



Incredibles 2 Movie Review
Page 3



Turkish Election Coverage
Page 4



World Cup Updates Part 2
Page 7

Don't Rain On My Pride Parade 2018



Sarah Madigan via UW Engineering Society Flickr

The Engineering Society participating in the Pride Parade on June 24, 2018



On the morning of June 24, 2018, Mother Nature prepared herself to dress in the colours of Pride as rain poured down on the heads, hard-hats, and umbrellas of the parade-goers. As is the tradition every year, the parade occurred on the last Sunday of June, the Pride Month, in downtown Toronto. Our very own Engineering Society arranged for Waterloo Engineering students to march in the parade to support and represent the cause and the student body. As we made our way to the lobby of Davis Centre at 10:00 AM, the bright yellow school-bus rolled its way to the cul-de-sac, contrasting the gray of the weather, and foreshadowing the hues of the rest of the day – the rainbow was only a couple hours away.

We reached Allan Gardens at noon, buzzing with excitement, only suppressed by hunger until the food found a seat on the park bench. Crowding around the bench, brightly donning the tie-dye t-shirts we had all prepared a week ago, we gobbled down our Subway sandwiches – half in anticipation and half out of starvation.

After lunch, we were free to roam Downtown until 3 PM, when we had to regroup and walk to the staging area of the parade. While most people decided to stay and hangout at the park, some of us tried to kill two birds with one stone by going to various food joints, and even the KitKat shop that lets you make your own flavour of KitKats – it was sold out.

Nonetheless, the three hours flew by as a lot of us checked out the booths around the parade route. Both sides of Gerard Street at Church Street were lined with stalls filled with colourful merchandise and big retailers supporting the cause. The festivities imitated a carnival as games, food and vendors formed a never-ending barrier between the street and the rest of the world. A booth contained psychedelic art where all paintings were made using a variety of colours. There were dog rescue booths which encouraged us to rescue dogs instead of breeding them. Some other interesting vendors included jewellery and accessories made at a women-only facility, a candle shop with some interestingly shaped candles, a photography studio giving away \$400 gift cards, and a florist which paired with the studio to give away free flowers. TD had set up a collaboration with various institutions where people could write nice messages for a cause of

their choice. Dove was right beside TD, advertising their deodorants and giving away “love” bracelets. These stalls were interspersed with DJs at every intersection, food trucks and rainbow coloured flags all around! Home Depot, in a makeshift wooden hut, sold Pride stickers for a toonie each. Patios of restaurants and bars facing the street filled with happy chatter as the weather cleared. Before we knew it, it was almost three, and time for us to make the twenty-minute walk back to Allan Gardens.

Once regrouped at the Allan Gardens, we all found ourselves mingling with Ryerson Engineering’s EngOut and contemplating some inquisitive dilemmas with them; “Would you rather have warm pop or no pop at all?” was one. Tired from having walked all day, we channelled our energies using chants. The fact that we would be seeing the Tool really soon kept most of us going. Finally, we arrived at Ted Rogers Way, the staging area, where we signed in and patiently waited for our turn to march. While we waited, McMaster Band entertained everyone around with their impressive instruments; we weren’t jealous, we just wished we could do that too.

About an hour of clicking pictures, contemplating going to Starbucks, and eating granola bars, we finally reached

the beginning of the parade. Here we were joined by our float – a humble pick-up truck carrying our favourite mascot, The Tool! We screamed and chanted for the Tool-Bearers to lift the Tool as we marched in the parade. The route began at Yonge and Bloor and ended at Yonge and Dundas, encapsulating four TTC subway stations. Walking in the parade is an amazing experience and it allows you to make connections with so many people. The march lasted about 30 minutes as we walked between thousands of people who celebrated Pride. We gave and received hundred of high-fives and had water sprayed on us from corners we couldn’t see. Waterloo alumni would initiate cheers from the crowd for the marchers to complete. It was an emotional experience in the best kind of way. The march ended way too soon and before we knew it, we were back in our yellow school bus, too tired to stay awake.

Pride Parade not only celebrates the LGBTQ+ rights, but also gives a platform for so many other causes to come forward. Marching in the parade is a hard-to-forget experience and has a unifying effect on all those who attend. For those of you who have never been but really want to go, mark your calendars for the month of June in 2019 – I know I will.

Hahahahah Get Owned Portugal



HASAN AHMED
EDITOR-IN-CHIEF

Okay I'm like super biased but I dislike Portugal and this is my editorial so HA. Thanks Cavani <3. Also thanks to the impeccable Uruguay defense team. Both Ronaldo and Messi are going home now, and I could not handle seeing Ronaldo advance over Messi. But thankfully, this 2-1 victory will set up Uruguay in the next round. France has advanced over Argentina too, so another one of the teams I like is going further in the round of 16. Unfortunately, I'm also a big fan of Argentina, and it sucks to see them out of the tournament after such an impressive goal by Rojo to keep them in the World Cup. I'm biased right now but I'll try not to be in my next World Cup update. I promise. By the way, I've been asked to start calling them World Cup updates, so yeah. That's the name now.

Okay it's editorial 4 and I'm getting tired. Why? Because for some reason, I get a bunch of work piled on me RIGHT before production weekend, which means balancing the paper and schoolwork. It is bitter-sweet though, since this is my second-last issue (third last if you count O-Week), and only feels like it's been a week or so. I don't have anything planned to celebrate the last issue, but keep an eye out for the Tin Soldier. For those who don't know, the Tin Soldier is our "Onion" of the Iron Warrior, where we post real fake news in our last edition of the paper each term. I'm hoping for some funny content and comics, and we are always taking satire and articles from everyone. So if you want to be funny and published, let me know!

Alright thanks for this issue extends to Samridhi for doing the crossword. It's not Cameron's which is surprising since he's been doing it for as long as I can remember. Also thanks to Aaron for again being on time with his articles as usual. Check out his Prof. Personality of Dr. Aiping Yu, a professor in the Chemical Engineering department. Pride happened last weekend, and Samridhi also covered that. I'm also glad to announce that the front page is in COLOUR WHICH MEANS RAINBOWS HECK YEAH! We also have a guest article from Farzeen Titina, who reviewed the *Incredibles 2*. As a non-movie watcher myself, this is something I really want to view in theaters since it follows up with my childhood, as it probably did with 90% of the readers of this paper. I heard fantastic things about this movie, and this spoiler-free review enticed me to try and check it out, maybe for my birthday.

I've been trying to self-teach myself piano for just over a year, but school keeps getting in the way. However, it is the most fun I've ever had with an instrument, especially since I didn't really grow up with music. I like using my fingers and hands a lot and piano has felt the most natural to me. I

used to play flute, saxophone, and trumpet throughout my middle/high school years, and they've been fun, but maybe I prefer not having to breathe a lot. Piano music has always felt more serene to me as well. I have a playlist on YouTube with my favourite piano music, ranging from classical music, to video game OSTs, and even random artists I find on the website. Every time I mention I'm playing piano, people in the conversation are always like, "OMG I'll teach you!" Well, sorry guys but I keep getting caught up in stuff to be taught. I really want to be good at this instrument and follow through it without having school getting in the way.

Back to the video game music (of which I have a separate, larger playlist that is awesome for studying). Gerudo Valley, Time's Scar, most of the Paper Mario series, etc. are my jams. Most of you know I'm a big Nintendo fan, but I've always enjoyed the other consoles' series. The original Halo theme song slaps, and is great to listen to since it feels monumental and is fun to...sing in bathrooms? What's this whole trend of boys in the bathroom to sing the Halo theme song? And why is it wholesome? I saw a tweet on Twitter explaining it pretty simply, how "boys will be boys" shouldn't refer to dismissing bad behaviour, but only to the Halo theme being sung in bathrooms. Good job boys! Let's not push the idea of toxic behaviours being rooted in our upbringing and thus have it excused. Instead let's continue singing theme songs in bathrooms to change that notion of thought! Most of us already sing in the shower, so I'm sure this will be no different. So tonight, if you're reading this (and not just boys, this is open to everyone), start singing the Halo theme song. The acoustics of the shower will make your voice sound not terrible.

Oh yeah, I got a co-op job. First time ever I've had interviews in first round, and I had 12! I was extremely happy to land an offer in my hometown, which means eight months of living at home, saving for tuition, helping my parents around the house, and sleeping in a nice air-conditioned room. Which is nice because as I'm writing this it is 32 degrees Celsius. My little brother is also starting University downtown at UofT, which is awesome for him. My parents like how I'm coming in for the next eight months because they were almost in a scenario where no kids were in the house; something they're not used to. They have sacrificed more than enough for us to be comfortable, and with my sister married, older brother unsure of where he will be, and younger brother starting university, me coming back home will allow them to have that connection to their children face to face.

Back in editorial one, I mentioned at the end how I was looking for book suggestions. I started with some fairly popular books to scratch the surface of what I wanted to learn about, and will mention them here. *The Art of Learning* by Joshua Waitzkin explores the idea of the mental game behind performing well. A chess and Tai Chi Chuan champion, Waitzkin explains how

we require more than physical and tactical strength to defeat our opponents at higher levels. I've always enjoyed this sort of performance psychology genre, especially since my athletic background comes from long distance running, goalie positions, and baseball pitching; all high pressure roles and very mental. It provided an interesting insight to how I approach competition, and I still use some of the tips today. *Influence*, by Robert Cialdini, was suggested by a friend of mine. It explores the reasons why people say yes to you, and how the market knows how to get you to make a decision. More importantly, if required, this book gives you tips if you need to do the persuasion. *Factfulness* by Hans Rosling is the last book I want to mention. This was advertised by Bill Gates as one of his favourite books and offers it as a "gift" to college graduates of 2018. *Factfulness* goes through reasons why the world is getting better, and steps we can take as individuals to be more critical of the world. One tip that stuck with me was to stop thinking in a "us vs. them" mentality. Don't think of the world as right-wing vs. left-wing, developing vs. developed, immigrants vs. non-immigrants, etc. It makes it easy to shift the blame and point fingers and drift away from tackling the root causes of issues. Applying that to everyday life is something I definitely plan to do, and I also plan to revisit this book again and again because of its great arguments. Bill Gates has some good suggestions in general if you have time to check them out. As usual, feel free to suggest me anything that would be good to read. I've already come close to my monthly budget spending it on books to read over this coming coop term.

I think I've changed quite a bit. I started reading a lot more over the last coop, deleted Snapchat and Instagram off my phone, and feel more productive in general. My opinions, although not expert, are informed, and I've gained a curiosity outside the sciences, which is nice since eight hours of work a day focusing on polymers can be draining. I think I mentioned this before, but part of me joining the Iron Warrior in 1A was because I was not informed at all and now I am. So yay. Read books, kids. But also play video games. The key is balance.

Your issue-ly word is defeat. Because Portugal was defeated. Okay just kidding. The word is ostensible, and it comes again from Merriam-Webster's word of the day. The definition is "intended for display : open to view." While I was looking this up, I noticed the definition for socialism was trending, probably due to Alexandria Ocasio-Cortez's victory over Joe Crowley in New York's 14th Congressional District. Which was pretty cool. I'm always for upsets, as you can tell by my World Cup updates.

Now that it's the end of the editorial, I should re-mention it is my birthday soon. I'm glad to statistically be done just about 25% of my life. I am not asking for presents, but if you find pictures of puppies graduating puppy school please send them my way.

THE IRON WARRIORThe Newspaper of the University
of Waterloo Engineering Society**Editor-in-Chief**
Hasan Ahmed**Assistant Editor**
Samridhi Sharma**Layout Editors**
Samridhi Sharma**Copy Editors**
Ratan Varghese
Samridhi Sharma
Gabrielle Klemt
Aaron Propp
Stone He**Photo Editor**
*OPEN***Circulation Manager**
Gabrielle Klemt**Web Editor**
Aaron Propp**Social Media Manager**
Hasan Ahmed**Advertising Manager**
Judy Zhong**Staff Writers**
Tony Kappen
Samridhi Sharma
Judy Zhong
Gabrielle Klemt
Aaron Propp
Hira Rahman
Tiffany Chang
Thomas Cojocar
Raeesa Ashique**Contributors**
Katie Arnold
Liam Yeates
Benjamin Beelen
Grant Mitchell
Ashley Clark
Cameron Soltys
Leah Kristufek
Farzeen Titina**ADVISORY BOARD**
Off-Stream Editor-in-Chief
Rafiq Habib**Executive Members**
Emma Swarney
Ashley Clark**Students-at-Large**
Cecile He
Alyson Skidmore

Advertise With Us!

Want to reach a wide, intelligent audience which includes students, faculty and staff at the University?

We are the official newspaper of the University of Waterloo Engineering Society representing the entire undergraduate engineering student body of over 6000 students.

Our newspaper is distributed all across campus and is the perfect medium to advertise your event, employer information session, service, etc.

For more information, please visit iwarrior.uwaterloo.ca/advertising or contact us at iwarrior@uwaterloo.ca, 519-888-4567, Ext. 32693Send your submissions for the next issue to iwarrior@uwaterloo.ca.
Winter 2018 Publication Schedule: January 24, February 7, February 28, March 14, March 28

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

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

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

Mail should be addressed to The Iron Warrior, Engineering Society, E2 2347, University of Waterloo, Waterloo, Ontario, N2L 3G1. Our phone number is (519) 888-4567 x32693. E-mail can be sent to iwarrior@uwaterloo.ca.

What Do You Know About Canadian Gangs?



GABRIELLE KLEMT
3A GEOLOGICAL

The recent police raids on Five Point Generalz street gang members has resulted in the largest illegal gun seizure in the history of the Toronto Police. During the raids, 78 firearms were seized, along with \$1.2 million in illegal drugs, and \$184 000 cash. The bust hit the gang hard, arresting 75 people around the GTA.

The operation, known as Project Patton, has been investigating the 5PG for nine months. The raids themselves were triggered by a seizure of 60 firearms between Cornwall and Toronto. The brand-new guns had been smuggled across the border all the way from Florida. They were meant to be sold on the streets in Toronto for an estimated \$200 000, and many are brightly coloured and “toy-like”.

Now, you may not be from Toronto and may be thinking who are these 5PG,

why should I care? Or you may be from Toronto like me and thinking why have I never heard of these guys before? Well folks, these are the worst of the worst apparently. Responsible for the most gun violence in the city’s northwest end, this gang grew out of the drug trade in a low-income neighbourhood near Weston Road in the late ‘90s. It now has ties to the Caribbean and United States, from whom they are supplied with drugs and guns respectively.

Since the ‘90s, the Generalz have been linked to some of the worst homicides in the city, including the shooting death of a child at a street party 11 years ago. Now that’s a story I do remember because I was the same age as the kid when it happened. Shortly before that was the Boxing Day shooting where a 15-year-old girl was shot and killed.

It seems I do know the gang, I just didn’t realize it. See, Toronto, like any big city out there, has its share of gun violence, but I never realized how much of the violence I’ve heard about has been

the work of one organization. The raids conducted this June were an attempt to target the highest profile members of the gang, and the seizures were a joint effort between the police from Cornwall, Halton, Waterloo, London, Barrie, Durham, Windsor and the border services, as well as Toronto Police.

So, what are some other historical Canadian gangs to keep you up at night? With a diverse history like ours, you better believe we’ve had every type of crime organization imaginable.

Well, we all know about the Quebec Mafia. If you’ve listened to much news at all over any of your time being alive you’ve heard it mentioned many times. This is especially true if you’ve heard anything in the last five years about corruption in the Quebec construction industry, which story includes contract buyouts, bribes, and mob-controlled unions.

Toronto has also seen its share of Italian mafia families. In fact, Commisso Bros., one of the best places in the city to get Italian baked goods and food, has been at

the centre of mafia confrontations more than once, my mother even claims it was bombed when she was a child. But trust me when I say the food there is fantastic.

Then, let’s not forget about the biker gangs that have been so well served by the unending highways of our country, from the Hell’s Angels to the Bandidos. The Hell’s Angels control the majority of the drug trade in Western Canada as well as prostitution, theft, money laundering... really just think of something illegal and they’ve got a team on it!

Finally, what would a list of gangs be without mentioning some of BC’s. This province has got a lot going on from the FOB gang, one of the most violent, to the Red Scorpions, to the United Nations gang (how diverse and open-minded).

If you’re in the market for some crazy stories try googling some of these, just get your work done first because you will get hooked!

Fun fact: In 2017, the OPP’s Project Hope seized 1,062 kilograms of pure cocaine. That’s about \$250m worth of drugs!

Ford Threatens to Axe Cap-and-Trade



AARON PROPP
2B COMPUTER

Doug Ford took office this past Friday, June 29th. The swearing in ceremony took place inside the legislature. He did however invite the public to a public ceremony on the steps of Queen’s Park where he reiterated his oath of office and delivered a speech.

His major pledge so far since the election is to kill cap-and-trade. In brief, cap-and-trade was a carbon tax system legislated by the previous Liberal government of Ontario. Companies bid on carbon credits (the cap part) and are allowed to buy and sell (the trade part) the credits amongst themselves. Proponents of the system advocate that it allows the market

to set the price of emitting carbon into the atmosphere. Those against argue Ontario dollars are being sent out of the province, as companies can trade with companies in Quebec and California, also part of the carbon market.

It was a campaign promise which he is keeping, but it does promise to be a thorny issue. For one, the federal government has promised to impose a carbon tax on any province that doesn’t have one. Saskatchewan premier Scott Moe referred the case to the Saskatchewan Court of Appeal to determine whether the federal government would be behaving constitutionally if it imposed a carbon tax. With Jason Kenney looking to be elected as Albertan Premier within the year, this is shaping up to be quite the fight. Kenney, leader of the United Conservative Party of Alberta, is a fierce opponent of carbon taxes.

The other issue is the companies that

spent billions of dollars on carbon credits that are essentially worthless. Ford can anticipate a lawsuit if and when he axes the cap-and-trade. It would shed doubt on whether the Ontario government can be trusted to keep its word across party lines.

Ford also will be recalling legislature for a brief session in order to legislate York teaching assistants and research assistants back to work. The contract faculty have returned to work already after negotiating a deal with the University already. The strike started on March 5, 2018 and has continued ever since. The strike has an impact on students who couldn’t complete the Winter term and impacting students who were supposed to graduate but can’t.

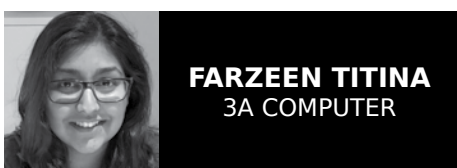
If the strike resolves itself before July when the legislature would be recalled, Ford will still like to lower gas taxes by 10 cents a litre. A key pocketbook campaign promise, he aim to fulfill it by pull-

ing out of the cap-and-trade system which may take up to 18 months. He also plans to reduce the provincial fuel tax. Running on a populist conservative platform, this would be key to proving his populist bona fides. He’s quoted as saying on a campaign stump speech, “every day, I hear from the people who are fed up. Fed up with being gouged at the gas pump. Fed up with the price of gas keeps going up, and with, the price of goods and services, with no end or relief in sight.”

More a symbolic gesture than likely to have any impact on the deficit is an end to all discretionary spending, including catered lunch for caucus meetings. Instead he’s instituting a “brown bag” policy, where each caucus member needs to bring their own food to work. He’s also imposed a public sector hiring freeze. This excludes essential front-line workers such as police, firefighters and paramedics.

Incredibles 2: How Incredible Is It?

The Ins and Outs of the Nostalgic Movie



FARZEEN TITINA
3A COMPUTER

Pixar’s Incredibles 2 is one of the few movies that lived up to its original. This action-packed film that has been in waiting for 14 years had a similar approach as the first movie. It begins right where the Incredibles ended, with the super family protecting Metroville against the Underminer. The Incredible family – Mr. Incredible (Bob Parr), Elastigirl (Helen Parr), Violet, Dash and Jack-Jack – along with Frozone, voiced by Samuel Jackson, try to save the city but they also cause destruction and fail to catch the villain, which again, leaves the politicians in a rage and along with the media, they suppress the supers. The Parr family’s home is destroyed and are forced to live in a motel and lay low. Although most are against the supers, there is still hope among a few who try to help all the supers gain their reputation back.

This second installation puts Elastigirl in the spotlight as the executor of the agenda to bring the supers back while Mr. Incredible is made to stay home and take care of the kids. This is where all the fun begins. While Elastigirl is saving the city from the newfound

villain with her awesome power of flexibility and innovative new equipment, the home life of the Parrs’ is in absolute mayhem. Here, Pixar blends action and comedy, delivering hilarious, witty and super cute scenes. One of the most memorable scenes being the discovery of Jack Jack’s powers, which we witnessed in a short Jack-Jack attack against Syndrome in the 2004 film. On the other hand, Violet deals with teenage problems, Dash with his overbearing math homework and Bob with being solely in charge of the kids. Helen does an incredible job trying to catch the villain without causing any destruction or casualties and impresses the media and citizens, succeeding at the campaign to bring the supers back.

Don’t worry, no spoilers here! As for new characters, the villain in this movie is definitely more interesting than Syndrome, a.k.a. Incrediboy, from the prior film. The movie also includes a plot twist that spiced things up a bit as compared to the first. A bunch of new supers are introduced as well with intriguing powers.

You’re probably wondering why I haven’t mentioned Edna yet. Well, you know what they say, ‘Save the best for last’. The superheroes’ high-tech costume designer, the ever flawless and witty, our *Edna’s accent* ‘Darling Edna’, voiced by writer and director, Brad Bird, was one of the most lovable

characters in the first movie and was even more so in the second film but only for a short scene. The movie would surely have made a bigger difference had Edna covered more scenes.

This visually stunning movie is a treat to watch in 3D and composer Michael Giacchino’s soundtracks were beautiful and perfect for the various scenes in the movie.

The Incredibles 2 is a must watch, especially for all those 90s kids who have been waiting too long for a sequel to be released. It is finally here, so don’t miss your chance. The audience in the theatres, as heard from many people and from my own experience, were 95% adults, all feeling nostalgic about their favorite movie from the 00’s.

It was truly incredible!



Turkish Election Coverage

Results of the June 24th Election



TONY KAPPEN
IT ELECTRICAL &
COMPUTER

Last Sunday, June 24, Turkish citizens far and wide headed to the polls to decide the future of their democracy, specifically whether they would still live in one at all. That race, unfortunately, ended badly for those Turks who still wanted to live in a democracy as the incumbent, Recep Tayyip Erdogan won the race and is preparing to return to a presidency with now vastly expanded powers.

To understand how the stage was set for Turkey's current, depressing state, we must first follow the career of the man currently running it (and now probably will for the rest of his life). Erdogan, the former mayor of Istanbul, first rose to national prominence when he was elected as prime minister in 2003.

The Turkey Erdogan inherited was one that was increasingly facing outward and inching closer to democratic Europe. It was well on its way to gaining membership into the European community of nations. At first, it looked like little would change under Erdogan. His AKP party appeared as a mainstream conservative party following the dogma of political liberalization and economic growth. The message of economic growth greatly appealed to Turks and they reelected Erdogan with solid majorities.

This popularity in the premiership

gave Erdogan the confidence to run for President. The presidency in Turkey had historically been a ceremonial position with the majority of executive power being exercised by the prime minister. This changed under Erdogan, who upon winning the presidency under the first ever direct elections began to accumulate ever more executive power into the office.

Turkish democracy at this point in time is beginning to stress. Erdogan is beginning to show an increasingly authoritarian side - cracking down on protesters and lobbying and bullying Turkish law enforcement officials to drop inquiries into his or his friends' activities.

Then the unthinkable happened - on July 15, 2016, the army rolled into Istanbul and attempted to seize control of the country. The army, which was the traditional bastion of Turkish secular values, was rebelling against Erdogan's increasingly religious, authoritarian style of governance. A coup d'état was underway. Erdogan, desperate to cling onto power called into the largest television station in the country and through facetime, broadcast a call to action to his country's men and women. He implored them to put aside their own individual political differences and fight to defend their democracy. Turks responded in force and the coup was an utter failure.

Having survived an attempt to have his power taken away, Erdogan clenched ever tighter to it. He declared a state of emergency and began an extensive purge of the army and the civil service of any-

one he perceived as his enemy. As of 20 July 2016, the purge had seen over 45,000 military officials, police officers, judges, governors and civil servants arrested or suspended, including 2,700 judges, 15,000 teachers, and every university dean in the country removed from their positions.

The state of emergency gave Erdogan the power to control the media and he put it to good use, working to shutter any opposition news outlets and molding the message into a daily deluge of pro-Erdogan propaganda.

Sensing an opportunity to permanently rig the stage in his favour, Erdogan launched a campaign towards serious constitutional reforms. The reforms called for the post of prime minister to be abolished and for all executive authority to rest in the hands of the president. The president would now appoint 5 out of the 13 judges of the supreme court and would have the authority to issue decrees without any interference from parliament.

These reforms were put to a referendum and an electorate that had been living under a state of emergency for nearly a year gave Erdogan a narrow victory with 51% of the public voting yes.

The stage was now set for Erdogan to become the most powerful leader Turkey had known in almost a century. All he needed to do now was win the upcoming presidential elections and he could come into the presidency with these hard won new powers.

On April 18, the Turkish parliament (in

which Erdogan's party, the AKP holds the majority of seats) voted for a snap election to be held on June 24. The campaign was in full swing.

The race at first seemed as a mere formality. Erdogan's election was all but guaranteed. Two things changed that and made an end to the Erdogan era a real possibility. One was a sudden downturn in the economy. A pillar of the popularity that Erdogan had enjoyed rested from his reputation as a good steward of the economy.

As the economy took a hit many of his core supporters began to increasingly complain against their dear leader. The second change came from an unusually charismatic opposition candidate, Muharrem İnce. İnce, a former physics teacher campaigned fiercely for a reversal of Erdogan's political reforms and a strengthening of Turkish democracy. İnce, even with massive odds against him was beginning to slowly inch higher and higher in the polls.

Ultimately, Erdogan's dominance of the media was just too great for any candidate to have reasonable chance of fighting. The race ended with Erdogan the outright winner with 52.59% of the vote.

Erdogan now prepares to enter the presidency with unparalleled power to effect the lives of his countrymen. As Turkish democracy enters a period of darkness Turks the world over must learn from its mistakes and fight to return it to its former glory.

What a Feminist Looks For in a Movie

My Experience with Ocean's Eight



SAMRIDHI SHARMA
3A CHEMICAL

DID SHE JUST SAY THE F-WORD?

This issue, I want to do something different with this column - instead of ranting about the world's injustices, I want to talk about something that made me really happy, that is, Ocean's Eight. If you are familiar with the "Ocean's" movie franchise, you know the basic plot of the movies. If you are not, I will give you a quick run down, because don't worry, I didn't know either. In the Ocean's movies, there is always a Danny Ocean, played by George Clooney. Danny is a known criminal and likes to attempt impossible heists. The second part of the name of all Ocean's movies, my friends tell me, come from the number of people partaking in the heist. For example, there were once 13 team members, so they called the movie Ocean's Thirteen. There, now we are all caught up!

So, here's what's different about Ocean's Eight - drumroll if you don't know about it or can't guess it - its an all female team of people committing a crime! Before we all take it the wrong way and get excited for the wrong reasons, I don't condone stealing, or criminal activity of any sort. I just like the fact that people have finally accepted that women have the smarts and resources and team-spirit to mastermind an almost impossible heist! It was so refreshing to see all these women come together from different backgrounds and phases (on and off-screen) and make a movie that has barely any need for a male role.

Having been a bit of a movie buff for

the early part of my life, I was really accustomed to the female lead only playing the protagonist's love interest in a movie. I never really questioned it much until I got bored being under-represented as a female as well as a person of colour. It also didn't help that movies incorporated only one body-type for women in all roles. But then I watched Ocean's Eight. Eight females in one movie? Check. Diversity of race? Check! Mindy Kaling and her sense of humour? Check and check!

Anne Hathaway, one of the leads,

interviewed on the Ellen Show for the movie and explained the atmosphere on set. Having become a new mum, Hathaway said she was really conscious about the way she looked but the director put her at ease by telling her they wanted as many body types up there as they could. All the other actresses also complimented the way she looked, and Rihanna even said, "Damn, girl you got an ass... You got an ass just like mine!" Hathaway told Ellen DeGeneres. "It was so beautiful to be surrounded by that much love and understanding. It was so

great." That's body positivity in the best way imaginable!

Needless to say, the movie is definitely worth the two hours of your life. Just go watch it and be surprised because it will change your perception of women. While I have seen a lot of movie where female leads seem to not function well without a hero to save them, this movie makes a complete one-eighty from those preconceived notions. Women don't need to be saved, women fight their own battles. That is how Debbie Ocean replaced Danny Ocean in Ocean's Eight.

LEA

ENGINEERING IS BUILT ON INNOVATION.
INNOVATION EMERGES FROM EXPERIENCE.
EXPERIENCE IS BACKED BY OVER 60 YEARS IN PLANNING & ENGINEERING.

**BUILD YOUR CAREER
WITH LEA.**

WWW.LEA.CA

UW Canada Day! 151 Years and Counting!



HASAN AHMED
EDITOR-IN-CHIEF

July 1st every year marks the celebration of Canada Day for citizens all around the country, and this year I got a chance to visit UWaterloo's celebration of the event at Columbia Lake Fields. Despite the hot, humid day, families poured in to the venue to enjoy the festivities, activities, and patriotism.

Food trucks were lined up outside the perimeter of the fields. And there were lots of them. Boston Pizza, authentic Indian cuisine trucks, and cotton candy among many others were packed with lines of families sampling all the food. I got the chance to try a BeaverTail for the first time (Nutella, peanut butter, and Reese's Pieces oh yeah), and let's just say I'm now even prouder to be Canadian.

Going around the festival I passed around by many Waterloo communities, including the Waterloo Public Library, Kitchener-Waterloo Art Gallery, St. Jacobs Country Playhouse, KW Symphony, and many others. The Engineering Science Quest also had activities for children who came to the celebration, and obviously as an engineering student, it makes me happy to see students taking such interest in the applied sciences.

There were also many bouncy houses and inflatable activities, which costed money for tickets. They were plentiful though, and children lined up around them to play. Unfortunately I didn't have the time to check them out, but I would

definitely second-hand recommend them to anyone who plans to check them out at future events.

From the University, there were picture booths, including the Engineering Society taking pictures with the tool. Beside the booth was also a waterslide which ran down the hill, which was a great way for children to cool off. Another interesting part of the festival was the UW Sikh Student Association tying red turbans for people to celebrate their religion. Along with that, they handed out pamphlets highlighting the importance of turbans in Sikhism.

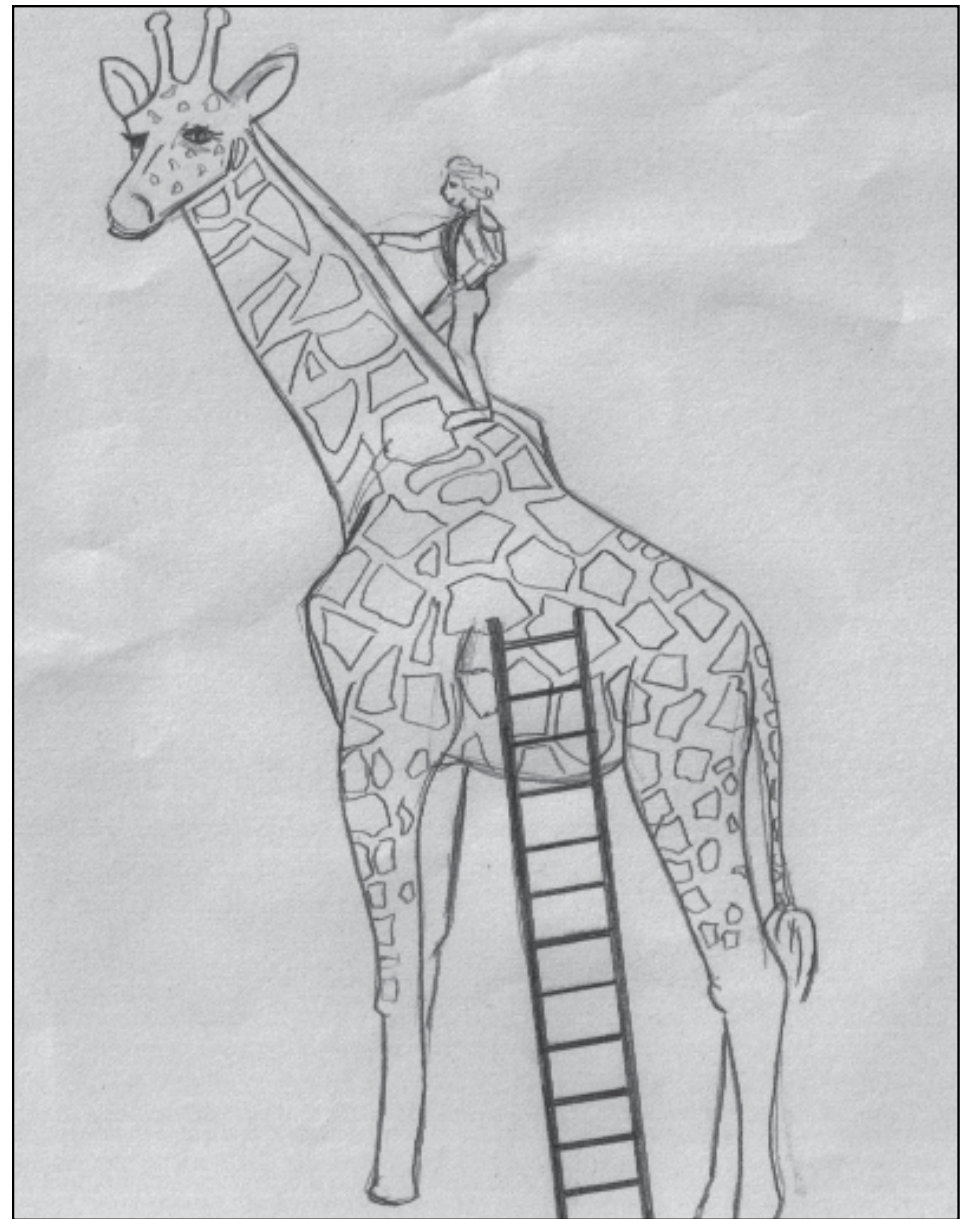
The University was further represented by many volunteers who helped run the prize tent with spinning wheels, face painting, and henna. The social development lab from the UW psychology lab was also present, as well as the science outreach booth, all having their own activities. If you're reading this and you were a volunteer at Canada Day (whether it be with a society, Campus Response Team, etc.) then shoutouts to you for coming out on such a hot day to provide for the families!

The concert was always ongoing, and encouraged crowd participation. Families were laying down in the heat just to listen, or they were cooling off in the mist station nearby. Nonetheless, Canada related songs were being played throughout the hour I was there, and the enthusiasm never died down.

The festival ended with fireworks, capping off one successful day and incentivizing people to come next year. That BeaverTail certainly did it for me. So if you're in Waterloo in Summer 2019, be sure to check it out!

Reaching the Top is a Group Endeavour

LEAH KRISTUFEK
CHEMICAL '16



SANDFORD FLEMING FOUNDATION

Professionalism.
Leadership.
Communication.

There's more to an engineering education than engineering.



Congratulations to our Leadership Award winners!

John Fisher Leadership Award

Abdullah Barakat, Mechanical

Albert Sherwood Barber Award

Joshua Ari Chorlton, Software

Roy Duxbury Leadership Award

Jatin Patil, Nanotechnology

And to our Convocation award winners!

Academic Excellence

Alexandru Andrei Vasile, Chemical
Eryn Danielle Belanger, Chemical
Bruce Gee, Civil
Xiaodan Tan, Computer
Shih-Chun Hung, Electrical
Pelagia Sofia Cefalas, Electrical
Shengdi Chen, Environmental
Mateusz Marcin Tinel, Geological
Pamela Elizabeth Reimer, Management
Robin Liu, Mechanical
Genooshan Indirathas, Mechanical
Mahimna Gautam Dave, Mechatronics
Akshayaa Govindan, Nanotechnology
Geoffrey Xiangyu Yu, Software
Chang Li, Systems Design

Co-operative Proficiency

Andrew Assatory, Chemical
Karthik Ramesh, Chemical
Lav Chaudhary, Civil
Daniel Beaudreau, Computer
Allan Yitao Wang, Computer
Stefan Jovanovic, Electrical
Gabriel William Yvan Dubé, Environmental
Niranjana Somasundara Warriar, Geological
Julie Yu, Management
Helena Wong, Mechanical
Graham James Waechter, Mechanical
Fan Zhang, Mechatronics
Kai Vincent Slaughter, Nanotechnology
Evan Yeung, Systems Design

Prof. Personalities - Aiping Yu



How long have you been teaching at Waterloo?

That's a really long story. Generally, I've been here for 9 years. But for the first three years I was not doing class teaching. At the time we had nanotechnology engineering. They just started the program and they needed everything done. I was brought in to help them build all the labs for first year undergrad, get all the labs ready and open the first generation of the program. That's for the first three years. Later on, I moved to more of a classroom teaching environment.

What courses do you teach?

I teach Heat & Mass Transfer, a core course of chemical engineering. I also teach a general materials science engineering course. For nanotechnology engineering, I teach nano structures and materials, which is directly related to my research. I'm working on graphene and carbon nano-tubes. You might have seen this somewhere. The tiny nano-materials are my building blocks for making a super capacitor.

What is your favourite course to teach?

Heat & Mass Transfer is more fundamental, there's not much new material. I added something new recently because of nano-materials. For the materials course, it directly connects to my research.

How'd you end up as a professor?

Sometimes with life, you cannot imagine what you'll do. I ended up going directly to industry after my dissertation, to work for General Electric. I thought I will work in R&D and that will be my goal. I was alone with my daughter in Philadelphia, but my husband was in Waterloo. Initially we thought he'd stay in Waterloo for two years and then he'd move back. But nanotechnology engineering was a very exciting program and my husband said why don't you try and come to Canada? I applied, got the position and the family was reunited. But when I initially planned my career, I never imagined I would come

to Canada. I thought about the States and maybe go back to China, but never Canada.

Favourite part of being a professor?

I have two favourite parts. One is classroom teaching. You feel as if you are motivating students. You give knowledge and the student's interest increase towards a particular area. I've seen several examples of this in both materials classes and that made me really happy.

Another part is regarding research. I have a good idea and then give it to my students. They will do laboratory work and come up with a good product. Our research directly connects with industry. Then companies are really happy and say we should apply for a patent together. That makes everybody happy. The company contributes funding, the government contributes funding and we make this product.

Hardest part?

I'm actually from China so initially my English wasn't very good. So the first class or second class, I didn't get a good evaluation from the students. I felt frustrated. I tried my best and prepared very well, why is everyone not happy? I found that my expectations and the students expectations were different. I have to imagine if I were a student, what would I expect.

In my research, sometimes I have very good ideas. For example, a few years ago, I had a very good idea and gave it a student. At the time, it was porous graphene. I said if we do this quickly it can lead to a Science paper. The student was lacking practice and was not the greatest hands-on. After a half a year, the student was still getting poor results. In my area of nanotechnology we aren't working alone. We're competing with everyone in the world. In the meantime, another group published the paper in Science exactly as I imagined it. We might have this idea earlier than them, but we didn't work hard.

Teaching philosophy?

My teaching philosophy is well organized. My teaching notes are well organized and relatable. I usually give the students the notes ahead of time before the class, so they can get a good overview. But I leave lots of questions blank and in class I answer the questions. Sometimes some key results or some key summaries I leave blank. In the class I'll show the summary and the answer to the question.

The second is motivation. When I teach the heat & mass transfer class, it's a fundamental class. More than 80% of the class is on mass. How can you motivate students to show interest? That's very challenging for me. So every class, I started from a YouTube video or pictures, which illustrates the concept. Start with the real-world example and then move to the key concept and finally any detailed derivations.

Finally, as I mentioned before, I have to ensure my needs and the students' needs match up.

If you weren't a professor what would you be doing?

I don't know whether I would've stayed in the States had I not been a professor. I probably would've stayed in the industry. It all depends on my personal goals and the family requirements. Why am I doing graphene? I'm not just doing the same graphene other people are doing. I'm making graphene to have a higher surface area in order to make a supercapacitor.

What's the difference between a regular capacitor and a supercapacitor?

Normally, a capacitor is in micro Farads. That's a very small capacitance. The reason is a regular capacitor is just two metal plates and then you have ceramic or polymer as a separation membrane. So the surface area is just these two plates, this limits the capacitance. Supercapacitors uses just graphene powder. However, if you look inside with a microscope, there are billions of small pores, which can each store charge. So right now you can buy a supercapacitor with 100 mF or even bigger. It all comes from the super high surface area.

Interviews are around the corner. Any tips for engineering students?

I usually hire every term 1-2 co-op students. Some projects might need constant testing and then I hire a co-op. Every year I hire three or four co-op students. When I interview a student, I look at their background. For example if I'm interviewing an electrical engineering student I ask them to show me the basic capacitor calculation. If I'm interviewing a nanotechnology or chemical engineering student, I'll give them a quiz. The questions are all true and false. I look at their marks as well and decide from there.

Tips for undergrad?

Show up to class. Lots of times, I have students ask me questions and it's because they missed class or didn't pay attention.

Second is teamwork. Engineering classes always have lots of homework. My homework is usually divided into easy, medium and hard. Easy and medium questions you can do by yourself after reviewing the textbook or class notes. The tough ones are for your thinking. Don't just think alone, you can have a group study session.

Favourite memory of undergrad?

My undergraduate degree was done in China. We had a twenty years reunion last year. In China at that time the requirements to get into university were really high, only 1 to 2% were admitted. As a result, the completion rate was really high. We had a few times were went to industry. It's like a co-op system, but ours was different. Our co-op is the whole class going into one particular industry. In our case it was the petroleum industry. You see the distillation columns, filtration techniques and chemical plants. I feel I gained a lot of practical experience.



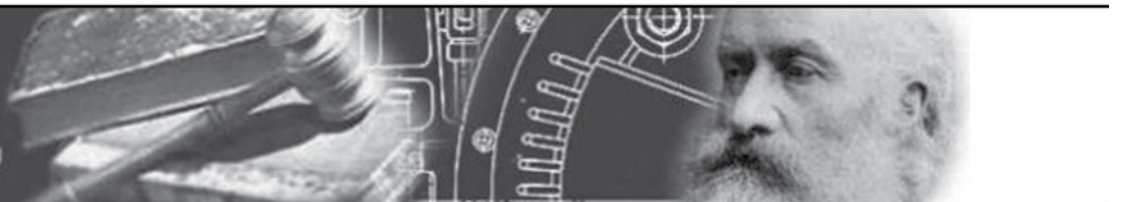
via Waterloo Institute of Nanotechnology



Sandford Fleming Foundation

Professionalism.
Leadership.
Communication.

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 August 31, 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 August 31, 2018

E2-3336, Extension 84008, sff@engmail.uwaterloo.ca
<https://uwaterloo.ca/sandford-fleming-foundation/>

World Cup updates 2

The Leadup to Round of 16



HASAN AHMED
EDITOR-IN-CHIEF

Welcome back to the updates for the World Cup. I should mention that POETS is also playing the games on the projector during the tournament, so I recommend going down there and checking it out in between classes.

We last left off the updates after Croatia's defeat of Nigeria 2-0. From there, Serbia and Costa Rica faced off and ended with a simple 1-0 finish in Serbia's favour, their first opening game victory since 1998 when they competed on the Yugoslavian team against Iran. On the same day, Mexico and Germany faced off and ended with a 1-0 Mexico victory after a 35' goal from Lozano, a bad start for the reigning champions. The day continued with a lull as Brazil tied Switzerland 1-1.

Sweden and South Korea faced off the next day, and reports say that the South Korean team switched jerseys during practice to trick any Swedish spies. Unfortunately, it didn't seem to help as they fell 1-0. Belgium and Panama were scheduled to play next, and resulted in a dominant 3-0 finish by Belgium, but the fact that Panama drew five yellow cards probably didn't help them. Tunisia and England ended off the day with a 2-1 English victory. Matchday 1 concluded on Tuesday the 19 after Japan and Senegal beat Colombia and Poland respectively 2-1.

Matchday 2 began with the host team Russia beating Egypt 3-1, which means they had scored more goals combined since their last two appearances (2002

and 2014). Portugal and Morocco ended in a 1-0 victory for Portugal, but Spain answered back with their own 1-0 victory over Iran, keeping the gap between them narrow. Uruguay also defeated Saudi Arabia, obtaining their second win of the tournament.

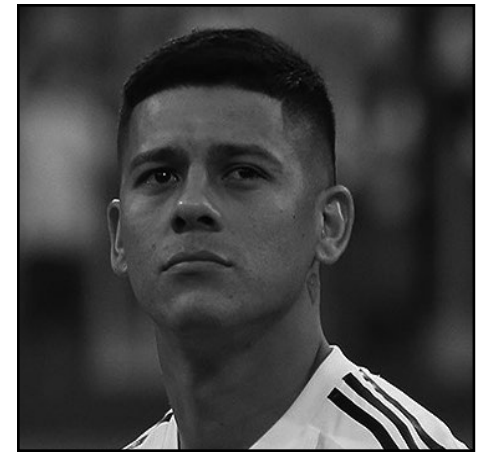
Denmark and Australia faced off and ended with a 1-1 draw, while their groupmates France and Peru ended in a 1-0 victory for the French team. However their games were overshadowed by the incredible 3-0 Croatian victory over Argentina, putting the Argentinians in a tight spot to qualify for the round of 16. Brazil and Costa Rica played the following day, ending with a 2-0 victory for Brazil. Both goals were scored in stoppage time of the second half. Nigeria also showed their skill against Iceland, defeating them 2-0. To end off the day, Switzerland and Serbia finished off a heated 2-1 game, as Switzerland scored their winning goal in the 90' minute.

Kicking off the weekend of June 23, Belgium obliterated Tunisia 5-2, and Tunisia has not won in their last 13 World Cup matches. Mexico also provided a swift 2-1 defeat of the South Korean team, and with the German victory over Sweden 2-1 on the same day, things started to shape up for the previous champions. To cap off the weekend and Matchday 2, England defeated Panama in a shocking 6-1 score, their biggest ever win in a tournament match. Senegal also prevented their first loss to the Japanese team, tying the game 2-2. Colombia ended Poland's World Cup run by defeating them 3-0, which marked Poland as the first country to be eliminated from the competition.

Matchday 3, and all the major elimi-

nations, began with a Saudi victory over Egypt 2-1, although neither team qualified for the round of 16. Their qualifying groupmates, Uruguay and Russia, ended in a commanding 3-0 Uruguay victory. Iran and Portugal also tied their game, which was good for the Spanish team, as they also tied Morocco, keeping their gap between Portugal close. The Portuguese team almost had a 1-0 victory, but a penalty kick in the 93' minute made the tie. A quick play after that by the Iranian team almost resulted in another goal, but unfortunately the shot was at a tight angle and hit the side of the net. Spain also had the shot of being seeded second in their group, but the tying goal by Iago Aspas in the 91' minute secured their top seed in group B. The following matches between Australia and Peru (0-2) and Denmark and France (0-0) were boring to say the least, since everyone's minds were fixated on the Nigeria vs. Argentina and Croatia vs. Iceland matches. Would this be the end of Messi and Argentina's run? It was close, as Croatia narrowly defeated Iceland 2-1 after a 90' minute goal by Ivan Perisic. Argentina was approaching the 86' minute with a 1-1 draw. Messi's 14' minute goal was overshadowed by a penalty kick in the 51' minute by Victor Moses. However, a beautiful cross by Gabriel Mercado in the 86' minute provided a shot from Marcos Rojo to enter the bottom right of the net, securing Argentina's victory and their place in the round of 16. You know it's an important goal when Messi himself jumps on your back to celebrate.

The antics didn't stop there. Just the next day, Sweden surprised the world with a 3-0 victory over Mexico. Not only that, but South Korea defeated the German



Кирилл Венедиктов via Wikimedia Commons

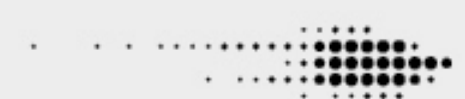
Marcos Rojo, saviour of Argentina

team 2-0. This shifted around the group quite a bit, and the German team was eliminated from the competition. This is a well-known curse. The champions tend to have bad subsequent world cups (at least recently) by getting knocked out in group stages. The 1998 champions, France, exited the group stages in 2002. Same thing happened with 2006 champions Italy and 2010 champions Spain. Glad to see Germany following traditions.

Matchday 3 ended with a tie (2-2) between Switzerland and Costa Rica, Brazil defeating Serbia 2-0, a few 1-0 victories from Colombia, Poland, and Belgium (over Senegal, Japan, and England respectively), and a Tunisian victory over Panama 2-1. This sets up the round of 16. We will be having France vs. Argentina, Uruguay vs. Portugal, Spain vs. Russia, Croatia vs. Denmark, Brazil vs. Mexico, Belgium vs. Japan, Sweden vs. Switzerland, and Colombia vs. England. In the final update, I will be covering the rest of the tournament.

VELOCITY START

presents



BILLION, 000,000N DOLLAR BRIEF



WHAT

At this workshop, you will be introduced to five different billion-dollar problems! Learn what makes them empire-building opportunities, what mistakes were made in previous attempts to solve them, and what a powerful solution would need to deliver.

WHO

Larry Smith; Adjunct Associate Professor of Economics, University of Waterloo

WHEN & WHERE

Thursday, July 19
7:30 P.M. - 9:00 P.M.

Velocity Start,
2nd Floor SCH
Pizza & water provided



**VELOCITY START A PLACE FOR ANYONE
TO LEARN ABOUT ENTREPRENEURSHIP**

Register for this and more Velocity Start events at velocity.uwaterloo.ca/events



Star Wars Episode MMXVIII.8

A New Month



KATIE ARNOLD
PRESIDENT

As we head into our last couple weeks of class I hope we're all doing well! These past two weeks have been a marathon of events and activities for the Engineering Society, and I took this Canada Long Weekend as an opportunity to celebrate... with my laptop, 4 textbooks, and all the studying I've been neglecting for my Presidential Duties.

Looking forwards into the future, we're happy to announce several resolutions of our Joint Annual General Meet-

ing! Firstly, the UWaterloo EngiQueers are officially a Society Affiliate!! We've also passed several society stances pertaining to classes and orientation week. Lastly, after serious discussion on the use of rankings within the faculty of engineering, the engineering Dean's List calculations, and competition based marking schemes in classes, the Waterloo Engineering Society adopted a stance on reducing causes of unnecessary competition within the Faculty of Engineering.

I'm excited to share with you all the Waterloo Engineering Society's Charity Purpling Initiative. Join us on July 13th, Engineering Day, with the Tool, fun activities, and to dye your Exec Purple for Charity!!! Currently we've raised

\$1055/3000!! www.gofundme.com/bsoc-exec-gets-purple. All funds go to The Trevor Project, crisis intervention and suicide prevention services for LGBTQ+ youth.

Commissioner Applications Are Open!! Want to get more involved in the Engineering Society? Have a passion for events, services, advertising, mental health or policy! There are several different positions and the apps are open now! bit.ly/CommissionersW19

I'm delighted to have Julia Reinstein as the Spring 2018 Chief Feedback Officer. She will be collecting feedback on the Engineering Society Executive and the events conducted throughout the term. There are many ways you can provide feedback, including our new feedback form; bit.ly/FeedbackS18.

If you have any questions or want to explore other feedback avenues, you can reach out to Julia at cfo.b@engsoc.uwaterloo.ca.



Orientation Week Stances Explained

Why the Change?



BENJAMIN BEELEN
VP ACADEMIC

You may notice soon that the document of stances has almost doubled in size as a result of my JAGM motion "Orientation Week Stance Version 2." This was modified from my original stance, which had the BIRT: The following stance be added to the document of stances: "The University of Waterloo and Faculty of Engineering should strive to collect more conclusive evidence of the benefits of the Fall Reading Break before permanently enacting it at the cost of any Orientation Week days (below five days)."

What I've instead put forward (which passed on both societies) is now two different stances as BIRT: The following stance be added to the document of stances: "The University of Waterloo and Student Success Office should strive to

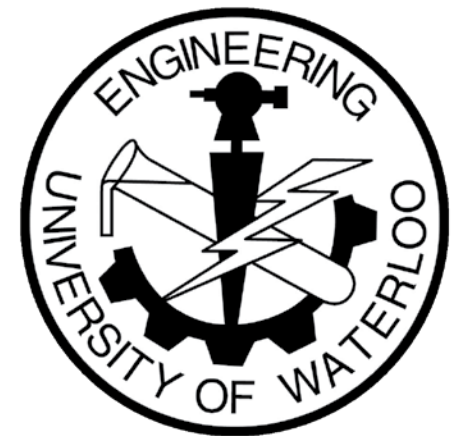
ensure that any assumed culture changes and/or delivery of first year classes within class days of orientation week, if permanently implemented, are ensured to follow the spirit and guiding statement of orientation week" and BIFRT: The following stance be added to the document of stances: "No classes of any form should be held during orientation week."

Why the sudden change in theme and spirit of motions? Glad you asked! I've met with the VPA of the University, Mario Coniglio and the SSO office Director, Pam Charbonneau as well as the FEDs VPed Matt Gerrits. This meeting showed me that the original intention of the data collection and trial of this reading break was not to find conclusive evidence that the reading break benefited students. Looking back that is a very large task that would require significant resources and would be difficult to prove. Instead, the University and SSO office looked into finding if it was possible or not.

The benefit to students from the fall reading break and it's suggested changes to orientation week rely on a "culture change" on campus that also involves the first few days of classes being primarily welcome days and orienting students towards how to be a student. This is the reason for the line "are ensured to follow the spirit and guiding statement of orientation week." If these days are expected to help orient FY students, it needs to be apparent that it is being done.

The burden of finding this I feel most appropriately falls onto the shoulders of those suggesting the change. I believe that a culture change would help orientation week, especially if having class during the week is permanent. There will be a referendum in the Fall of 2018 that will look into passing another "trial" of the full fall reading break, which will likely bump orientation week back by one day, without removing any faculty programming days. This is the reason for my BIFRT that no classes should be held

on these three days. I know this stance sounds extreme, and it is, but the fact that it passed on council shows that our society believes that orientation week should be class free. Side note, many programs are putting "design days" during these few days. Those do not count as class from my interpretation of the stance. Additionally, this stance will be deprecated if this Fall Referendum passes.



Upcoming Events Calendar

Wednesday July 4	Thursday July 5	Friday July 6	Saturday July 7	Sunday July 8	Monday July 9	Tuesday July 10	Check out up-to-the-day event postings on the EngSoc website at engsoc.uwaterloo.ca/event-calendar/
EngSoc Council Meeting #4 5:30 - 7:30 PM RCH 302	Charity Grilled Cheese 11:30 AM - 1:30 PM CPH Foyer Coffee with MATES 4:30 - 6:30 PM POETS	EngPlay 7:30 - 9:30 PM Hagey Hall	EngPlay 7:30 - 9:30 PM Hagey Hall		EngiQueers 6:00 - 9:00 PM POETS	Charity Yoga 7:00 - 8:00 PM	
Wednesday July 11	Thursday July 12	Friday July 13	Saturday July 14	Sunday July 15	Monday July 16	Tuesday July 17	
WiE: Car Maintenance 101 5:30 - 7:30 PM	Engineers Read Things They Wrote as Kids 5:30 - 7:30 PM	WEC 6:00 PM - July 14 12:00 PM RCH	WEC July 13 6:00 PM - July 14 12:00 PM RCH Beach Day with FEDS D&D 2:00 - 6:00 PM POETS EngSoc Visits the MUSEUM		EngiQueers 6:00 - 9:00 PM POETS	Board Games 5:00 - 7:00 PM POETS	

World Cup Live in POETS!

Plus My Potentially Sloppy Predictions



LIAM YEATES
VP FINANCE

Hello everyone, First the big news, THE POETS PROJECTOR HAS BEEN REPLACED AND NOW IT WORKS AGAIN!!!! I will now pause my article for your applause.

Now moving on. Since getting the projector fixed, my wonderful POETS managers (as well as Laura Scanlan) have been working hard to make sure everyone can enjoy the most popular game in the World. It has lead to some

pretty fun moments in POETS as everyone has been getting into the games. It was really great to hear cheers and screams when South Korea scored to take the lead against Germany, knocking the defending champions out of the tournament. This is the fourth World Cup in a row where the defending Champs have been knocked out in the round of 32. It is also further proof that Germany can never win in Russia. But now we are closing in on the last games of the tournament So I'll list the games to watch and my picks so you can all mock me when I'm wrong.

Sweden vs. Switzerland - Neutrality Bowl 2018 (Tuesday July 3rd, 10 am). What happens when two countries who

never take sides face each other? The Swedes win thats what. Sweden 1-0.

Colombia vs. England - (Tuesday July 3rd, 2pm). Both team played in weaker groups and picked apart their competition. I didn't see much of England but Colombia did look scary against Poland. Both teams can score so it should be fun. Colombia 2-1.

Now we get into speculation. I'm only going to skip to the final four. So this could be very wrong when you read it. Woops.

Semi Final 1: Uruguay vs. Brazil: Let's have another Soccer War (Tuesday July 10th, 2pm). Both teams have looked strong and I see them getting to the final four quite easily. Brazil will

be looking to erase the 7-1 smacking Germany handed out in the last world cup in this round. Luis Suarez will be looking to get another taste of Neymar. I think Neymar is going to carry Brazil through while their defense stifles Uruguay. Brazil 2-1.

Semi Final 2: Colombia vs. Spain: Colonial Bowl (Wednesday July 11th, 2pm). Colombia has a fairly easy path to the final four in my opinion. But Spain is for real this year. They will be tough to beat. Spain 2-0.

This brings us to my predicted final: Brazil vs. Spain: Kinda Colonial Bowl Part 2 (Saturday July 15th at 2pm). I'm not going to predict this but it'll be good.

Media, WEC, and Everything in Between

July is a Busy Month!



GRANT MITCHELL
VP COMMUNICATIONS

Well, the end of June was a busy time for our media and marketing teams, and it looks like July is going to be just as hectic. Engsoc has been running a lot of fun events over the past couple of weeks and there are way more where that came from and our media team has been there recording all of it for you.

Lately our media team has been working hard to make sure that all those fun moments at Engsoc events can be forever immortalized in a photograph for everyone's viewing pleasure. They've been attending all of our big events like Semi-Formal, Pride Parade, and Canada Day taking photos of you, your friends and everyone in between and they are doing an awesome job at it. So, make sure you go and checkout the Engsoc Flickr page to find pictures of you and your friends at our events ([flickr.com/photos/engsoctsn/albums/](https://www.flickr.com/photos/engsoctsn/albums/)).

Our social media team has also been hard at work keeping all of our social media accounts active with event updates and photo uploads. Now they need your help though. We've sent out a social media survey that you can

find on our facebook page asking for your thoughts on how we send out our updates and what social media platforms we should be using. That way we can tailor our content so that our updates reach all of you in a timely manner on

the platforms you prefer.

If you have any suggestions on how to improve our social media or media teams content or just want to find out more, please feel free to find me in CPH 1327 on Wednesdays from 2:30pm-

4:30pm or Fridays from 11:30am-12:30pm. Alternatively, send me an email at vpcomm.b@engsoc.uwaterloo.ca.

Good luck with the rest of the term and enjoy the July heat!



Adam Rywak via UW Engineering Society Flickr

Your EngSoc Exec enjoying Semi For- wait that's not Liam...Michael you're on in Winter!

Arthur and The Quest for Passing Grades

...or the Holy Grail (whichever is easier to find, I guess)



ASHLEY CLARK
VP STUDENT LIFE

The Spring 2018 term is slowly coming to an end. This is the second-last time you'll be hearing from me this term and as always, I want to take a moment to remind you that you're doing great! Study terms can be tough, and I know this one has been one of the hardest I've faced. So: keep your head up, because we've almost made it!

In bigger and more exciting news, Engineering Day is swiftly approaching on July 13th! With the end of Pride Month here's a quick update on our fundraiser to get the EngSoc executive team dyed purple. We've currently raised \$1055 for the Trevor Project at the time this article was written. That means that both myself and Grant Mitchell will be going

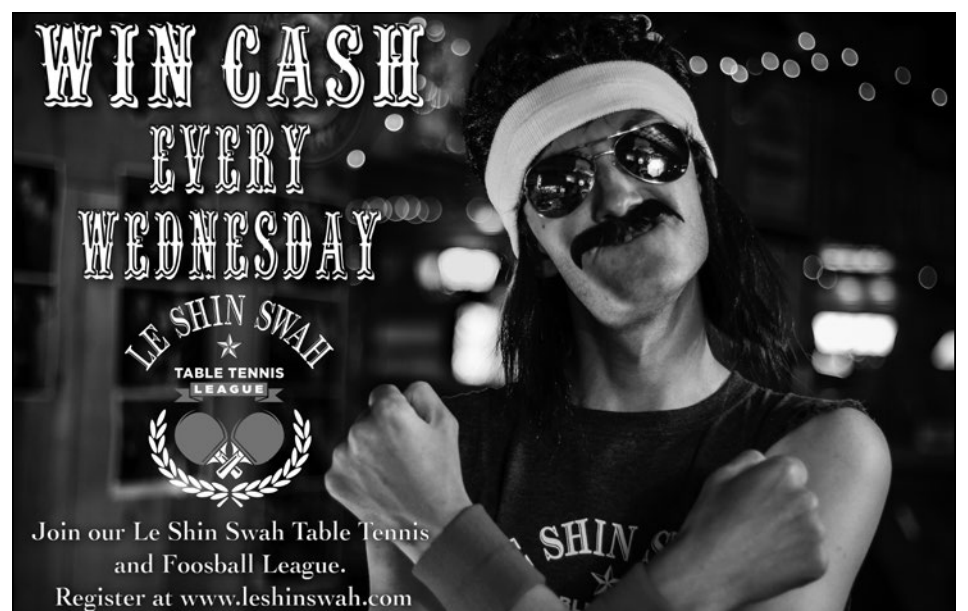
fully purple on Engineering Day! If you want to support us (and get our VP Academic Benjamin Beelen dyed purple) the next milestone is \$1500. You can donate at: www.gofundme.com/bsoc-exec-gets-purple.

In upcoming events, we have a very creative month ahead of us! EngPlay is happening on July 6th and 7th in Hagey Hall, and tickets for this event can be purchased in the EngSoc Office (CPH 1327) or online at: squareup.com/store/EngSoc-B.

This term's EngPlay is a student written script that takes a modern-day engineering twist on a classic King Arthur tale. Also coming up is Engineers Read Things They Wrote as Kids, which was a huge success last term and highly requested to happen again. Come out to read anything that you wrote as a kid, whether it be a song or a book or some cringe worthy diary entries, all submissions are welcome!

For those of you looking for events that are "licensed" for a little more fun, look no further than Pints and Perler Beads on July 18 or our end of term

TIKI-EOT on July 20. Both of these events will be held in POETS, and more information can always be found on our Facebook page!



Join our Le Shin Swah Table Tennis and Foosball League. Register at www.leshinswah.com

Point Vs. Counterpoint

POINT

HASAN AHMED
EDITOR-IN-CHIEF

With the ever-looming behemoth of global warming upon us millennials, it is up to us to start caring for the environment more than ever before. The Canadian government is now setting rules for provinces to set carbon pricing regulations, and this brings the case of a carbon tax vs. cap-and-trade. In this side of the PCP, I'll be going through a few details and reasons for carbon taxing our pollution. Right now, Ontario uses a cap-and-trade system, but I'll make the case as to why other provinces (namely Alberta and B.C.) may be benefiting more from the tax.

First of all, some general benefits of a carbon tax. The whole reason for carbon pricing in general is to incentivize citizens and corporations to emit less pollution. Simply put, global warming is bad, and we should try to make it better (I know, mind blowing isn't it?). A tax on this could really allow us to monitor exactly how much we're releasing into the environment as well as the rate at which it's being released into the environment. It also allows for accountability for the person emitting the pollution, and it comes straight out of their pockets (obviously, in theory. I'm not an economist, and I'm not going into the deep dive of tax evasion). The suggested pricing method is to set the tax to something like \$10 per tonne, and then increase it by a rate such as \$5 per year until it reaches a benchmark (eg. \$50 per tonne). This will not only incentivize people to look for alternative, green methods, but also look for them QUICKER than normal. Solar, wind, hydro, etc. would all benefit in some way due to the greener practices, and due to the higher demand for alternative energies, more investments could be placed on these energy industries, resulting in even more innovation and production and a creation of a positive feedback loop of carbon emission reduction.

The additional revenue of the government provided by the tax could be used to mitigate further pollution. I just mentioned the investment in other industries, but also could offer tax rebates/reductions to homeowners and other users. Since their costs might increase due to the tax, "giving back" could theoretically result in neutral gain. We're using less, but what we use costs more, but since we're using less, we've earned a rebate which

pays for what we've used. Yes, I'm sure we've all looked at our co-op salary and are bummed to see how much of it goes to taxes, since we're not making a whole lot in the first place. But again, it's all going to be worth it since we're doing for society and for the earth. Starting at a low level of taxes can also allow for all of us to afford it and can give us time to find alternatives such as public transportation and biofuels. Besides, taxes are good if they benefit the whole province, and some of those alternatives I just mentioned are some places (other than rebates/reductions that I mentioned above) that this tax money can go. I'm sure we'd all like to see the TTC improved in some way.

Alberta and B.C. are both using the carbon tax system, Alberta having it at \$30 per tonne as of 2018, and B.C. having it at \$35 per tonne as of April 1, 2018. Although it might seem a little expensive, compared to Ontario starting at \$10 it would be cheap. Besides, the environment doesn't wait; it'll keep going. To be impactful we need to reduce emissions. In 2015's Paris Agreement, Canada promised to cut 30% of emissions by 2030. According to the Ecofiscal commission, we would need to set our price to \$200 per tonne, so this price seems low in relativity. But if you really want to be hardcore, check out Sweden. Their current rate is 120 EUR (just under \$200 per tonne CAD). Economic analyses have shown that their economy has been unaffected as well. This may be due to other parameters of the country as well, but it is evident that the carbon tax did not cause any major downfalls since its implementation back in 1991. They have set a precedent long before us, and we should follow.

There's no better time to tackle global warming than now. Canada needs to take the steps in the right direction to do whatever it can to implement social and environmental change, and a carbon tax might be the right way to go. Alternative energy sources must be improved, economic analyses must be performed, and incentives should continue to be implemented for carbon pricing to move forward. Quick, everybody start planting trees.

Carbon Taxing vs. Cap-and-Trade

GABRIELLE KLEMT
3A GEOLOGICAL

There is no question that the Ontario government needs to regulate carbon emissions. Despite people who don't believe human production of CO₂ in the atmosphere has any correlation with the climate, there is indisputable evidence to the contrary at this point that is impossible to ignore. Companies that willfully produce extreme amounts of carbon emissions do so because there are no consequences, or the consequences do not outweigh the benefits of doing it. It is for this reason that the government needs to get involved and actively limit the amount of emissions a business can lawfully produce. There are, however, better and worse ways to go about doing this. I posit that the best option for reducing the emissions produced in the province is through cap and trade.

It's likely that you've heard the term "cap-and-trade" before, but what does it actually mean? In plain terms, the government sets a cap on carbon emissions and anything over this limit is then penalized. The cap is typically reduced each year, prompting businesses to take action to continually reduce emissions. The trading aspect is to do with pollution quotas distributed by the government. The total cap is divided into quotas which it gives or sells to businesses, and which a business can sell to another business if they are going to be under their limit. This creates a double incentive of a fine for exceeding and a reward for being below the cap.

It's possible you think this is unfair, especially to smaller businesses, but the program is only mandatory if the company produces more than 25,000 tonnes of greenhouse gas emissions. To put that in perspective, it would take driving a Honda Civic approximately 140,817,600 km to generate 25,000 tonnes of CO₂ emissions*. That's an insane amount of emissions. And the caps aren't equal across the board, they're industry-dependent, so clothing vs automotive production for example will have different caps placed on them.

Of course, the main target of the caps are CO₂ and other greenhouse gases (GHGs), but the government can cap pollutants that

cause smog as well.

In the words of the VP of Global Climate, "Cap and trade lets the market find the cheapest way to cut emissions", so it's really benefiting the companies as well. To get anywhere with climate preservation, companies need to find it too expensive to keep going as they are now, producing emissions without a care. But we also have to do it in a way that doesn't force companies to pack up and head for a cheaper environment which will let them produce emissions and not be penalized. Cap and trade is the best way to do this because it provides so many financial incentives to reduce emissions, that a company doesn't need to go elsewhere. Cap and trade instead creates a competitive environment where companies actively work to reduce emissions, rather than accepting a small tax.

I can see you might be skeptical, sure it SOUNDS good, but what proof is there that something like this would actually work? Well, in the 1980s North America had a major problem with acid rain. You may have heard stories of acid rain killing entire lakes, denuding forests, destroying crops, and even damaging buildings. The reason I can say that you may have heard stories is because, thanks to a cap and trade program introduced in the States to reduce sulfur dioxide and nitrous oxide pollution, this is no longer a major concern. Cap and trade successfully stopped acid rain.

It's possible I've convinced you that cap and trade is a good system, but you may want to know in what way, is cap and trade preferable to an option like carbon taxes? It's true that cap and trade promotes green infrastructure development and use – always a good thing – but this can be costly in the short run. The problem with a carbon tax is that it's easy in the short run, it's a friendly option to businesses already used to paying tax ... it's also an easy option in the long run though. In economics this term we're learning about how it can be easy to write off an expense like a carbon tax to the consumer without changing company practices. Sure the government gets a bit more cash, but you're not solving the problem! Increase the tax too much and the companies leave, but set it too low and the company won't even care. It's a lose-lose situation, there's no incentive.

You may be thinking that I'm talking a lot about money in this article, but to be honest, that's what everything comes down to in a capitalist country; what is the bottom line? The bottom line is efficiency and maximizing profit. Cap and trade, unlike a carbon tax, offers a way to actually make a difference in emissions without harming a company enough to send them packing. I hope I helped to convince you of that.

*From Planet Honda and Car Talk



via US Library of Congress

Please save the
environment please please

Editor's Note:

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

KITCHENER WATERLOO



TRAVEL
Clinic

Travel Vaccines
& Advice
by Appointment

Health Canada Certified for Yellow Fever

519.570.4208

www.kwtravelclinic.ca

Physicians Certified in Travel Medicine

The Iron Crossword

Travel and TV

SAMRIDHI SHARMA
3A CHEMICAL

1	2	3	4		5	6	7	8	9		10	11	12	13
14					15						16			
17					18						19			
20				21						22		23		
		24	25							26				
27	28								29				30	31
32										33				
34										35				
36					37					38				
			39			40	41	42						
			43									44		
45	46			47							48	49	50	
51			52		53						54			
55					56						57			
58					59						60			

ACROSS

- 1: ____ Jojo, villain of the PowerPuff Girls
- 5: Daughter of Pan and Echo
- 10: Largest continent on the planet
- 14: Wine betters as it ____
- 15: Alliance of Disability Advice and Information Providers (abbr)
- 16: Unfeeling
- 17: Shelley Marshaun Massenbun-Smith's stage name
- 18: A round hill or point of land
- 19: A Texas Company offering an automated loan management system
- 20: Enterprise Europe Network (abbr)
- 21: A Brazilian town which gets its name from a combination of Acre, and Una
- 23: Filename extension for an executable
- 24: Plays an iconic mother in a science fiction TV show
- 27: Integrated Climate System Analysis and Prediction (abbr)
- 29: Gives birth, usually
- 32: A Valencian municipality located in the re-

gion of the Horta Nord, birthplace of Vincent Soriano Sierra

- 33: A South Arabian speaking kingdom mentioned in the Hebrew Bible
- 34: Composed of, or resembling a part of fire
- 35: ____ seal, AKA otary
- 36: Dark-skinned French wine grape
- 38: Method for classifying typefaces solely on visual characteristics
- 39: Al Turbi in Lombard, municipality in Italy
- 43: Aged like a beer (4 words)
- 45: Hedwig was one
- 47: Enamored in a silly or sentimental way
- 48: Parent Teacher Association (abbr)
- 51: Past the agreed-upon time
- 53: Historic neighbourhood of Kiev, Ukraine
- 54: Pharmacy College Admission Test (abbr)
- 55: Suffix of aldehyde having neighbouring double bond
- 56: Name of Celtic origin, it is close to the name Enola which means "the one who looks, who discovers the world".
- 57: To separate and arrange

- 58: Measles, in Polish
- 59: "Give" in Italian
- 60: On something

DOWN

- 1: ____ of Honor: Movie with a male bridesmaid
- 2: Shrek's species
- 3: French Neoclassical painter who painted the Portrait of Marie-Julie Bonaparte and daughters
- 4: Honda ____, a concept car revealed at the London Motor Show in 2008 (abbr)
- 5: Policeman saying Groot's catchphrase (3 words)
- 6: Make more beautiful
- 7: 6600 km long transatlantic communications cable between Virginia Beach, Virginia United States and Bilbao, Spain
- 8: Town located in Karnataka, India close
- 9: A name or a noun formed after a person
- 10: The first half of Tobias Funke's license plate
- 11: Wonder Woman for one, Thor for another
- 12: "...Most immersive movie experience"
- 13: To pay the penalty of, in olden days
- 21: Scientists using Excel
- 22: Doctor's instructions to take pill once daily (4 words)
- 25: Two or more compounds with the same formula but different arrangement of atoms
- 26: Major ingredient in absinthe, to name one
- 27: Coastal Pacific Food Distributors, Inc. (abbr)
- 28: ____ lemon: major retailer of fitness apparel
- 30: A village in Hajdú-Bihar county of eastern Hungary with area code 4211
- 31: Chiefly dialectal past tense of ride
- 37: ____ server is a happy one! (2 words)
- 38: Italian word for pea
- 40: A role-playing video game developed by Artepiazza and published by Koei for the Wii
- 41: ____ Felgen, a fictional character in The Pinchcliffe Grand Prix
- 42: Modern Hebrew name of an ancient site that developed around a spring once associated with the Greek god Pan.
- 43: Place to get married
- 44: Theme park in Walt Disney World Resort containing Spaceship Earth
- 45: Margarine
- 46: The Elder ____, Dumbledore's weapon
- 49: Purple flavour in bubble tea
- 50: Alliance of Technology and Transfer Professionals (abbr)
- 52: ____, Cathedral City in Cambridgeshire
- 54: Please See Attached (abbr)

Sudoku

#2018-09

SAMRIDHI SHARMA
3A CHEMICAL

Panama

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

Spain

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

Croatia

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

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

IRON INQUISITION
Hasan Ahmed - Editor-in-Chief

"Favourite Study Spot on Campus?"



"Literally any place where people can't talk to me."
Liam Yeates, 4A Management



"Perched on POETS balcony disguised as a bird to hide my true identity."
Jack Smith, 3A Electrical



"Software Lounge, right before going to EngPlay!"
Roxane Fruytier, 2B Software



"POETS because I'm always looking for a reason to procrastinate..."
Rachel Malevich, 4A Chemical



"E4 first floor."
Christopher Chalmers, 3A Computer



"In my prof's office."
Kristopher Sousa, 3A Computer

WATERLOO | ENGINEERING
EDUCATING THE ENGINEER OF THE FUTURE

A TRADITION CONTINUES

ENGINEERING DAY

JULY 13, 2018

HOSTED BY ENGINEERING ALUMNI RELATIONS

11:00 AM – 1:00 PM
COLOUR THROW AT NOON
CPH COURTYARD

- › Purple colour powder throw – wear a white shirt!
- › ‘Boggan Burger BBQ / ice cream truck / cookie dough bar / popcorn
- › Dunk your prof. tank, inflatable games and photo booth
- › EngSoc Pinkie Purpling Station
- › EngSoc executives will get purpled for charity

FREE FOOD. NO KIDDING.

#WEARETHEENGINEERS

JOIN [TENTHOUSANDCOFFEES.COM/HUB/WATERLOOENGINEERING](https://tenthousandcoffees.com/hub/waterlooengineering)



UNIVERSITY OF
WATERLOO