

## THE CARLETON STUDENT ENGINEERING NEWSPAPER

# THE IRON TIMES

THE IRON FAREWELL

MYCSES.CA/PUBLICATIONS/IRONTIMES

APRIL 2019



Engineering students old and new (relatively), the 2018-2019 year at Carleton is coming to a close! I'm sure you're all as tired out as I am... though to be honest, that level of exhaustion is a little excessive, and I don't blame you if you're a tad more optimistic than this CYNIC over here.

Speaking of this cynic... who is she? Do you know her? Yes, you do. It's your friendly neighbourhood Editor-in-Chief returning to the front page to give my closing remarks before I'm gone from this paper for good (just kidding, now that I've been part of this work of art, I don't plan on leaving any time soon).

It's been a long year, and serving as Editor-in-Chief has been a time-consuming, stress-inducing, and ultimately extremely rewarding experience. I came into this position with nothing but excitement, and I leave with nothing but pride in this paper. The Times experienced its fair share of setbacks, especially with the unfortunate disappearance of print copies. These difficulties will only persist as the dreaded budget cuts loom over

CSES and all other student groups. This is why it is more crucial than ever to get involved and support valued traditions such as this one.

The Iron Times needs a strong-willed, creative, and eloquent individual to stick up for its best interests in the upcoming year, and that is why I want YOU to apply to be Editor-in-Chief for the 2019-2020 academic year.

The Editor-in-Chief *is* the Times. They have every say in this paper, and every responsibility. They design each layout, write to their heart's content, and do a decent amount of chasing down people who promised them content. As I said, it's a lot of work. But it's also an identity, a purpose, and a passion project.

This position will always be something I hold very close to my heart. As someone who wasn't very active for the first two years of my degree, that application was my first step into the C-Eng community. This directorship has helped me learn more about the community's traditions, the myriad events that take place all year long, and

the immense work contributed by its members -- from the CSES execs to the presidents of each stream society to those who participate in it all.

The gratification comes in small moments: when a past Editor-in-Chief approached me at Whirlwind to tell me I was doing a great job on the paper; when I connected with a different former Editor-in-Chief at a job interview; when I received a photo message from a student who had clipped out a particularly funny article and posted it on his wall.

If this paper has ever made you laugh, taught you something new, or given you an outlet to express yourself, I implore you to apply. I promise you it is one of the greatest jobs you can have in C-Eng.

From the bottom of my heart, thank you to everyone who contributed to these eight issues. I have nothing but the deepest appreciation for your dedication. And thank you to all the readers! This is all for you. I wish you all the best this summer. Hope to see you in print again soon.

## READ ON, I DARE YOU

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## AND MUCH MORE!



### WARNING:

This publication may contain offensive material. It should not be read by anyone who is easily offended. All opinions expressed within are solely those of the contributors; they do not reflect the views of the Carleton Student Engineering Society. This paper is purely satirical in nature and is not intended to be malicious in any matter.

If you wish to express your views on the content within, please email us at [irontimes@cses.carleton.ca](mailto:irontimes@cses.carleton.ca).



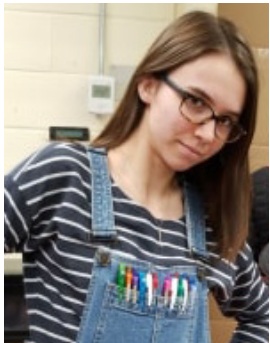


# EDITORIALS

ONE LAST TIME

nostalgic

## *From the Desk of the Editor*



Caroline Lenarcic  
- AERO C III -

So, another school year has come to an end. Y'all know what that means: cramming for exams, making plans for the summer, and reflecting on everything that this past year has brought us.

Personally, I took this time to look back on all the editorials I've written for this here publication in my time as Editor-in-Chief. What a blessing it was to have a platform where I could articulate my feelings once a month, and all of you were forced to deal with it! Okay well not really... this is a paper, you can just put it away. You know that, right?

Anyways, in reviewing my past articles, I've noticed a common theme arises in all my writing, a question that motivates all of it: "Are you what you want to be?"

Identifying the distinctions between the person I was, the person I thought I should be, the person I wanted to be, and the person I am is an ongoing process. A year ago, I felt like a lot of things were lacking: I didn't know what my passions were, or where I fit in, or if I would ever truly feel like I belonged here in C-Eng. My preconceived notions and insecurities held me back from pursuing much of anything until I had reached the end of my second year. Since then, I've learned a lot about the community and about myself, and I've come a long way from that sadboi place where I was.

Getting involved with the Iron Times was a major milestone in my journey out of that place. I think for this last issue, it's fitting that I share these lessons in the hopes of reaching anyone who may be in the same place I once was.

*Lesson 1: We're all mad here.*

Confession: I may have watched too much TV as a kid. I grew up with that stereotypical assumption that you were either Popular or Unpopular, Cool or Uncool. I continued to operate with that belief for quite some time. Turns out in C-Eng, we're all a unique kind of weird. Everyone is a nerd, everyone has their geeky hobbies, and everyone has respect for their friends' interests. I've also learned that a lot of the people I've always looked up to as Cool and Popular are actually just as insecure as I am. It's comforting to know that despite our unique traits, we all share the same heart.

*Lesson 2: Getting involved is way easier than it seems.*

One of the very first directorships I picked up was one that I just kind of stumbled into. A friend was looking for someone who had experience designing sponsorship packages so I volunteered by graphic design skills. Turns out getting involved is really not a Herculean task; directors are always in demand, and sometimes all it takes is to apply (you may be the only one to do so). From there, you have your foot in the door. Looking back, I have met so many friends and learned everything I know about how C-Eng operates just because I managed to participate in these small ways. If you're still trying to find your place, don't hesitate to throw your name in when a position starts accepting applications. And if you don't feel qualified, that just means you have so much opportunity to learn and grow.

*Lesson 3: There is no "right" way to get involved.*

GNCTR isn't just for civils, CPRT isn't just for aeros, and CSES isn't just for kids who sat on their high school student council for four years. Don't limit yourself, don't tell yourself you should pursue certain opportunities because they fit with your degree or with the job you want to have one day. Extra-curriculars are great for resumes, sure, but their main objective is to spark your interest and allow you to give back to your community. Don't force your-



self to be the person you think you should be, or else you'll never learn anything new.

*Lesson 4: School is HARD, and sometimes there's nothing you can do about it.*

I can sense several of you rolling your eyes right now but this was a very difficult lesson for me to learn. As someone who suffers from Unattainably High Standards, it took me a while to realize that it wasn't just me... everyone finds their degree hard because it *is* hard. So if you find yourself pulling in less-than-optimal grades, or just find yourself more exhausted than you used to be, cut yourself some slack. You can do your best but some factors remain out of your control. Just because your academic performance changes, doesn't mean you are a worse person. Often it's about making the most out of a bad situation, making sacrifices, and giving your best effort in the given conditions. This isn't high-school level stuff, so don't expect you'll get high-school level grades. Be kind to yourself.

*Lesson 5: That's what friends are for.*

I'll never cease to be blown away by the kindness within C-Eng. I honestly never believed I would feel appreciated, respected, and loved the way I do today. Early in my university career, I was convinced that friends were for good times and fun only, and that I shouldn't rely too heavily on anyone. Thank goodness I've been taught otherwise. The people I have met in C-Eng have surpassed all my expectations and consistently provide support in any way they can. I am eternally grateful I came out of my shell enough to witness it.

*Closing remarks:*

It feels as though a lot has changed over the last year. With any luck, none of us are exactly the same person we started this year as. I am grateful not just for my time as Editor but for every moment I spent getting to know you all, cementing my place in this beautiful messed-up extended family. If you've been hesitant to get involved, this is your time. I cannot wait to see what you become.



# COLUMNS



NEW MONTH? NEM WEEK? NEM WEEK MONTH OF NEW?



## HIGHLIGHTS FROM MARCH 2019: NATIONAL ENGINEERING MONTH

### One week just wasn't enough!

While C-Eng had been accustomed to celebrating National Engineering Week each spring, 2019 marked its first year honouring National Engineering Month (NEM), a March full of activities bringing students together to celebrate the profession. The

festivities began with a ceremonial Rube Goldberg kick-off. The month's events included a variety of educational and entertaining offerings including prof talks, science demos, a scavenger hunt, a movie night, and plenty of free food and beverages. NEM also partnered with CSES to

present Pi Day, with CSCE to run a hydraulic bridge contest, and with CMAS to present a CO2 car competition. A volcano closing ceremony rounded out the month. Thank you to everyone who organized, volunteered at, and attended the events! Below are some of the highlights of the month.



I NEVER WANT TO EAT PIE AGAIN





# COLUMNS

SNAPS NOT CLAPS



Dayna Goldfarb  
- Child Studies IV -

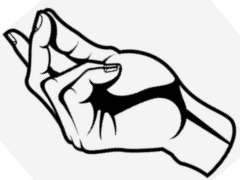


Rafe Osborne  
- COMP SYS IV -

*Engineering Events Edition*

## ENGINEERING LIMERICKS

*Commemorating our culture,  
emphasis on the cult!*



### CHARITY LAN

There once was a day called Charity LAN  
Playing for 24 hours is the plan  
With tournaments, snacks, and gaming  
You'll have your team flaming  
Staying up all night will make you feel like a trash can

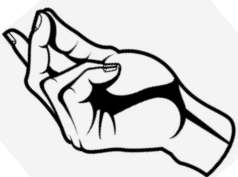


### C-ENG MUSICAL

There once was an engineering play  
Seeing it is pretty risque ;)  
Legally C-Eng it was called  
The talent had us enthralled  
It deserves to be on Broadway

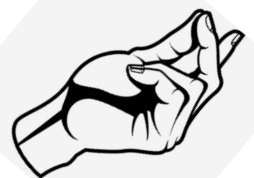
### ECOR 1010

There was a class called ECOR 1010  
Took it ages ago, way back when  
Learned things and stuff,  
The experience was pretty rough  
Thankfully no one ever has to take it again



### REFLECTIONS

There once was a night called Reflections  
You can see your friends who hold your affections  
Dinner and dancing sounds great  
It's well worth the wait  
Go - you won't have any objections!



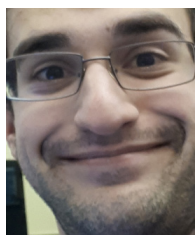
# COLUMNS

NO ONE IS ALLOWED TO SPEAK UNTIL NEXT SEPTEMBER



“What's a moment from this year that you never want to forget?”

The musical was pretty hype  
with my band bois.



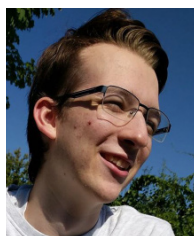
**Daniel Shifman**  
MATH III

Ahh Skeet Skeet Other Truckers  
Ahh skeet skeet god damn  
#denimisalifestyleplaidisjustaprint



**Dency Amalraj**  
AERO C II

When everyone answered this  
question as "Dunno forgot."



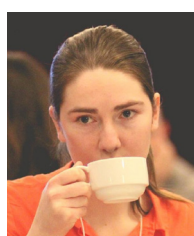
**Lazar Milojevic**  
SOFT II

I went as a delegate to the Conference  
on Diversity in Engineering at Ryerson  
University and that whole weekend was  
absolutely incredible.

**Hannah Carton**  
ENVE IV



The Musical!



**Alexandra Dubie**  
ELEC V

Conducting the band during the musical. It was  
amazing hearing everything I'd worked on for  
months come together. I was smiling ear to ear.



**Adam Dublin**  
AERO C III

When I built a chandelier stand  
for our trade up.



**Alex Stevens**  
CIVE III



**Kahini Dhoat**  
MECH I

u.(rxF), haha

THE MUSICAL WILL NOT BE FORGOTTEN ANY TIME SOON





# COLUMNS

## KOMBUCHA IS THE ELIXIR OF THE GODS



B



**Noah Pacheco**  
AERO D V

Shaving my head and donating my hair!



**Dayna Goldfarb**  
Child Studies IV

"FACE ME LIKE A MAN OWEN!"



**Owen MacIntosh**  
BMED MECH IV

That time I went bowling with my friends.



**Syed Syed Syed**  
AERO II

Tasting kombucha for the first time.



**Michael Loh**  
ELEC I

Getting my first real engineering job!



**Michael Wiebe**  
AERO D III

Bows and curtains on the C-Eng Musical. Each and every time.



**Peter Siriphongphanh**  
ELEC I

Literally all of it.



**Isaac Csekey**  
AERO A III

Jeremy dousing himself with chalky water in front of a screaming crowd of 500.



**Gabriel Karam**  
CIVE III

I never want to forget the first day coming to Carleton; waiting for what this university and community has to offer.



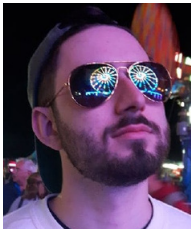
**Zein Ghazal**  
CIVE I




## “In what ways have you changed since September?”




I have gotten way less sleep.





I have become a more positive person, and started to enjoy the smaller things in life, while being grateful for what I currently have :)

In September I was but a wee 20 year old boi. Now I am 21.

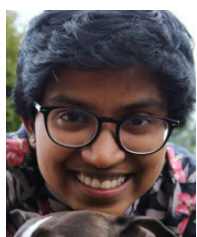




# COLUMNS

## THE ROPE TECHNIQUES MUST BE UNLEARNED

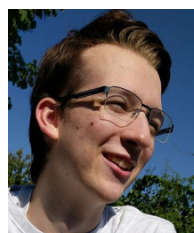
I eat more McDicks than Donald himself.



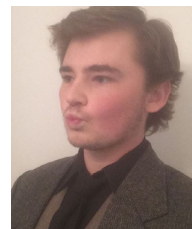
I started running but somehow got fatter.



Greater existentialism.



Too many to count.



I learned the forbidden rope techniques 00



CGPA - 0.4, Caffeine + 50, Happiness + 1000

Admittedly, I have a lot more friends compared to high school. Or at least a lot more people I'd consider friends, or even acquaintances. Part of that's from being more social and being more willing to put myself out there, since talking to people and learning about them is pretty fun. Part of it's because there's so many great people around to meet.

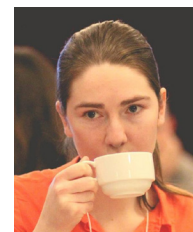
I think I've grown a bit more independent.



I got more knowledgeable about classical mythology.



Died a little more.



Honestly, I've gotten a lot more aggressive, in a bad way. Hopefully I can change that soon.

turns out i'm not graduating rip



Been taking on more responsibilities and trying roles outside of my comfort zone.



I realized how cold Ottawa's winters are.

I have been more organized and concise.

Rafe Osborne  
COMP SYS IV

WE'VE DIED MORE BUT WE'VE ALSO LIVED MORE





# COLUMNS

DANIEL THAT LEVEL OF DETAIL WAS NOT REQUIRED BUT OK

“If you had a time machine, what time would you travel to?”

Well see, this depends on which form of time travel this is.  
Case 1: If the time travel allows for consciousness, but nothing physical to be sent, then I'd go back to like Grade 3 and fix ALL the things.  
Case 2: If the time travel allows for physical transmission and paradoxes are impossible, then I'd go to all the big boi tragedies and have them just....not.  
Case 3: If time travel allows for physical transmission but paradoxes are possible, I'd go to the future (idk, like maybe the year 6969) to see all the cool shit and bring some back if possible.



2012 to slap some sense into my younger self.



1960s. Some of the best art came out during that time.



The end of the semester, so that I can troubleshoot my ability to change the past and affect the future. If going into the past could reverse things like my existence, then that would be bad.



I would travel back 13.8 billion years to witness the birth of Glenn McRae, zirconium rods, cattle NOT sheep, and the Montreal Protocol.



No thanks, I've seen enough movies to know that time travel is a bad idea.

I would go back to fill out the C-ENG Speaks that I missed.

The future.



I wanna see/ride dino bois so the Mesozoic era.

graduation



1970s -- gotta see what my parents were talking about when they said they had to travel uphill both ways, though the snow, with no gps or cell phone, rampant sexism & milkshakes, and back when music was good.



# COLUMNS

## AH YES I TOO WOULD LIKE TO VISIT 3



First year..

A long while ago, long enough that there'd be little effect on humanity or whatever messy stuff could come up. Do some sightseeing, maybe watch some extinct things walk around.

The time when we all went to Caleb's house so I could finally go.



You know, it would be pretty neat to hop back in time every century or so and see how S O C I E T Y was back in the days, how it evolved, how it changed, ultimately to consider common themes in a person's development that span across time. Something like that.

Graduation day from high school.

Back to my childhood, relive the memories.

3



Engfrosh, duh.



Connor Logie  
AERO B IV



## CONGRESS 2019 AND ACCESSIBILITY



Teo "Senpie" Blidaru  
- BMED ELEC IV -

Early January I had the pleasure to go to Congress. I didn't know what to expect beyond having the opportunity to meet leaders from engineering programs all over Canada, while attending amazing sessions. And I was not disappointed.

There were so many amazing sessions and people I met that it wouldn't make sense for me to talk about them all. But I did want to mention one session that stood out to me, and I think we can all use this knowledge, whether in our personal lives or with our clubs and societies.

The session was on accessibility in social media which isn't something we usually think about, but it's something that's very easy to fix and keep on top of. I will give two small changes that you can do in your social media life.

An easy one that we are likely all guilty of is posting "poster" photos on social media. Text to

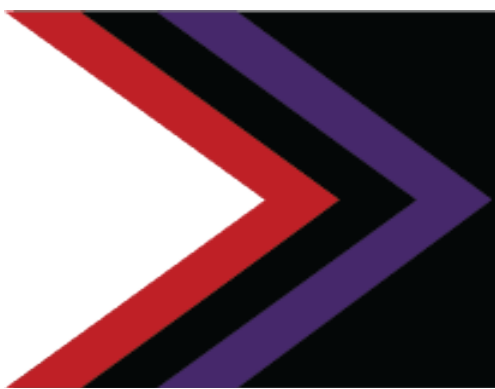
speech software, used by many who cannot see or find it difficult to, cannot read the image text, and so when an event is advertised in this manner, the event is inaccessible to those with low vision. A good thing to do for when you make a post like that, is to post the picture with a comment that also gives out all the information mentioned in the picture.

Something that can be added as well in our personal lives is alt-text. Alt text is something that can be even added to Instagram posts that provides a short description of what the photo is about, that software for the blind would read out. For example you could describe a

photo as "Girl in field of flowers", or "Girl in field of red and orange flowers laughing." Basically it's a description that helps set the scene in not too many words but enough so that someone understands what is going on. This can be done in Instagram! You wouldn't think that a photo sharing app is accessible for those with low vision, but it is!

Either way, if everyone started applying these very small changes to their social media posts, we would all help the world a little bit, and help the Carleton Engineering community and beyond be more accessible and welcoming.





# CLUBS AND

AND THUS ENDS ANOTHER GREAT YEAR FOR THE

## CSCE CARLETON CHAPTER UPDATE - APRIL

CSCE is excited to be nearing the end of another successful year. In March, we held a Winter General Meeting where we gave members an overview of what the society has done during the year, focusing on the winter semester. A highlight from the meeting was the presentation of a proposed organization structure for future industry nights. Thank you to everyone who attend-

ed and provided input to better our society. Also in March, CSCE hosted the Hydraulic Bridge Building Competition as a part of NEM. This event got groups of students to design and build a hydraulic drawbridge with the materials provided. At the end of March, we held elections for the 2019/2020 council. Thank you to everyone who came out to vote, and congratulations to

those who got elected! As for April, CSCE is hosting their bi-annual Cookies and Cram on April 6th. Come out to the 3rd block of Mackenzie to enjoy snacks and activities, as well as to use the classrooms booked out to study and cram for the upcoming exam season. CSCE wishes the best for everyone during exam season and hope for a safe and fun summer.



Jess Thorne  
- ENVE II -

Hello friends! My name is Jess and I am the enviro rep for CSCE. I am here to tell you about my first experience with GNCTR. Good Nights Can't Trump Relaxation? Get Naughty, Can Tequila Remember? Good News C-ENG Taite Rocks? Not quite. This year, 23 teams from across Canada and the United States made their way to freezing cold Edmonton, Alberta between January 30th and February 3rd to compete in the one and only Great Northern Concrete Toboggan Race (GNCTR).

Before my university days, I would never have believed concrete toboggans existed, let alone the fact they are raced annually at a national competition. For those who may be new to T-Bogg, teams must construct a sled large enough to fit 5 people that consist of an entirely concrete running

surface, a structural frame, steering, and braking. The universities are also evaluated on safety, technical report, and team spirit.

Carleton University used the year leading up to the competition to prepare; new toboggan superstructure and concrete designs are brought to life while cheers and costumes were created to fit this year's theme "Bogg it on!" (inspired by the famous "Bring It On" movies). In November 2018, 24 of the most dedicated team members were given the opportunity to fly and attend GNCTR 2019, hosted by University of Alberta.

The competition consisted of 4 busy days of challenges and activities. On day 1 of competition, we ventured from Ottawa to Edmonton and took part in the opening ceremonies and a dinner, where teams unveiled their team themes in some memorable presentations and celebrated having made it all the way to GNCTR. Day 2 was competitor interaction day; competitors were given the opportunity to socialize with students from other schools

at the West Edmonton Mall and waterpark. The new teams consisting of members from various schools were given the task to complete a scavenger hunt in North America's largest mall.

The following 2 days of the competition focused more on the technical aspects of the project. The teams were responsible for mounting displays presenting to visitors and industry professionals their toboggan that they would attempt to race down the hill the following day. The compe-

tition was concluded at the end of day 4 with a closing banquet, where the awards were handed out.

I had an absolute blast at Carleton GNCTR 2019. I loved having the opportunity to meet students from different schools, and contribute to a interesting team project. If you think this is something you would like to try, the team is always open to new members, no matter their previous skills or experience. Keep an eye out for news on the Carleton GNCTR facebook page!



**GNCTR**  
EDMONTON 2019



# SOCIETIES

## REAL MENTOR HOURS

### CARLETON ENGINEERING PHYSICS SOCIETY

#### PROF. PAVAN GUNUPUDI



*What do you do at Carleton?*

I teach an undergraduate course on circuits & signals, and a graduate course on solving digital design space problems using algorithms. I do research centered on design automation -- specifically, on developing algorithms to speed up electronic systems simulations via model-order reduction.

*What is a typical day like in your job?*

I ensure that my courses run properly, answer student emails, deal with departmental/admin issues, etc and I also do my research, and read a lot about what's going on in my field. I mean, all engineering problems are

only relevant insofar as they solve something in the world, right?

*What do you enjoy the most and the least about your job?*

The best and worst part is the freedom that I have: it's great to have it, but then what do you do with it? Definitely make sure you have direction!

*What has been your most rewarding accomplishment?*

My early research into the parameterization of model-order reduction became an actual research area.

*How did you get into your field of research? Is this where you thought you'd end up?*

I did my undergrad in Electrical Engineering then I got a job in software at Siemens... but I didn't like it. I heard about a prof doing some interesting research in model-order reduction, so I emailed him about grad studies. Things just clicked, and when they click, it just works out. I published a lot in grad school, which fast-tracked me to a PhD (again in modular reduction), and then I got hired by Carleton right away. I never thought this was where I'd end up!

The Carleton Engineering Physics Society (CEPS) hosts its monthly Coffee With A Prof event at Ollie's pub. Here is a breakdown of the

conversation we had with Professor Pavan Gunupudi (Monday January 28th) and with Professor Sangeeta Murugkar (Monday February 25th).

*Was there a time you messed up and felt like you'd failed? How did you bounce back?*

Not really... Once, I was working on this project, and I felt like I wasn't contributing enough, so I moved on. I realised it wasn't my thing and moved on towards what I really wanted to do.

*What's the most important leadership lesson you've learned?*

Listen! Everyone has a different angle on things, so to understand how people perceive things, you have to listen to them. If you respect different views, then direction comes automatically.

*What are future prospects in your field? What trends do you see developing over the next few years?*

In design automation, the next step is having intelligence build into design tools, so that the goal is that we can just say: "here are my specs, now make it".

*What resources do you regard as essential for those considering work or study in your field?*

IEEE is very good. Besides that, start reading to find what interests you, de-

velop an understanding of it, and find a supervisor who is doing research on it. Basically: take a problem and dig into it!

*EngPhys has 2 primary focuses: integrated semiconductor devices and optical devices. Any advice on choosing between the two?*

There's no wrong answer: what you do when you're there is what matters.

*Are you accepting undergrad students for 4th year projects or summer internships?*

Yes! Just drop by and see if your interests align with the 4th year project. For summer internships in my lab, I'm open to any area that deals with algorithms onto engineering.

*If you could do it all over again, what would you do differently?*

Invest more time in people, not just solving engineering problems: network, build people skills!

*Any final words of wisdom?*

Watch out for "Analysis Paralysis", where you think too much that you don't actually do it. Perfection is bad. Let it go. If your aim is perfection then you will always fail. Just try to do a good job at what you do!

#### PROF. SANGEETA MURUGKAR



*What do you do at Carleton? What is a typical day like in your job?*

It's about 40% teaching, 40% research (reporting, publishing, presentations), and 20% admin. I also manage about 3 people in my biomedical optics lab, where we develop new techniques for biomedical applications. One of these is optical spectroscopy (Raman scattering) and machine learning; the other is imaging without chemical staining, made portable for skin level detection.

*What do you enjoy the most and the least about your job?*

What I enjoy the most is real prob-

lem-solving using optics, for example, knowing that the tools we develop actually help doctors and surgeons. What I enjoy the least is writing proposals! But funding is necessary for research...

*What has been your most rewarding accomplishment?*

Earlier in my career I developed a handheld microscope, so that was quite rewarding. Also, starting a research lab from scratch and having students go through it.

*How did you get into your field of research?*

My path is non-traditional: after a PhD in Physics and a Post-Doc in EngPhys, I worked in industry as a research scientist. When the sector crashed and I was laid off, it gave me time to stay at home, think and network. Several research associate positions opened up thanks to networking, but I had to forge my own path since biophotonics was just emerging as a field of research.

*Is this where you thought you'd end up?*

I really thought I would be in industry doing research, not in academia.

*Did you have any major setbacks on the way? How did you bounce back?*

I had to undergo aggressive medical treatment, but I kept on doing my research. If you're passionate about something, then keep going and find new ways around stumbling blocks.

*What's the most important leadership lesson you've learned?*

Take ownership of what you're doing.

*Are you a member of any professional associations? Which ones do you feel are the most important to belong to and why?*

SPIE, IEEE, etc... these associations make sense if you have time to commit to them. As students it really benefits you because you can participate in networking events and conferences.

*What are future prospects in your field? What trends do you see developing over the next few years?*

AI and machine learning (applicable to many problems in industry), telecommunications (filters), and pure research (though NRC-type positions are getting rarer). A great source of info is optics.org.

*What resources do you regard as essential for those considering work or study in your field?*

Programming (analysis or interface), Matlab, Python.

*EngPhys has 2 primary focuses: integrated semiconductor devices and optical devices. Any advice on choosing between the two?*

Both have great futures: follow your passion.

*Are you accepting undergrad students for 4th year projects or summer internships?*

Yes you can join the lab via USRA job postings if you're in 3rd or 4th year.

*If you could do it all over again, what would you do differently?*

Collaborate more, network a lot more, find out what's happening, seek mentors.

*Any final words of wisdom?*

It takes time to find your place and the field might not even exist yet. So follow your passion and forge your own path: nothing is impossible.





# CARLETON STUDENT ENGINEERING SOCIETY

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APRIL


2019

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
1 April Fool's Day	2 Sustainability Day	3	4 Winter VAP	5	6	7
8	9	10 Last day of winter term	11	12	13	14
15	16	17	18	19 Easter Weekend (no exams)	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

 Alexander's Office  
3390 Mackenzie

 613-520-3616

 Open Monday-Friday  
8:30 AM - 5:30 PM

 Open Fall & Winter  
Academic Terms





# CARLETON STUDENT ENGINEERING SOCIETY

3390 MACKENZIE BUILDING

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## WHAT IS CSES?

THE CARLETON STUDENT ENGINEERING SOCIETY HAS BEEN SERVING THE STUDENTS OF CARLETON ENGINEERING FOR MORE THAN 35 YEARS.

ITS GOAL IS TO PROVIDE ITS MEMBERS WITH ACADEMIC, PROFESSIONAL, AND SOCIAL RESOURCES TO HELP THEM MAKE THE MOST OF THEIR FOUR (OR MORE) YEARS AT CARLETON. IF YOU'RE AN UNDERGRADUATE STUDENT ENROLLED IN A STREAM OF ENGINEERING, YOU'RE A MEMBER OF CSES.



President  
Tristan Durie

Hi Friends, I hope your semester is going well and that you will do well on exams! There is nothing much for me to in terms of CSES, other than to welcome the new CSES Council. With that, I'm going to take a moment to thank everyone, during my past five years both older and younger than me. I was a much different person in 2014 and I'm happy for everything, good and bad, that has happened to me, to help me grow into a better person. From CSES, to EngFrosh, Leo's and everything in between, this community has truly meant a great deal to me and anything after this will have a tough act to follow. I'll leave off with one last note: never stop getting involved. University is like sailing a boat, it's unpredictable. Sometimes it's nice and calm, and other times is stormy and chaotic but either way with a good crew you can survive anything! Bye C-Eng, I'll miss you.



VP Finance  
Cyлина El-Bouchi

Hey C-Eng! The end of the year is fast approaching and that means the deadline to submit cheque requests is as well! The deadline to submit cheque requests is Friday, March 29th at 5:30PM to the CSES Office (ME 3390). Thank you all for a great year and I wish you the best of luck on your exams!



VP Internal  
Henri Cheung

Hey everybody, good luck with your exams! I came into this position unexpectedly in January, but I've somehow managed to hold on and get most of my work done. For those of you who are graduating, good luck in the future, and for those of you who will still be here next year, I hope you're all looking forward to EngFrosh (I sure am)! Finally, I'd like to thank the rest of exec and council for supporting me in this position, I owe probably half the work I've done to them.



VP External  
Bay Ross

Hello C-Eng! It's been a pleasure serving as your VP external this year!!! I hope you all have a great rest of the year and wish you the best on you exams.



VP Publications  
Elizabeth Wilson

Thank you to everyone for a great year!



VP Social  
Kaylin Paquette

Thank you to everyone who came out to the many events this year. Our final event of the year is VAP; if you have volunteered with CSES, Leo's or IEEE you are invited to come to Playback Ottawa on April 4th. Good luck on exams everyone!



VP Services  
Logan McFadden

Hey friends, as the year is coming to a close, I am all out of merchandise to advertise! The textbook library will still be open until our last day of the year. Speaking of which, the office will be open until April 10th (the last day of the school year), so feel free to come in anytime before that and pay us a visit. Bucket hats are finally in, so we hope you enjoy the new merch! Thanks for all the great times this year and I hope to see you all next year! Stay fresh.



VP Academic  
Ahmed Abdalla

Hey everyone! The year is finally coming to a close. I want to thank you all for this wonderful year and opportunity. Serving as your VP Academic has honestly been an honour and I hope you all are satisfied. One final event before we wrap it up is CSCE's Cookies n Cram where CSES once again is serving grilled cheese! I wish you all the best in your exams and have a wonderful summer!!

DON'T BE A STRANGER! ANYONE INVOLVED IN CSES WOULD BE HAPPY TO TALK TO YOU ABOUT ANYTHING FROM DIRECTORSHIPS AND EVENT PLANNING TO VOLUNTEERING AT LEO'S LOUNGE, OR JUST SHOWING UP TO EVENTS. IT ALL PLAYS AN IMPORTANT ROLE IN MAKING ENGINEERING YOUR FAMILY AWAY FROM HOME. REMEMBER... EVERYTHING COUNTS FOR FLIGHTSUIT STAMPS.



# DISTRACTIONS

LOOK WHO'S ALL HIGH AND MIGHTY NOW THAT THEY HAVE AN OFFICE

## C-ENG SIDETRACKS

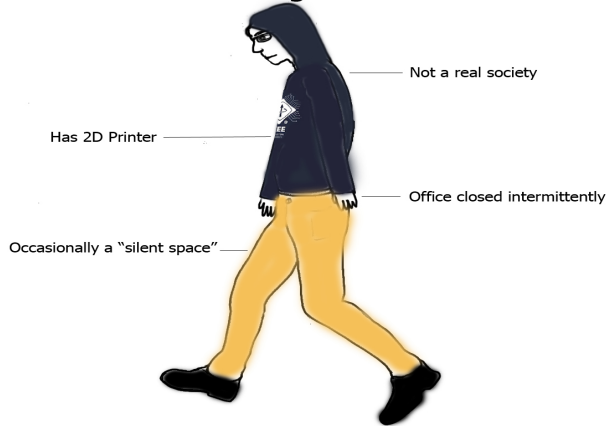
*Distractions by you!*

This month's theme:

*Meme  
Madness*

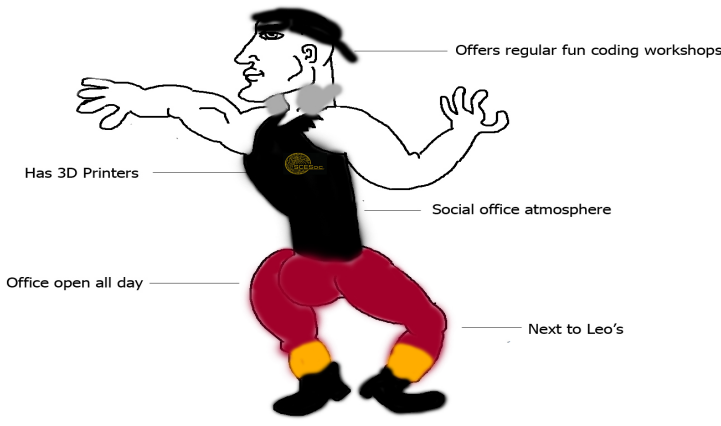
This month we asked C-Eng to send us their best homemade memes. Below are some of our favourites!

The Virgin IEEE



*Submitted by Daniel Shifman, MATH III*

The Chad SCESoc



*Submitted by Spencer Carlyle, AERO D III*

# WHOREOSCOPES

*By Daniel Haycocks-Tulli, ELEC III*



## ARIES

THIS IS THE MONTH THAT YOU LOSE THE KIND OF VIRGINITY THAT YOU DON'T WANT TO LOSE, BTW WHAT'S VIRGINITY ANYWAYS, I FORGET IN THE MIDST OF EXPERIENCING THE COMPLEXITIES OF LIFE IN A SOCIETY IN CURRENT YEAR.



## TAURUS

TODAY IS GOING TO BE A REAL HARD DAY YOU MIGHT WANT TO CONSIDER BRINGING EXTRA KLEENEX AND PUT ON SOME DBANGZ TO TRY AND DISTRACT YOURSELF FROM THE STRUGGLES OF STUDENT LIFE.



## GEMINI

ANIME TIDDIES ARE COOL, BUT YOU KNOW WHAT'S COOLER? PASSING YOUR DAMN CLASSES, YOU GOB; SO GO AND STUDY YOU UNEDUCATED CABBAGE.



## CANCER

JUST BETWEEN YOU AND ME I'M WRITING THIS AS A FORM OF PROCRASTINATING IN THE SAME WAY THAT YOU ARE READING IT AS A FORM OF PROCRASTINATING, HOWEVER; YOU SHOULD PROBABLY GET BACK TO WORK JUST LIKE I SHOULD ;)



## LEO

YOU ARE A LION JUST LIKE THE SIGN SAYS. YOU KNOW WHAT THAT MEANS RIGHT? IT MEANS YOU SHOULD RAAWR JUST LIKE ONE WHEN YOU CLIMAX DURING SEX TO CHANNEL THAT PRIMAL ENERGY. GIRLS LOVE IT, BOYS LOVE IT EVERYONE LOVES IT; LET OUT YOUR INNER LION.



## VIRGO

YOUR SIGN MIGHT CALL YOU A VIRGIN, BUT VIRGINITY IS A KIND OF ABSTRACT AND MEANINGLESS CONCEPT AND BESIDES TO ME YOU'RE A WINNER :) SO GET OUT THERE AND WIN THAT TEST OR WHATEVER, YOU KNOW.



## LIBRA

BUTTER, JUST FUCKING BUTTER.



## SCORPIO

YOU SHOULD PROBABLY START DOING SOME SQUATS BECAUSE WHEN GOD EMAILED ME WITH THE DAILY HOROSCOPE UPDATE IT SAID THAT THERE WAS A 10 TIMES MULTIPLIER ON EXPERIENCE TOWARDS LOOKING DUMMY THICC; SO SQUAT UNTIL YOUR CAKE IS LARGE ENOUGH TO OPEN A BAKERY.



## SAGITTARIUS

SAGITTARIUS LMAO MORE LIKE SWAGITTARIUS; YOU LOOKING MAD FUNKY FRESH MY G. YOU SHOULD PROBABLY HEAD ON DOWN TO VALUE VILLAGE TO GET A VINTAGE PIMP JACKET TO GET YOURSELF SOME EXTRA CLOUT.



## CAPRICORN

IF YOU BUY 3 WHITE AIRHEADS, 2 BLUE AIR HEADS, A GREEN AIRHEAD AND 4 RED AIRHEADS AND THEN YOU COMBINE AND TWIST THEM INTO ONE SUPER AIRHEAD THEN EAT IT; IT WILL GIVE YOU A + 10 INTELLIGENCE MODIFIER. THIS SHOULD BE APPROXIMATELY ENOUGH TO PASS ELEC II THE FIRST TIME.



## AQUARIUS

THE UNIVERSE AROUND YOU CONVERGES AS THE STARS ALIGN WITH THE PLANETS OR SOME SHIT AND ALL YOU GOT WAS THE LOUSY HOROSCOPE.



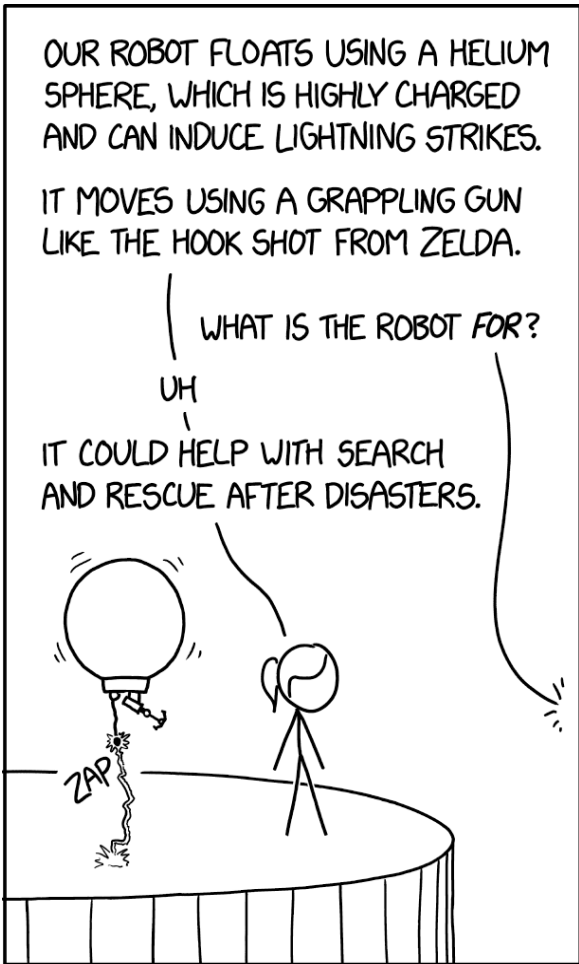
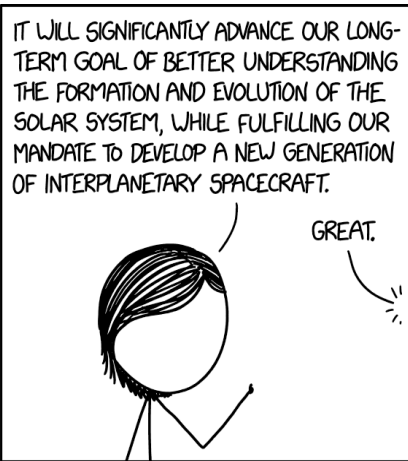
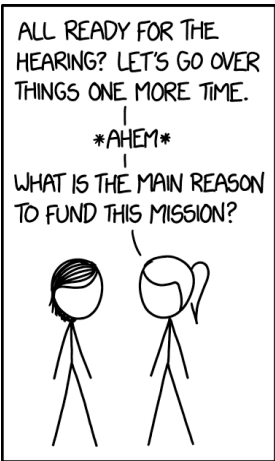
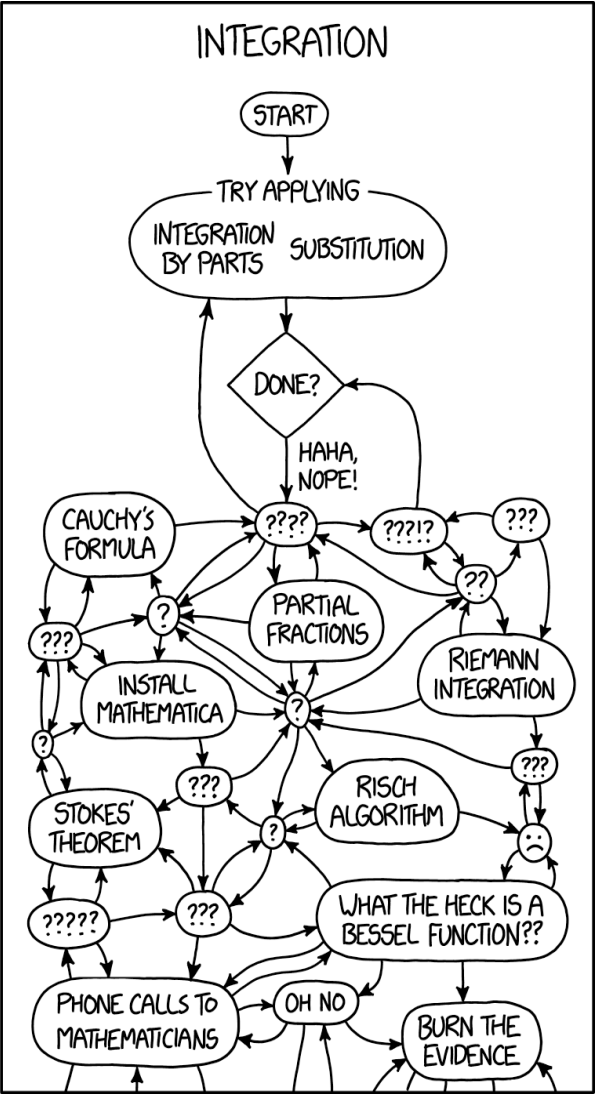
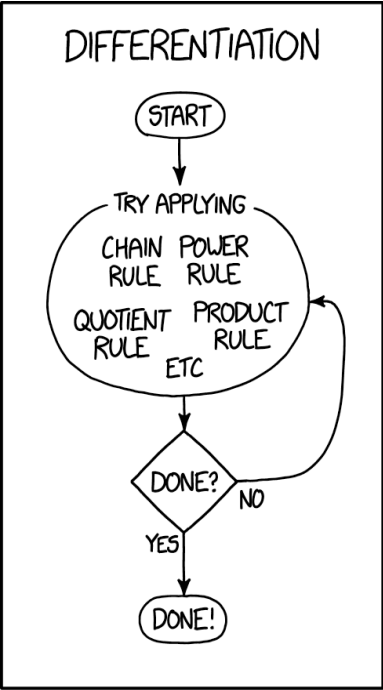
## PISCES

YOU WILL RECEIVE A MAGIC HARMONICA IN THE MAIL HERE ARE THE INSTRUCTIONS ON HOW TO USE IT: [HTTPS://BIT.LY/2TCKZE5](https://bit.ly/2TCKZE5)



# DISTRACTIONS

## WHO LET THE AERO D IN HERE?



"IT COULD HELP WITH SEARCH AND RESCUE" IS ENGINEER-SPEAK FOR "WE JUST REALIZED WE NEED A JUSTIFICATION FOR OUR COOL ROBOT."



VIDEO ORIENTATION	PROS	CONS
HORIZONTAL 	<ul style="list-style-type: none"><li>LOOKS NORMAL TO OLD PEOPLE.</li><li>FORMAT USED BY A CENTURY OF CINEMA</li></ul>	<ul style="list-style-type: none"><li>HUMANS ARE TALLER THAN THEY ARE WIDE</li><li>I'M NOT TURNING MY PHONE SIDWAYS</li></ul>
VERTICAL 	<ul style="list-style-type: none"><li>HOW MOST NORMAL PEOPLE SHOOT AND WATCH VIDEO NOW SO WE MAY AS WELL ACCEPT IT</li></ul>	<ul style="list-style-type: none"><li>HUMAN WORLD IS MOSTLY A HORIZONTAL PLANE</li></ul>
DIAGONAL 	<ul style="list-style-type: none"><li>BOLD AND DYNAMIC</li><li>EQUALLY ANNOYING TO ALL VIEWERS</li><li>GOOD COMPROMISE</li></ul>	<ul style="list-style-type: none"><li>NONE</li></ul>





# LAST CALL

## WHO RUN THE TIMES? GIRLS!

### THE IRON LADY CAROLINE LENARCIC - AERO C III -



**C-Eng Involvement:**  
Iron Times Editor-in-Chief  
C-Eng-C Sponsorship Director  
NEM Logistics Director  
C-Eng Musical Cast  
Volunteer (CMAS, IEEE, Leo's)

**Hailing from:** Ottawa, ON (Orleans gang)  
**Song that is the anthem of your life:**  
"Patience" by Bad Suns  
**If you weren't in engineering, what would you be pursuing?**  
Perhaps graphics design, or magazine editing. Regardless, I'd want to drop everything and move to LA.  
**Weirdest thing you've ever purchased:**  
A ticket to see The Emoji Movie in theatres.  
**Memory that you never want to forget:**  
When Glenn McRae personally apologized for roasting me in class.  
**Most private thing you're willing to admit:**  
Back in high school, memes made me an unironic fan of My Little Pony.  
**Most useless talent:**  
KenKen puzzles. They're like Sudoku but with arithmetic.  
**If you could have any super power, what would it be and why?**  
The ability to rewind time, not to affect change but to watch a historically accurate documentary whenever I want, wherever I am.  
**Gimme your smoothest pick-up line:**  
Are we two equal and opposite forces acting at a finite displacement from each other? Because I think we're having a couple moment.  
**If there is a god/creator of the universe and you could ask it one question, what would it be?**  
Have I been doing a good job so far?  
**Hit me with your best six-word horror story:**  
Breaking news: DOE announces Elec III.



### USES FOR THE CHARLATAN

- > Use it to wipe up jungle juice spills from Grove's kitchen floor.
- > Rip it to pieces as a form of stress relief.
- > Hold it up to shield yourself from those pesky April showers.
- > Make it into a folder for all your exam study notes.
- > Wallpaper 3300 block as an April Fool's prank.
- > Wrap gifts to thank the many wonderful C-Eng Musical directors.



> You could read it

### THE IRON LADY ELIZABETH WILSON - SOFT II -



**C-Eng Involvement:**  
CSES VP Publications 2018-2019  
CSES First Year Rep 2017-2018  
CSES Rube Goldberg Director  
C-Eng-C Organizer

**Hailing from:** Oro Medonte, Ontario  
**Song that is the anthem of your life:**  
Oh god this is a lot of pressure, um, Take On Me by A-ha has been my favourite for ages... So I guess that? Or one of the covers of Africa I have hoarded.  
**If you weren't in engineering, what would you be pursuing?**  
Probably psychology and then medicine, maybe some linguistics.  
**Weirdest thing you've ever purchased:**  
I'm too cheap to have an interesting answer oh no  
**Memory that you never want to forget:**  
I would prefer to forget Most Things.  
**Most private thing you're willing to admit:**  
I have an absurdly short tongue.  
**Most useless talent:**  
Bold of you to assume I have talents that aren't useless.  
**If you could have any super power, what would it be and why?**  
PSYCHOKINESIS bruh there's no limit to what you could do.  
**Gimme your smoothest pick-up line:**  
"Hell yeah I'm a dick, girl. I'm addicted to you." -Big Sean, 2013  
**If there is a god/creator of the universe and you could ask it one question, what would it be?**  
Probably for better answers to these questions rip  
**Hit me with your best six-word horror story:**  
"Tell me a bit about yourself."

### Editor-in-Chief

Caroline Lenarcic

### Special Thanks To:

The readers! This was, is, and always will be for you. Much love to you all.

### VP Publications

Elizabeth Wilson

### - Footnotes -

### Issue Made Possible By:

12 horoscopes provided by a new author! Exciting!  
11 pens in my overall pocket  
7 months of practice at this gig

### Last Words:

Y'all haven't seen the last of me *or* my words!



## HAVE A GREAT SUMMER!