you couldn't make it out but would like to be connected with PEO or have questions to ask, please reach out to me at *vpcomm.a@engsoc.uwaterloo.ca*.

## So much to do, So much to see!

## PAT DUONG

VP ACADEMIC

Hi Everyone. Welcome back on campus! I'm Pat Duong your EngSoc VP Academic for the Winter 2018 term! I deal with all things co-op and academic related. Over the co-op term, I've worked with Andrew McBurney (former VP Ac B) to reformat and update all of our transition documents so that future academic services and events can run much more smoothly.

### Co-op Fee Deep Dive

https://uwaterloo.ca/co-operative-education/your-co-op-fee

Waterloo Co-op has released their first set of information about the long awaited co-op fee. And while the comprehensive breakdown of the current fee is not yet available, they do talk about the general categories that they've broken down Co-op's services into 6 categories. This is the first publicly available step towards understanding the co-op fee, and I will continue to push for and support having

more information and transparency.

## Add an External Job on WaterlooWorks

CECA has listened to feedback students have given over the years and has added a new feature to WaterlooWorks. In the past, some students have been in this situation with an external offer and then had to make the difficult decision between losing access to WaterlooWorks or giving up an external offer. This no longer

needs to happen during main round! Students are now able to add jobs found externally to WaterlooWorks as an offer during main round! This must be done before rankings come out in order to be added to the system as an offer.

## Al Option (coming out Fall 2018)

The Faculty of Engineering is coming out with a new Option in Artificial Intelligence in Fall 2018. Upper year students with the right courses also will qualify for the Option as long as it is completed before graduation. It requires a specific (not yet publicly released) mixture of MSCI and ECE, as well as a choice of courses from most other departments. It's centred around courses in algorithms, process control systems, and machine learning. If you are at all interested, ask your class' EngSoc representative for more information or email me.

### Some of my other Goals:

- Collaborating to host a FYDP Poster workshop
- Updating the content of the Exam Bank website page
- Investigate cross-departmental collaboration/course taking

I want to hear your thoughts/opinions/concerns, so if you ever want to talk to me about anything academic/coop related and otherwise, my office hours are Fridays 11:30 am - 1:20 pm in the Orifice or drop me an email at *vpacademic.a@engsoc.uwaterloo.ca*. Cheers!



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# **EngSoc Elections**

SIMON GRIGG

CHIEF RETURNING OFFICER

It's Engineering Society election season again. We have 8 candidates running for 5 positions this term. Voting begins January 27th and runs through January

31st. You will receive an email link to vote for your new Engineering Society executives and WEEF Director. They will be representing you on a number of levels, and on a number of issues, so take a moment to get familiar with their platforms:

## **Presidential Candidate:**

## Mariko Shimoda 2020 Mechanical Engineering

www.facebook.com/Mariko4Prez

"I am a smol gal with big ideas and I want to be your President! I have previously served as the Vice President of Student Life and the First Year Commissioner, and have experience in many areas of the Waterloo community. As your President, I promise to do my best to make Waterloo Engineering more fun, supportive, inclusive, and something we can all be proud to be a part of. I

will look to involve more of the Waterloo community by creating initiatives that are relevant to more people. I will support diversity initiatives to allow minority groups to become more prevalent in the community. I will advocate for students receiving more timely mental health care, and improving the quality of life for engineering students. Vote Mariko for a better time at Waterloo!"





# VP Communications Candidate:

Andrew Dawson
2020 Mechanical Engineering

https://www.facebook.com/Andrew-Dawson-163829507572474/

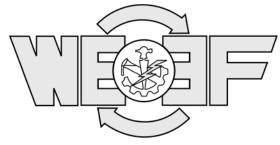
My name is Andrew Dawson and I am currently enrolled in my 3A term of mechanical engineering here at the University of Waterloo. I am a candidate for the VP Communications role within the Waterloo Engineering Society election. My goal for becoming VP Comm is to strengthen the culture and community within the engineering student body by means of improved advertising, student outreach initiatives, and increased awareness of organizational information.

Since starting university, I've been very passionate about getting involved and learning more about the culture within engineering. By becoming more involved, through conferences and assumed positions, I began learning about myself, and

how I can make a difference in our community. I feel that as engineering students, we should all feel inclined to expand our experiences beyond the classroom to build up a sense of pride and community in our profession.

I've personally seen and experienced the impact of the engineering community; however, many students don't often get to have these opportunities due to a lack of information or poor communication. I plan on taking a personal approach to communication by improving awareness for what EngSoc does and what we can do to accurately represent our students.care, and improving the quality of life for engineering students. Vote Mariko for a better time at Waterloo!"





## **VP Finance Candidate:**

## Michelle Teplitski 2022 Nano Engineering

https://www.facebook.com/Vote-Michelle-Teplitski-for-VP-Finance-1672867889401668/?modal=admin todo tour

Hey everybody! I'm Michelle and I'm running to be your next VP Finance!

A bit about me: I was involved in Eng-Soc last term as class rep, volunteered at EngSoc events, and was a part of the sponsorship committee. Through those experiences, I learned a lot about how budgets are managed, and I would love to have a bigger role in the Engineering Society to help continue its amazing work for Undergraduate students!

The previous VP Finances have done some incredible work in terms of planning for the future, and I plan on helping them implement those ideas. First off, I'd like the transition of Rigidware from CPH to E7 to run as smoothly as possible, so that Rigidware becomes greater than ever! I'd also like to to bring more hype towards Novelties, because it's awesome!! Lastly, I'd like to continue planning for licensed events, because upper years are awesome and deserve appreciation (and other things that start with the letter A)!!

Overall, you (as an engineering undergrad) are incredible and amazing, and I'd love to be a part of making your university experience better as a whole!!





## **WEEF Director Candidate:**

Zemann Sheen
2A Computer Engineering

https://www.linkedin.com/in/zemann-sheen

Hi, my name is Zemann and I am running to be your WEEF Director! I have a deep interest in hackathons, swimming, tennis, 3D printing, and AI. I have been a part of the WEEF since 1A and currently sit on the WEEF Board of Directors. As a fellow student, I will to do as much as I can with the resources

at WEEF to benefit all engineers in Waterloo. I will continue to improve the educational environment for all undergraduate engineering students and maintain our outstanding reputation here at Waterloo. Vote on Jan 27 – Jan 31, to invest in your future! Vote for Zemann for your WEEF Director.

# VP Academic Candidates:



## Jackson Barr 2021 Electrical Engineering

https://www.facebook.com/Jackson-Barr-for-VP-Academic-2011936489029099/

Hi, my name is Jackson Barr! I am an Electrical Engineering student in 2A running for the position of VP Academic. You should elect me to this position for my strong sense of duty to the engineering students of Waterloo

and unavering commitment to making our time here as positive as possible. I promise to promote the intersts of engineering students and petition hard for more robust mental health services! Thank you!



Thomas Dedinsky
2021 Computer Engineering

thomasdedinsky.com

I'm Thomas Dedinsky, 2A Computer Engineering, and I am running for VP Academic for the Engineering Society 'A'. My main goals are to work towards improving WaterlooWorks, Coop, professional development services, student services, and the academic experience as a whole. I also aim to properly represent Engineering students as a whole as well as keeping them informed in relevant matters. In the past I have acted as an Advertising Commissioner, Exam Bank Director, Secretary, and more for EngSoc. I hope you vote for me to represent you come January 27th.

## My platform includes:

• Working towards improving WaterlooWorks based on evaluating the feedback from the WW survey last term

and current feedback

- Keeping Engineering students informed as Co-op 2.0 is fully implemented
- Pursuing the investigation of whether a strong professor-society relationship with the exam bank would benefit it
- Representing Engineering students well while sitting on various committees
- Maintaining and improve the quality/ quantity of informative and interactive workshops the society provides
- Continuing to support the growth and positive effects of Engineering MATES
- Investigating the satisfaction of the recently implemented orientation week/fall study days split
- Acting as a liaison between Engineering students and the faculty for relevant academic and co-op matters

# VP Student Life Candidates:



Emma Swarney
2021 Systems Engineering

https://www.facebook.com/Emma-Swarney-for-VP-Student-Life-144843039549970/

Hello! My name is Emma Swarney, I'm in 2A SYDE and I'm running for VP Student Life.

I have a passion for people and inclusivity and believe that EngSoc events should reflect the interests and needs of our student population as accurately as possible. If I were to be elected VP Student Life, I would like to implement methods to understand who is not currently participating in EngSoc events, and how we could modify existing events (or create entirely new ones) to engage that missing population. Yes, I'm talking about DATA DRIVEN decision making! EngSoc is for everyone, so even if

you don't identify as an "EngSoc person" I promise to work to create events, informed by actual statistics, that will directly benefit you. I'm here to improve the life of all students...it's in the title!

Additionally, I have a reputation for reliability, approachability and enthusiasm from my current and previous roles within Eng-Soc. I'm the Outreach Commissioner this term, so I have lots of experience with communicating between the Engineering student population, Directors, EngSoc Executives, faculty members etc.., which I plan to leverage to create change from day one.

Happy voting!



William Losin
2022 Nanotechnology Engineering

https://www.facebook.com/Will4VPStudentLife/Life-144843039549970/

0&A

**Q:** "Who is that good-looking fellow upon this page?"

**A:** Firstly, I'm flattered! Secondly, I'm the guy who made the duct tape "Ridgid" Tool, and I am running for VP Student Life.

**Q:** "Why should I care about VP Student Life?"

A: Are you a Student? Are you alive? THEN LISTEN UP! You know those Tron students? No? What about the Management students? Still no? And do the Architecture students even exist? If I get elected, I will collaborate with many teams of program-specific EngSoc reps to aid in bring all the programs

together through inter-program events. Such events would include coffee house, coding competitions, trivia nights, gaming competitions, the list goes on. Such events would provide a stronger community within the faculty of Engineering.

Q: "\*skims past Will's article\*"

A: \*Goes home and cries\*

**Q:** "What about me? I've got good ideas for events too!"

A: Perfect! The greatest part about being a part of a student society is it represents the voice of the people. I will be 100% open to new ideas, and I will make a pretty little box for any ideas you have for events that you want to see in the future.

# The CRISPR Miracle Hits Immunity Problems



Starting around 2012, a genetic technique called CRISPR/Cas9 rose to prominence in the fields of genetic research and biotechnology. It was seen as a huge breakthrough in genetic manipulation technology; with it, scientists and engineers were able to manipulate and alter DNA with immensely improved accuracy and substantially reduced costs.

CRISPR/Cas9 has already been used to make wild improvements in medicine and genetic engineering. For instance, one team used the technique to remove HIV DNA from human cells implanted in a mouse, apparently permanently curing the animal. Another team used the technology to tamper with a mosquito's fertility to reduce its ability to spread. 2018 is set for even more exciting CRISPR news, with human trials for combating several diseases planned in the US and Europe

However, a slight dampening has been put the CRISPR excitement: a new, not-yet-peer reviewed study suggests that some humans may have an immunity to CRISPR/Cas9, and that this immunity may pose an safety and efficacy issue moving forward.

#### What is CRISPR/Cas9?

The words CRISPR, Cas9, and CRISPR/Cas9 all refer to the same technology in the public vernacular. However, CRISPR is really a type of DNA sequence while Cas9 is a "DNA Scissors" protein that uses CRISPR

to determine where to cut.

Cas9 is an enzyme used by bacteria to identify and destroy viruses. This enzyme works by taking a "mugshot" of part of a virus and seeking out DNA with a matching genetic sequence. If it finds a match, Cas9 cuts up the virus, disabling it and rendering it inert

CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) is the DNA "mugshot" that Cas9 uses. It has some unique properties, as given by the name: the sequences are short, palandromic, repeat with some variation, and are regularly spaced in clusters around the bacteria's DNA. The DNA sequences themselves have been copied from previously-identified viruses, which the bacteria had killed and incorporated into its genetic structure so that there is a record for Cas9 to use. Together, CRISPR and Cas9 are a critical immune function for many bacteria.

The CRISPR biotech revolution has come about as scientists learned to re-purpose the CRISPR system for their own benefit. By making their own DNA sequences, researchers can cause Cas9 to target a very precise location on a genome. The Cas9 slices the DNA open at that point, allowing genes to be added, removed, turned on and off, or altered.

#### The Immune Response

While many different types of bacteria have been shown to have a CRISPR/Cas9 style defence system, the two most well-developed systems come from Staphylococcus aureus and Streptococcus pyogenes. Both of these bacteria frequently infect humans and, as a result, some humans have developed

immunity responses to the bacteria. This, the researchers of the aforementioned paper suspected, could cause problems if CRISPR was used on living human subjects.

One line of defence in the humans against bacterial infection is antibodies. The body produces a range of antibodies that freely circulate in the body, looking for some particular antigen to latch onto. When that antigen is found, the antibody attaches to it. A larger immune response is triggered, including the creation of more antibodies of the same type.

According to the performed research, more than half of human blood samples tested reacted to the Cas9 protein from both S. aureus and S. pyogenes. This means that these people's bodies have identified Cas9 proteins as foreign and have created antibodies to disable them. As a result, injecting free-floating Cas9 into a patient for gene therapy will frequently cause an immune response. Furthermore, the protein will not reach its host cells and cause the desired genetic change.

The second immunoresponse that the researchers considered is the body's ability to identify cells "infected" with the gene therapy. As part of the immune system, cells take parts of their contents and display them on their cell surface. Other cells, called T-Cells, migrate around the body, searching for cells that are expressing inappropriate contents. If such a cell is found, the T-Cell identifies it as infected and kills it.

The study tested samples from thirteen individuals to see if this immune response was also present. They found that half the samples had an immune response to cells infected with the S. aureus Cas9, but none responded to the S. pyogenes enzyme. Given

the number of samples considered, the study cannot conclude that there is no human resistance to the Cas9 of S. pyogenes. Nevertheless, the findings suggest that the human immune response may identify and kill any cells that are successfully treated using Cas9 gene therapy techniques.

The finding are almost certainly not an unavoidable roadblock in the application of CRISPR to humans; many possible workaround have already been proposed. For instance, CRISPR could be used on cells that are extracted from the body, then re-inject once the Cas9 is no longer expressed on the surface of the cells. The protein could also be modified, or a similar protein used, to prevent an immune response.

The most important part of this research is not that new techniques might be required for gene therapy in humans; the importance is that CRISPR is capable of provoking an immune response in humans. Previous studies, using less-precise viruses as the gene vector, have provoked immune responses with unfortunate results. In general, trials show no therapeutic benefit if the patient has an immune response. More importantly, in 1999 a patient named Jesse Gelsinger died after the viral vector he was given caused a massive immune response.

CRISPR is still a revolutionary tool that has, and is expected to continue to see, widespread success as a medical and technological marvel. However, this research is a stark reminder that gene therapy, like any tool, has risks. With proper due-diligence and additional research, CRISPR can undoubtedly become a safe treatment with incredibly widespread applications that is routinely administered to great effect.

# **An Interplanetary Visitor**



Starting in 2008, a Hawaiian telescope called Pan-STARRS 1 has been taking a survey of the night sky. This telescope, like many others around the world, was built primarily for the purpose of identifying and cataloging Near Earth Objects (NEOs). These objects have attracted a lot of scientific and popular interest in the past few decades because of two reasons. Firstly, these objects have a significant potential to strike the Earth, causing a natural disaster comparable to a major volcano or earthquake. Secondly, unlike the multitude of other disasters that are always threatening humanity, NEOs are the one disaster that could conceivably be prevented with today's technology; gravity tractors, nuclear weapons, or kinetic impacts are all possible prevention methods.

In October 2017, Pan-STARR made a typical observation: a small smear in the camera, indicating an object moving quickly across the sky (at least relatively quickly compared to most objects). The observation was announced with the normal amount of fanfare—none at all—and other NEO-tracking telescopes turned to look for the object. Other observations were reported on subsequent nights, so scientists could begin to estimate its orbital path. As more and more measurements came in, the projected orbit of the object—now called A/2017 U1—became increasingly elongated until, on October 22, observations from the Canada France Hawaii Telescope pushed the expected "orbit" into interstellar space. Suddenly, A/2017 U1 became a very interesting object.

The asteroid, which has since been renamed as 'Oumaumau (Hawaiian for "scout"), is now known to have originated outside our solar system. Instead, the 250 m long object is has been floating through space for hundreds of thousand or even hundreds of millions of years. It happened to fly close to the sun on September 9, then happened to come close enough to Earth for Pan-STARR 1 to spot it. For the next few weeks, scientists used every tool they could to study 'Oumaumau, since it will never return to the sun again.

This is not a totally unexpected discovery. Many scientists had predicted that a large number of small planetesimals, especially comets, should be ejected from star systems during their planet formation stage. However, the particular nature of 'Oumaumau is exciting because it defies many expectations that these interstellar objects (ISOs) were expected to have.

For instance, while the asteroid was always too far away to be resolved in a telescope with a size larger than one pixel, it displayed regular variations in brightness that researchers have interpreted as it being cigar-shaped, ten times longer than it is wide. This is much more elongated than any other asteroid that has ever been observed. It is spinning so fast and is so elongated, in fact, that the object must have some tensile strength, since gravity alone is not enough to prevent it from shedding material. Alternatively, 'Oumaumau may have a difference in albino (reflectivity) that causes the brightness difference over the orbit.

'Oumaumau is also unexpected in that it is a rocky asteroid, not an icy comet. Surrounding our solar system is a cloud of bodies called the Oort cloud. These are objects that were almost-but-not-quite ejected from the solar system, and they are almost all comets. Therefore, it was assumed that most interstellar objects

would also be comets. The fact that the first interstellar body that is observed was an asteroid suggests that our solar system may be an exception, with other systems having asteroids in their outer reaches.

In light of these recent findings, scientists are now eager to spot and observe more ISOs. The prospect of another interloper coming along soon is less illusory than might be expected. A letter published in Nature by a number of scientists, lead by astro-biologist Karen Meech, suggests that there may have been previous detentions of ISOs, but that they were not properly identified. They estimate that, statistically, there should always be one ISO that is about 250 m in diameter closer to the sun than Earth.

The letter goes on to describe how previous ISO sightings could have been discounted; after a first observation, the orbit of an object is not known. Subsequent observation attempts must guess at the likely orbit of the object and search in the expected regions. Since ISOs are on hyperbolic, as opposed to elliptical,

trajectories and move much faster than orbiting bodies, they would typically move beyond the limits of this search region. After failing to find the body a second time, the hopeful telescope operators would discount the first observation and move on to more promising NEO candidates.

'Oumaumau is now speeding away from Earth at over 30 km/s, never to return. The observations that have been made have been enough to challenge current theories on stellar evolution and the normalcy of the solar system, but not enough to disprove them or offer concrete new ideas. New ISOs will be found and observed in much greater detail eventually. The bigger news, however, is that they are there. Just as the discovery of exoplanets is becoming normal and routine, their reveal less ground-breaking and statistical, a whole new type of astronomical body has been found. Be it decades or centuries in the future, the detection of these bodies, too, will become routine. Just in time, perhaps, for a new type of astronomical body to be



Artist Impression of the Cigar-Like Shape of 'Oumaumau

## One Year of Donald Trump

## **Dammit Donald**



On Saturday, January 20, the anniversary of Donald Trump's inauguration, the government shut down and anti-Trump protests were held in cities throughout the country. This gong show of a day is reflective of how his term has progressed so far

The bill to fund the government for the upcoming weeks did not receive the required sixty votes to pass by Friday night, so Americans woke up on Saturday to find that their government had shut down. This is the first shutdown when one party controlled all three branches of government. At the time of writing, it is uncertain how long this will last.

As expected, both sides are playing "who's to blame?" Trump is blaming the Democrats for prioritizing immigrants or "other Americans," as he puts it, also noting "that he will be blamed" for it according to a source close to the White House. Democrats are blaming the Republicans for rejecting a bipartisan compromise. This disagreement refers to the deal which would protect hundreds of thousands of young immigrants – referred to as Dreamers – against deportation

Ironically, Trump tweeted back in May 2017 that the country needed a good shutdown of government. Happy anniversary, Mr. President. Your wish was granted

One year ago, his inauguration was marked by the first Women's March, which was one of the biggest protests in American history. Thousands turned out this Saturday to protest the president, again. Trump tweeted his support in response: "Beautiful weather all over our great country, a perfect day for all Women to March. Get out there now to celebrate the historic milestones and unprecedented economic success and wealth creation that has taken place over the last 12 months. Lowest female unemployment in 18 years!" Typical.

Coordinated rallies were held across the country, in Washington, New York, Los Angeles, Chicago, and 250 other American counties. But this time had a different feel than last year. One protestor told CNN, "This feels like a protest, today. Last year it felt more like a funeral. We were all in mourning. We all got together. There was this quiet solidarity. This feels like anger and resistance."

This year, female and male supporters are turning their frustration into something tangible. "I think we've moved from doing the important culture change work to now starting to think about institutional change and passing policies," said Kelley Robinson, the national organizing director for Planned Parenthood.

2017 was a year focusing on women's rights, especially with the #MeToo and #TimesUp social media campaigns, as sexual assault and misconduct allegations arose against powerful men in Hollywood and Washington. More women have been pushed into activism by many of Trump's policies, such as rolling back on birth control. Women want a change, and Trump facilitated these rising voices.

"Power to the Polls" is an initiative kickstarted at an event in Las Vegas on Sunday. It aims to register voters in swing states, with a goal of one million new voters. They want victories in the midterm elections in November, to get strong advocates for women's rights into office. Now is not the time to sit back and feel bad for oneself; it's the time to

"Women's March has created a powerful movement that has ignited thousands of activists and new leaders," Tamika D. Mallory, the Women's March co-president, said in a statement on the Power to the Polls website. "In 2018, we must turn our work into action ahead of the midterms."

### One year of Trump

One the whole, what can we say about Trump's first year in office? Divisiveness, questionable opinions, rants, and fake news; racism, sexism, and scandal after scandal. Look no further than Trump's Twitter account for all you need to know about the most powerful man in the world.

In a nutshell, Trump's term has revolved around the following: the travel ban, the crackdown on immigration, trade deals, the tax reform which will not benefit the middle class, the attacks on reproductive rights, childcare, and maternity programs, and the deterioration of foreign policy. Trump is playing a childish game with North Korea, he has recently declared that the US recognizes Jerusalem as the capital of Israel, he has refused to recertify that Iran is in compliance with the JCPOA (Joint Comprehensive Plan of Action), and he seems unable to keep track of who his allies are in the Middle East.

As Trump's first year rolls to a close.



**President Donald Trump** 

all we can hope is that the upcoming year does not get worse. Although, to no one's surprise, the Trump-ish behaviour continues. Damnit, Donald.

#### The scandals continue

Trump allegedly had an affair with porn star Stormy Daniels (born Stephanie Clifford) in 2006. According to the Wall Street Journal, Michael Cohen, Donald Trump's personal lawyer, set up a private company which paid her \$130,000 in 2016 to keep the affair quiet. This payment took place just a couple weeks before Trump's election victory.

Cohen has said that the president "vehemently denies any such occurrence, as has Ms. Daniels". However, Daniels gave an extensive interview with In Touch Weekly magazine about the affair in 2011. The interview was just published in full on Friday.

## The racism continues

On Thursday, Trump rejected the bipartisan immigration deal mentioned above, asking why the US would want to accept more immigrants from Haiti and "\*\*\*\*hole countries" in Africa rather than places like Norway.

Republicans and Democrats alike were shocked, condemning his comment and calling for an apology. It is no surprise that Trump has exhibited racist behaviour in the past, but a periodic wake-up

calls seems to be necessary. Trump has called himself the "least racist person you've ever met."

White House spokesperson Raj Shah issued a statement that Trump supports policies that invite "those who can contribute to our society". He did not, however, deny this remark.

Ironically, as global disapproval of Trump hit a record high in 2017, the highest disapproval came from Norway at 83%.

### A day in the life

If everyone worked as hard as Donald Trump, the world would not be in good shape.

Axios obtained a copy of Trump's private schedule, and it makes me jealous. He typically spends 11 AM – 6 PM in the Oval Office, after which he returns to the residence. During this time, he has briefings, a meeting or two, and plenty of scheduled "executive time". According to officials, executive time is spent watching television and Tweeting. He also makes phone calls, and watches the news. Let's not give him too much credit: aside from the one-hour lunch break, the majority of the President's day is spent as executive time.

Does Trump ever actually do anything? Although, it may be in the best interests of the world if he continues to lounge around.

# Hawaii Missile - Warning False Alarm



**STONE HE** 1B MECHANICAL

On an early Saturday morning of January 13, Hawaiians were woken by a missile-warning message, only to find out that the message that was sent out was a mistake.

The whole missile alert ordeal lasted 38 minutes before a cancellation message was sent. Many have complained why it took so long to cancel the alert.

The alert, sent by the Hawaii Emergency Management Agency, was sent out due to human error that occurred during a shift change, where the operator accidentally selected the actual warning, instead of the drill warning. Richard Rapoza, the spokesperson for the Agency stated, "Somebody clicked the wrong thing on the computer."

The file names for both the actual and drill warnings were PACOM (CDW)-STATE ONLY and DRILL-PACOM (CDW)-STATE ONLY. The former file would send alert messages to all mobile phones in Hawaii, while the latter would only send alerts to testing devices.

During the shift change, the operator would go through routine checks to make sure the IPAWS (Integrated Public Alert and Warning System) software was functioning correctly. During the test on Saturday, however, the operator accidentally clicked on the file PACOM (CDW) – STATE ONLY instead of the

drill file, which resulted in sending a ballistic missile alert to everyone who owned a smartphone in Hawaii.

After the incident, further plans to prevent an accidental alert being sent to people's smartphones are now being implemented. A new cancellation command has been made to fix mistaken alerts easier and faster. In addition, a new procedure was implemented on the same day, such that 2 people will have to sign off the official alert before it could be sent.

The alert was triggered at 8:07 am, causing widespread panic across the state of Hawaii. Highways were filled with cars as people rushed to find shelter in the tunnels. In some areas of the state, emergency sirens went off, which increased the panic and terror of the people. However, those sirens were not

triggered by the Emergency Management Agency.

This false alarm was already adding stress to the citizens due to the current political situation between the United States and North Korea. Earlier this year, both Donald Trump and Kim-Jong Un sent threats of nuclear missiles, with the former stating he has the bigger "size," turning his threat into some sort of button-measuring contest. State officials have stated that residents would only have around 15 minutes to find sufficient shelter before a missile from North Korea could strike Hawaii.

The good news is that there was no missile. However, lessons were learned for the Hawaii Emergency Management Agency to prevent a false alert from going

THE IRON WARRIOR WEDNESDAY, JANUARY 24, 2018



An Image of the Inside of Pacific Mall

# Pacific Mall on Notorious Market List



STONE HE
1B MECHANICAL

Pacific Mall, a mall located in the Greater Toronto Area, has been listed as a notorious market for pirated and counterfeit goods in a 2017 report from the United States Office of the Trade Representative. The mall has been recognized as one of the largest Chinese mall in the Western world. It consists of over 270,000 square feet of retail space with more than 500 small shops.

The mall is considered a popular tourist destination for many visitors in Toronto. It operates year-round including holidays, as it is classified as a certified tourist attraction. The mall was exempted from the Ontario's Retail Business Holidays Act, which does not allow regular businesses to operate on public holidays with a few exemptions.

Pacific Mall was opened in 1997, and stood on the original site of Cullen Country Farm. Cullen Country Farm consisted of a farm-themed complex with shops, restaurants, and a theatre inside of it. The complex was damaged by fire in 1988, and was finally demolished in 1994.

For over a decade, Pacific mall has had a reputation for selling counterfeits and pirated products. The recent American report has listed Pacific Mall as one of the 18 physical markets notorious

for counterfeit goods. It was the only Canadian location that was listed.

According to the report, the goods at Pacific Mall are "sprawling and pervasive" and that vendors "operate largely with impunity and requests for assistance from local law enforcement have reportedly gone unanswered." In addition, the report has also stated that many of the counterfeit goods, which included cosmetics, sunglasses, and fragrances, pose a risk to public health and safety.

However, there have been crackdowns and investigations of the vendors conducted by the RCMP and the York Regional police over the last 2 decades. It is said that the electronics, DVDs, video games, and other goods that were seized were worth millions of dollars.

In 2015, one case of counterfeiting at Pacific Mall was the selling of fake Chanel products in a Pacific Mall vendor "Lam Chan Kee." The case ended with court action taking place where the judgment included \$250,000 in punitive and exemplary damages against the owner and the store.

The other physical locations that were listed as major counterfeiting centers included markets from across the world. The following other countries that have their markets listed in the report: Argentina, China, Mexico, India, Italy, Paraguay, United Arab Emirates, Turkey, Vietnam, and Indonesia.

Representatives of Pacific Mall were not immediately available for comment.

# Olympic Diplomacy Across the Korean Peninsula



JIMMY WANG 2A MECHANICAL

In a surprising turn of attitude, North Korean leader Kim Jong Un has expressed a clear desire to open peace talks with South Korea during his New Year's address to the nation. Inter-Korean peace talks began on Tuesday, Jan 9, and marked the first time in two years that the two governments held any formal correspondence.

Issues discussed at these meeting did not include North Korea's nuclear program, which was brought up by the South but quickly shut down by the North, but rather heavily focused on the 2018 Pyeongchang Winter Olympics set to commence on Feb 9 in South Korea. The North agreed on sending a large team of athletes and a cheerleading squad to Pyeongchang next month, marking their return to involvement with the winter Olympics after eight years of absence. In return, the South proposed that the two Korean teams walk into the Olympic area together during opening ceremonies, a powerful sign of unity.

Also resulting from the discussion were agreements to hold future meetings to reduce military tensions along the DMZ and the reestablishment of a military hotline between the two countries. The South Korean delegation called the North to end its nuclear program. The North Korean delegation did not comply but said that its "nuclear weapons are aimed at the US" and not at its brethren in South Korea.

Plenty of speculation has arisen concerning

the sudden shift in North Korean attitude, although a consensus has been reached among most political analysts that President Donald Trump is partially responsible. Some, including South Korea's President Moon Jae-in, believe that Trump's hardline rhetoric against Kim Jong Un has pressured the Hermit Kingdom to come to the meeting table. Some believe that the supreme leader might be attempting to seem more reasonable, in the eyes of the world, than his US counterpart, given Trump's warhawk threats to "totally destroy" North Korea if provoked.

Regardless, diplomacy through sports is not an unheard-of occurrence. Looking back at the early 1970's, formal relations between the United States and the People's Republic of China began though ping-pong diplomacy, where members of the US Table Tennis team were invited to Communist China to play against the host nation's team. This paved the way for talks between Beijing and Washington after nearly two decades of Cold War tensions, culminating in Richard Nixon's visit to Beijing in 1972, making him the first US president to step foot in China since the Communist Revolution in 1949.

The two Koreas have been in a state of war since 1950, never having formally signed a peace treaty to end the Korean War. Desires for reunification have been present since then but relations have fluctuated over time, deteriorating recently due to advancements in the North's nuclear missile program and the election of Donald Trump in 2016. With the Pyeongchang Winter Olympics starting in early February, perhaps the wonder of sports can bring unity to a divided Korean peninsula.

## **Uncertain Future of Trade**



KAI HUANG 1B COMPUTER

"A Trump administration will renegotiate NAFTA, and if we don't get the deal we want, we will terminate NAFTA and get a much better deal for our workers and our companies. 100 Percent." These were the words spoken by Donald Trump at a rally, during his Presidential Campaign, and these are words that he appears to be standing by. NAFTA talks are about to begin in Montreal, where they will be held from January 21 to 29.

Initial talks within Trump's inner circle were reported to have been divisive, but resulted in a document with a list of demands.

These changes proposed focus entirely on an "America first" attitude. Points include reducing the U.S. trade deficit within NAF-TA, scrapping certain NAFTA dispute-resolution panels, opening up Canada and Mexico to U.S. telecom companies and banks, and restrictions on Canadian or Mexican firms seeking U.S. government contracts.

More recently, during October of last year, more specific (and contentious) demands were set during the talks in Arlington. Notably, the U.S. wants to specify vehicles under NAFTA to be at least 85% North American content and 50% U.S. content, a major change from the current regulation that simply needs 62.5% North American content. This rule included an additional clause that exempted U.S. automakers from it. This is merely one of the examples that worried both the U.S. and the rest of the continent,

a radical proposal pushed out with immense risk for every party involved.

In Canada, both the ruling party as well as the official opposition are unified in support of Canada's position in NAFTA. Andrew Scheer, similarly to Trudeau, criticized the U.S. approach to the negotiations, and suggested that they would be better off looking at internal issues such as taxation, regulation, and technological change. Conservative MP's are divided on certain aspects of NAFTA and many consider it imperfect, but urge for cautious decisions.

Mexico, on the other hand, is in a dangerous position. With the general election coming up in half a year and incumbent President Enrique Peña Nieto ineligible for another term, national politics and NAFTA have become intertwined. With additional comments from Trump that his prom-

ised border wall would be paid by Mexico weaved into the NAFTA discussion, the Mexican public is heavily disillusioned with the U.S. Political candidates in the country risk servere public backlash if any concessions to the U.S. are suggested.

Throughout most of the current talks, not much progress has been made. Most of the tough issues brought forward are still left as impasses. Many of the U.S. proposals have been described by Canada and Mexico to be non-starters entirely. On the other hand, many officials on the U.S. side are getting increasingly frustrated with the lack of counter-offers. While the Canadian government is still hoping for the best to come from the negotiations, Foreign Affairs Minister Freeland has stated that it is also prepared for the worst: the U.S. invoking Article 2205, withdrawing from the agreement entirely.

# The Golden Globes: Don't Stand out, Stand Up



Black gowns dominated the red carpet at the 75th Golden Globes as a sign of solidarity with victims of sexual assault and harassment.

The Golden Globe Awards honour film and television. The ceremony was held on January 7, 2018 in Beverly Hills, California.

Awards shows have been a platform for political statements in the past. For example, black gowns also made an appearance in 2003 when the Oscars were held just days after the start of the Iraq War. At the 2010 Golden Globes, attendees wore red ribbons as a symbol of support for the Haiti earthquake five days earlier. At last year's Oscars, attendees wore blue ACLU-American Civil Liberties Union—ribbons to support the organization as it fought Trump's recently enacted travel ban.

Time's Up, an organization which recently launched, encouraged this year's statement: actresses wore black gowns, and actors wore black shirts with their suits. Pins also made an appearance. Reese Witherspoon commissioned Arianne Phillips, costume designer and stylist, to design the Time's

"Reese asked me to come to the actors' group, and told me they were going to be wearing black and would I consider creating a pin for the nominees and male presenters," she told The Hollywood Reporter. "We were up against the holidays, but I said I could do it, and the first person I called was my partner-incrime, Michael Schmidt."

The two of them designed and produced 500 copies of the pin within two weeks.

Time's Up is a new initiative with the message: "The clock has run out on sexual assault, harassment and inequality in the workplace. It's time to do something about it." It launched on January 1 by an open letter signed by 300 actresses, and female Hollywood agents, writers, directors and executives. This letter ran as full-page ads in The New York Times and La Opinion, which is a Spanish newspaper.

"This is a moment of solidarity, not a fashion moment," Eva Longoria told The New York Times. "For years, we've sold these awards shows as women, with our gowns and colors and our beautiful faces and our glamour. This time the industry can't expect us to go up and twirl around. That's not what this moment is about."

Time's Up is steering the conversation towards their agenda with the colour black: don't stand out, stand up.

#### What is Time's Up?

Time's Up has no leadership, and is run by volunteers. Its members include Reese Witherspoon, Eva Longoria, Shonda Rhimes, Ashley Judd, Natalie Portman, America Ferrera, Rashida Jones, Emma Stone, and Kerry Washington.

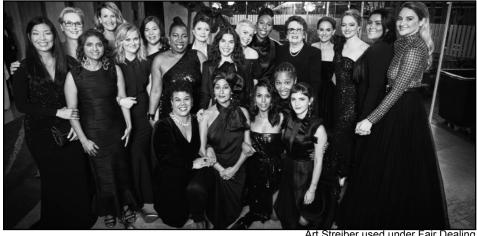
It is comprised by various working groups with different initiatives. A legal defense fund has raised over \$13 million to help less-privileged women seek retribution against harassers. They are developing ideas for legislation, such as penalizing companies that tolerate persistent harassment and discouraging non-disclosure agreements which often prevent women from coming forward. They are also pushing studios and talent agencies for gender equality in employment.

This came in response to recent sexual harassment allegations against powerful men in the entertainment industry, such as Harvey Weinstein and Jeffrey Tambor.

As Shonda Rhimes, executive producer of television series "Grey's Anatomy," "Scandal," and "How to Get Away With Murder," notes: "It's very hard for us to speak righteously about the rest of anything if we haven't cleaned our own house. If this group of women can't fight for a model for other women who don't have as much power and privilege, then who can?"

By starting with Hollywood, they are setting a new standard to better help working class women. Women in bluecollar workplaces, such as janitors, nurses, and workers in factories, restaurants and hotels, are often overlooked.

Connie Britton made a similar comment: "What we really need to do now is get to the grassroots and get to every day women who have been dealing with these issues and have to sit alone with it and don't have the resources to empower themselves," she told CNN. "For me, my hope is that we really get to a place with this movement where it's not just about



Art Streiber used under Fair Dealing

Hollywood."

#### Who are the Activists?

Several founding members took an extra step, and invited prominent female activists as their guests.

Emma Stone brought Billie Jean King, one of the greatest tennis players of all time. She won thirty-nine Grand Slam titles and a record twenty career victories at Wimbledon, all the while advocating for female athletes. She fought for equal pay, and founded the Women's Tennis Association and the Women's Sports Foundation. Stone played her in Battle of the Sexes, for which she received a Golden Globes nomination.

Michelle Williams brought Tarana Burke, who founded the Me Too movement to "help survivors of sexual violence, particularly young women of colour from low wealth communities, find pathways to healing", ten years before the hashtag took off on Twitter. She is also a senior director for Girls for Gender Equity in Brooklyn, and organizes workshops to help victims of sexual violence.

Laura Dern brought Monica Ramirez, an activist, author, and civil rights attorney who is dedicated to ending violence against women—especially farmworkers. She is the co-founder and president of Alianza Nacional de Campesinas, which is working to end the exploitation of female farmworkers.

Shailene Woodley brought activist and artist Calina Lawrence, member of the Suquamish tribe. She uses her work to address a wide rage of causes, including racial injustice, police brutality, violence against women and children, and the misrepresentation of Native Americans in mainstream media. She is currently

touring the US to advocate Native Treaty Rights, and the "Mni Wiconi" (Water is Life) movement led by the Standing Rock Sioux tribe.

Amy Poehler brought activist and attorney Saru Jayaraman, co-founder and director of Restaurants Opportunities Centers United, which "improve[s] wages and working conditions for the nation's restaurant workforce". It was established to protect those displaced after 9/11, but evolved to represent all immigrant restaurant workers. She is also the director of the Food Labor Research Center at the University of California, Berkeley.

Meryl Streep brought Ai-jen Poo, co-founder and executive director of National Domestic Workers Alliance, which protects the rights of domestic workers such as nannies, housekeepers, and caregivers. She is also the codirector of Caring Across Generations, organization working towards transforming long term care by attending to the needs of the elderly, people with disabilities, and caregivers.

Susan Sarandon brought Rosa Clemente, who is a journalist and hiphop activist, and founder of Know Thy Self Productions, which consults on issues including hip-hop activism, voter engagement, immigrants' rights, and healthcare. She ran in 2008 as a Green Party vice-presidential candidate.

Emma Watson brought Marai Larasi, with whom she has been collaborating over the past year. Larasi is dedicated to ending violence against women. She is the executive director of Imkaan, a UK-based black feminist organization that works to prevent violence against marginalized women, and is the co-chair of the End Violence Against Women Coalition.



# Sandford Fleming Foundation

Professionalism. Leadership There's more to an engineering education than engineering

## The SFF Memorial Leadership Award Nominations

In recognition of the late Professors Saip Alpay and Wm. C. Nichol, and Sam Ceccerallo, Robert Elligsen, later former students of the Faculty of Engineering

The Leadership Award is granted to an intermediate-level undergraduate student in the Faculty of Engineering who has demonstrated outstanding contributions to the Faculty in the promotion of extra-curricular activities, including, but not limited to: Intramural Athletics, promotion of Engineering Society and Sandford Fleming Foundation events, competitions, etc., and for the support of associations, both on and off campus.

Nominations for the Memorial Leadership Award can originate from student groups, faculty members, or other individuals. A Letter of Nomination and Letters of Support from colleagues, faculty, and others familiar with the nominee's accomplishments are extremely important and form the major basis upon which the Executive Committee of the Sandford Fleming Foundation will form its decision. Nominations must be submitted to the Foundation by April 1, 2018 and/or before the last day of the student's 3A term.

The Memorial Leadership Award consists of a Certificate plus a citation, and an honorarium of \$1,000.

Nominations Must be Submitted to SFF Office Manager by April 1, 2018

## The Iron Crossword

Pick Your Poison

### **CAMERON SOLTYS**

**4B MECHANICAL** 

1	2	3	4			5	6	7			8	9	10	11
12					13				14		15			
16					17						18			
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58	59				60	61	62	63			64		65	66
67					68						69			
70						71					72			

- 1: Bar code for books (abbr)
- 5: Frequent garment for baseball fans
- **8:** Proud, especially relating to the failure of
- 12: Exclamation to an unwanted pest
- 13: Covered with, for instance aluminum and the Washington monument
- 15: Projected effect
- **16:** Deep feeling of dislike
- 17: Quick
- **18:** Academic test for lawyers
- **19:** Popular skincare brand
- **21:** Move like a fairy
- 23: Outdated Microsoft Excel file format
- **24:** Of or relating to ten
- 27: Female gametes
- 28: In chemistry, atoms desire these be filled
- Ketchum, Pokemon legend
- **31:** Unit for measuring precious gems
- **34:** Even, especially in golf **35:** Killer of Socrates
- **38:** Measure of quality in printing

- 39: Anger
- **40:** Abreviation for manuscripts
- **41:** "You will the day you crossed me!"
- 42: Female human
- **43:** United Bank for Africa (abbr)
- 44: Helped, especially in committing a crime
- 46: Both the highest and lowest card in blackjack
- 47: Renascence vocal music composition
- **49:** Internet expression of humour
- **50:** Isolated areas of water in a desert
- **52:** Medical device that makes extensive use of magnets
- a red door and I want it painted black"
- 54: Most common naming scheme for iron
- in North America and every
- **57:** State of Salt Lake
- 58: Archaic unit of weight, especially for industrial purposes
- **60:** Compound that occasionally contains

#### dinosaur DNA

- **64:** Once-common additive to gasoline
- **67:** Location
- 68: Sticker or marking, especially to adver-
- tise something
- 69: Eldest daughter of the last Czar
- **70:** Leader of the Warsaw pact 71: Non-gendered singular pronoun
- **72:** Give off faint light

#### **DOWN**

- 1: Suffix indicating approximation
- 2: Hash function created by the NSA
- 3: Superficial operations that use deadly fungus products (2 wd)
- **4:** Angels spoke on the first one
- 5: Canadian tow-truck company (abbr)
- **6:** Tinder, Slack, or Snapchat, for example
- 7: Island province
- 8: Lubricant of the mouth
- 9: WWI chemical ammunition (3 wd)
- 10: Opportunity offered by the university to give undergrads research experience (abbr)
- 11: Out of Hell, Saints Row video game
- 13: Baby's frequent behaviour
- **14:** Digital Developers Fund (abbr)
- **20:** Suffer of long-term inflamed lungs
- **22:** "I forgot my keys and was \_\_\_\_!" (2
- **24:** Often distressed or captured by dragons 25: Acronym indicating a non-native english
- 26: laugh, especially to oneself
- 28: Derivative of poppy plants
- **29:** Gaius Papirius \_\_\_\_, consul of Rome **32:** Walk , keep up with
- 33: Bathroom floor decoration, for instance
- **36:** Enterprise service bus
- 37: Mark or signal
- 45: the line
- 48: Pencil deleter
- 51: Not digital
- **56:** owned
- **57:** Hyperlink (abbr)
- **58:** Toronto Secondary Unit (abbr)
- **59:** Photograph-enhancement technology that adjusts the lens (abbr)
- **61:** Tex , American culinary style
- **62:** Negative years
- **63:** Listening organ
- 65: "A long time \_\_\_\_, in a galaxy far far away..."
- **66:** Exclamation upon observing cuteness

## Sudoku

#2018-01

## **CAMERON SOLTYS**

**4B MECHANICAL** 

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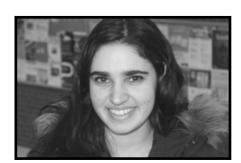
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	4		2		5			3
		3					8	

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

## "What's Worth Eating at the Plaza?"



"Anything but Aunties" Michael Baucheman, VP Finance



"Wlliam's Coffee" Rachelyn Collins, 2A SYDE



"Has anyone said Paninos? If not, Paninos!" Ian, 3A Mech



"Shawerma Plus, they have two Shawarma's for \$10" Toni Ogunmade



"Mels, even after an hour wait" Eric, 2A BME



"Shawarma Plus" Ghaith Bakri, 4B Mech