



the carleton student engineering newspaper

THE IRON TIMES

Who Runs the World!

cses.carleton.ca/publications/theirontimes

September 2015



WELCOME

This is the IRON TIMES! (Pretty cool huh?)

The Iron Times is an engineering student run newspaper. And when I say student run, I mean student run. Everything is written, edited, and produced by students. SO that means that if you ever feel

like writing something you can get it published here! (Did I mention that writing for the Iron Times also gives you a stamp for your flight-suit?) Basically writing for the Iron Times is one of the absolute best things you can do here as an engineering student. (And I am totally not biased at all)

Who am I? Well, my name is Rebecca and I am a third year Arch-Eng student. I am also this year's Editor-in-Chief of this fantabulous paper. I am super excited for the year to start and even more excited

to see what kind of things you engineers can come up with.

So just to kick things off in your spare time, which will be short lived, go check out hellogiggles.com. They have a pretty interesting article full of interesting facts about the incoming firstyears. Like apparently you guys have never lived without Google, or had to lick a postage stamp. The things you learn...

This year's college freshman have never known a world without **Harry Potter** (and other crazy facts)

Find the article at hellogiggles.com

UNDER THE SURFACE



OCTranspo SURVIVAL TIPS
PAGE 3

CARLETON CHRONICLES #1
PAGE 5



MAKE YOUR OWN DEMOTIVATIONAL BANNER
PAGE 5

LET C-ENG FUNK YOU UP
PAGE 9

FIND OUT WHAT'S IN STORE FOR THE MUSICAL THIS YEAR
PAGE 17

AND MUCH MORE!!!



WARNING: This publication may contain offensive material, and should not be read by anyone who is easily offended. All opinions expressed within are solely those of the writers and contributors, and do not reflect the views of the Carleton Student Engineering Society. This paper is 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: irontimes@cses.carleton.ca



EDITORIALS

The Iron Times, where the most common form of writing is listing things

From the Desk of the Editor

This is *Your* Chance to Be The New You



Google

how to write and editorial



Web

News

Images

Videos

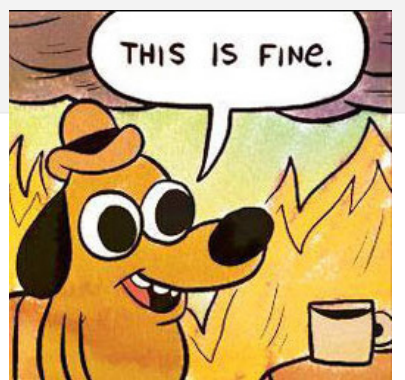
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Rebecca "Swallow" Feddema
- Arch Eng III -



argument for being fake or not being yourself, but really this is your life, you get to choose who you are.

So apparently editorials are a thing... that I have to do... every issue. Well here goes nothing.

First as a bit of an introduction: Hi! I'm Rebecca. I am a third year Arch Eng student and residence fellow here at Carleton. I am also this year's Editor in Chief of the Iron Times, our fantastical engineering newspaper! (Yes the engineers have a newspaper. Yes we are able to write – somewhat. No I do not possess any skills in the written arts, but I know how to use a spell check, so that's a start.)

As a residence fellow I seem to have developed the tendency to want success and happiness and community for all. And since I really have no idea how to write an editorial, AND since this issue will be going into all the frosh kits of our new engineering students, I'm just going to take this opportunity to give y'all a bit of a send off, greeting, address, encouragement, advice thing.

This is a magical time where you get to chose who you are going to be. I'm talking to everyone, whether you are entering your first year or your seventh year. This September you get to make a choice.

Everyday you get to make a choice of who you are going to be.

Maybe you are gonna try being a morning person. Believe me, you may have been able to get up at 7 every morning for high school, but those 8:30 classes can easily start to feel way to early to bother attending.

Maybe you're going to be less messy. From experience this works. I lied on my residence placement survey and said that I preferred neat and clean specifically so that I would be placed with someone clean who would force me to keep my side of the room clean out of politeness (and when I say I did this, I mean my mom made me) but it worked.

Maybe you're gonna try being more positive. Not that there is anything particularly wrong with being a downer, speaking from experience my friends and I have a particular brand of sadistic nature about us. But maybe you're gonna start making a thankfulness journal or start performing random acts of kindness! Btw I am a great recipient of RAKs especially when they come in the forms of food and/or Iron Times articles!!

Or maybe you're going to become super involved! Well you've come to the right university. Even if you couldn't do EngFrosh there are still a truck load of ways for you to become involved especially in the engineering faculty. Or you know get to know your res a bit more. Actually go to events and meet your neighbours. Talk to your res fellow!!! (Speaking from experience, we definitely want to get to know you!).

Maybe you're just going to try and survive first year. A nobler cause I have not heard of. First year can be tough.

Basically what I am saying is that you get to make the descision, hence all the maybes. And the great part is you don't have to choose just one. you could take your favourite aspects and blend them all together.

I knew someone who talked in a fake british accent for her first semester in University. Nobody minded. This is your fresh slate, your chance to make yourself someone who you have always wanted to be. And sure there is an

I knew someone who would go home and spend a minimum of one hour devoted to each course he was taking that semester, even if there were no project to complete or papers to write, he would just study that subject for an hour. Crazy, I know.

I know someone who decided they were going to get into Dr. Who and then proceeded to watch all 7 (8) series of new who in one semester, while still aceing all of their courses, and working as a residence fellow, and being involved enough to get a flightsuit.

Ok, that last one was me, and I definitely would not recommend following in my footsteps if you want to remain sane. But what I'm saying is you have the choice!

This semester I'm going to see where this paper takes me and I might try and regain my sanity, I think I left it somewhere in my first ECOR 1010 lecture, give me a shout if you see it.

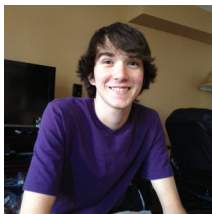
Come on Carleton engineers! Take this year by the horns and show em all who's boss!

EDITORIALS

We will survive!

OC Transpo

Survival Tips



Ryan "Hell Boy" Waddell
- Arch Eng III -

Welcome to Carleton! The campus surrounded by the beautiful Rideau River, and magnificent Rideau Canal. The place where you can find groundhogs, squirrels, chipmunks, and Ravens galore! The place where you look around and can see the luxurious transit system that Ottawa has to offer. Its stretch vehiclular devices hold large amounts of people, with high quality metal seats topped with thin cushions that have no effect on comfort whatsoever. These elegant white and red vessels can be seen dressed in advertisements, mud, grease, and in the winter months they tend to sport grungy slush as well. This service, OC Transpo, is the cause for my dreams at night...not dreams... nightmares.

With living in the south Ottawa region with no car, I have a necessity to use public transit. This will be my third year busing between 45 minutes to an hour and 15 minutes each way to and from campus, so you can basically call me a professional at commuting by bus. Every time I step on to those vehicles I feel a mood swing hit me immedi-

ately. I've come up with some ways to keep my sanity with these trips and have been told of some from others, so I thought I would share with you!

Here are my OC Transpo Survival Tips:

-Make a playlist with relaxing music. "Without music, life would be an error" (Fredrich Nietzsche). OC Transpo is an error, so I guess it couldn't hurt! But really, music tends to calm me down so it is the perfect thing to distract me from my pure hatred of my current situation.

-Take a nap. This is my favourite, but takes time before being possible. I've taken the same route for a long time now, so my internal clock knows when to wake myself up so I can hop off that 99 and catch the Otrain at Greenboro. It is VERY easy to sleep past your stop and end up having to get off at Billings for the 111 Carleton...not fun. To prevent this, time your route a few times, and then start setting an alarm on your phone (wearing headphones) for about 5-10 minutes before your stop.

-Read a book. This unfortunately doesn't work for me as I tend to get motion sick, but if you can do it I've heard it works wonders! Just pay attention to when your stop is!

-Find a friend to bus with. BUS BUDDIES ARE BETTER THAN THUNDER BUDDIES!!! Nothing better than having a casual conversation with someone whom you enjoy the company of.



cheaper alternative to sleeping in and buying Tim Horton's, and it doesn't take too long (5-10 minutes max. ie. MORE SLEEP).

-Write an article for the Iron Times. I'm pretty sure Rebecca would have shot me if I didn't put this one in. But seriously, we all have a note app on our phones, so when you have the time why not write one!

-Play "The ground is lava" (#VolcanicDistrict). Never done this one, but it seems like fun! Don't know if it's such a great idea though, so don't take it too seriously...

Well, that's all I can think of, and I have nothing more to rant about, so I guess I'm done! Hope this helps everyone! Happy busing!

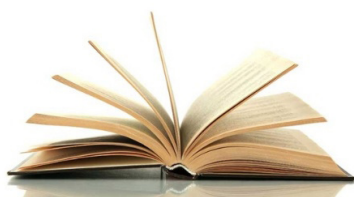
-Catch up on a TV series. If you have a phone with a big enough screen, and either have the media files (which you got by the most legal of ways, of course), or Netflix with a whole lot of data, then you're set!

-Start watching a new TV series when you're all caught up. See above.

-Learn to knit. Whatever floats your boat.

-Study (...sure...) Refer to "Read a book" regarding motion sickness. I have however gotten away with reading cue cards and feeling fine. This works very well when you're memorizing those integrals in first year Calculus! Make sure you actually understand those integrals, otherwise second semester math is much more difficult!

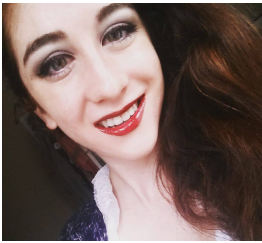
-Eat breakfast. MY DAILY ROUTINE. Bagels, toast, fruit, yogurt, basically anything but cereal. This is a much





COLUMNS

So cheap you feel fine spending twice as much as you planned



Jasmine “404” Shaw
- BMED IV -

Hello new and returning C-Eng-ers! I’m excited to welcome you to another (or your first) year here at Carleton. Known for its aerospace fanatics and innovative engineering programs alike, you are sure to find your niche within the engineering community – and that is where the Carleton Student Engineering Society (CSES) comes into play!

CSES has been around for over 35 years, and are an established and crucial key to the continuing engineering culture at Carleton. CSES is the one-stop-shop for your success and involvement throughout your undergraduate degree: be it academic, social, or professional needs, we offer a plethora of services that I urge you to take advantage of.

Academic Services:

Some of the academic services CSES offers includes the infamous Textbook Trade – a program

where you can sell your textbooks to make some extra cash; and in return, purchase textbooks for great prices! Also based out of our office is a Textbook Library, where you can rent textbooks free of charge if you’re on a tight budget. Another one of our most popular academic services is our Exam Library – this is an online database where you can find old exams for your courses; they’re a great study tool! Last but not least, if you aren’t satisfied with the performance of your professor, or the way a course is taught, CSES offers Academic Advocacy – just shoot concerns@cses.carleton.ca an email and we’ll resolve it!

Social Services:

CSES runs a multitude of fun and inclusive events throughout the academic year. In September, you can look forward to EngBowl, a fun-filled day at Brewer Park with lots of sports (athletics). You can also show your engineering and Ravens pride by attending Homecoming – you’ll have the opportunity to dye yourself a beautiful shade of purple! October features events such as a comedy night at Yuk Yuks, and a haunted walk at Skreamers. In November, you can mo-out and help raise money for the CSES Movember campaign.

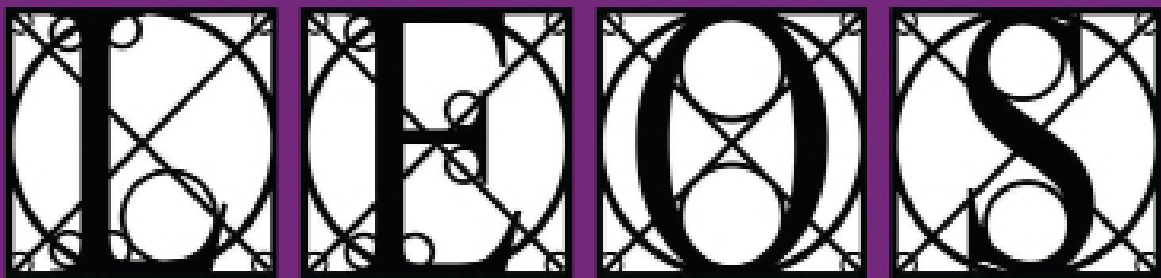
While you’re rocking that mo, you should come out to the engineering semi-formal, Whirlwind. We’re also bringing you a 24-hour charity LAN party, EngFrosh Reunion, and a Volunteer Appreciation Party if you’ve been involved with CSES! In January, you can attend the Ontario Engineering Competition if you qualified through the Carleton Engineering Competition. February is jam-packed with the mental health awareness/de-stress campaign, February Feel Good Week, and another comedy night. March features 2 events you do not want to miss: the engineering formal banquet and graduates send-off, Reflections, and National Engineering Week, a week-long celebration of everything awesome that is engineering! If I haven’t convinced you that CSES does a lot for you, there’s more...

Professional Services:

If you’re interested in developing networking, leadership, and communication skills, you should apply to attend a conference! CSES is affiliated with the provincial and national engineering societies (ESSCO and CFES, respectively), and each year we send dozens of delegates to a variety

of professional conferences. We also offer over \$30,000 of funding to engineering student groups – if you’re looking to work on a cool project, this is a fantastic opportunity. Last but not least, we sponsor a variety of networking events hosted by stream societies such as the SREE Society, the Mechanical and Aerospace Society, and IEEE.

So, in a (rather large) nutshell, that’s CSES! We’re here to serve C-Eng, so make sure that you utilize the resources available to you, and make the most out of your time here at Carleton (trust me, it passes way too quickly...).



[CANTEEN & LOUNGE]

Cheapest food on campus
3342 Mackenzie
Sign up to be
a volunteer



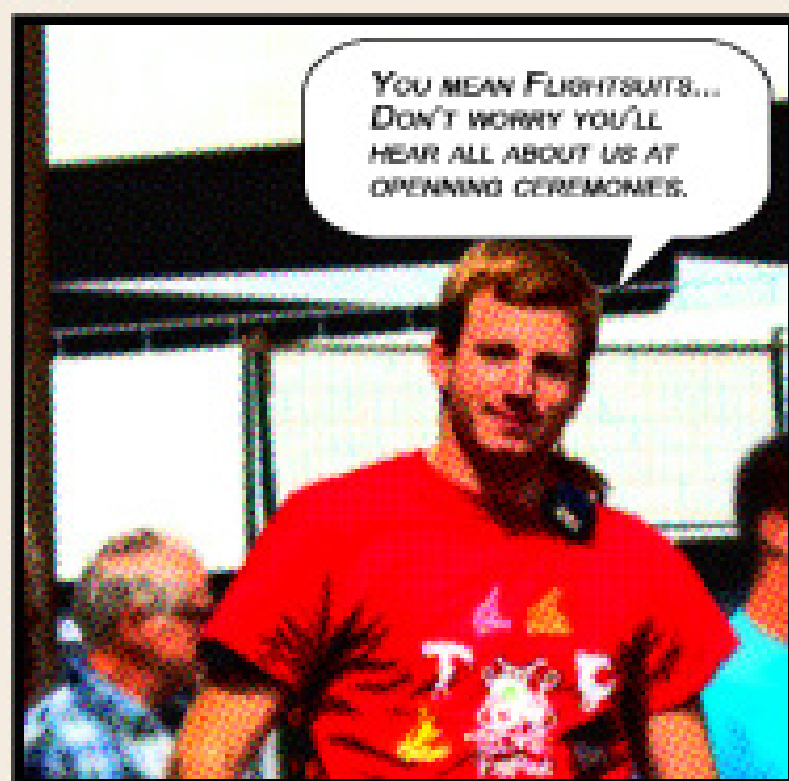
Coffee	\$1.00
Tea	\$1.00
Muffin	\$1.00
Hot Chocolate	\$1.00
Chocolate Milk	\$1.75
Sandwiches	\$4.75
Naan	\$4.00
Samosas	\$4.25
Pizza Pops	\$2.00
Instant Noodles	\$1.00
Chocolate Bars	\$1.25
Protein Bars	\$1.50
Chips	\$1.75
Bottle of Pop	\$1.50
Can of Pop	\$0.75
Vitamin Water	\$2.00

COLUMNS

Don Jackson: god of photography and digital manipulation

CARLETON CHRONICLES #1

DON G.L. JACKSON



One day this will all make sense



EDITORIALS

Motivation is too mainstream



Zoe Crowston
- Arch-Eng IV -

Demotivational Banner DIY

So the new school year is upon us; many people are either just moved into residence or whatever off-campus options are out there. If your walls are all bare and you need something to keep you from going crazy, this is the article for you. *Distant unenthusiastic cheering* A demotivational banner will always remind you that the world sucks and no one gives a fuck if you're happy, as long as you submit assignments on time. So this might make you

Steps: 1.) Figure out what you want to say. I made one that says "You Suck", but my roommates said it was mean, so I made another that says "Meh.". Other suggestions would be "Why Bother?", "Just do it. Or not", or "Whatever". I wouldn't recommend picking something with too many words, if you keep it simple your life will be so

2.) Cut your felt into the shape you want. For one of the banners I wanted a point at the bottom, so I used a pen and ruler to mark out the shape on the back of the felt before cutting it out. For the other one, I used a pie pan and traced it to get the curve, because I knew there wasn't a chance in hell I could free hand that shit.

3.) For this step you have two options. You can free-hand paint the words on, or you can print what you want on a piece of cardboard, cut that out and use it as a stencil. If you're going the stencil route, you can use spray paint (which is faster) or you can use a brush and dab the paint on. Whatever method works best for the materials you have on hand. I would recommend putting a piece of cardboard behind your work, because the paint might leak through it and



Materials:

- A piece of felt in the colour of your choice
- Paint and paint brush (or spray paint)
- Cardboard
- A wooden dowel (or a stick)
- Yarn
- Needle and Thread

Also:
-Scissors
-Ruler
-Pen



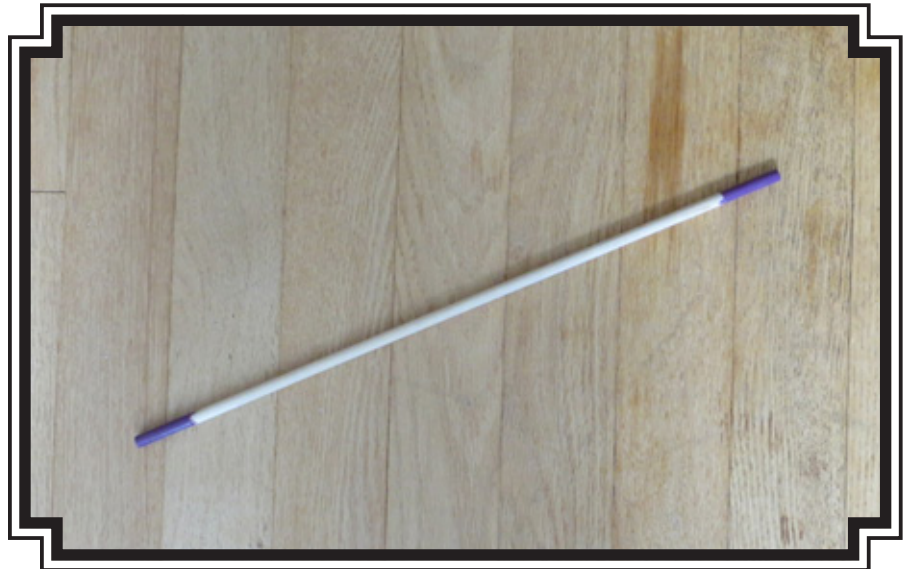
EDITORIALS

Other ideas include: I'll do it tomorrow, who needs sleep, and whatever



4.) As you wait for your banner to dry, you can cut your dowel down to the right size. I would recommend it to be 3-6 cm longer than the width of your banner. To cut it, score the wood with your scissors and snap, and the dowel will break to the right size. I spray painted the ends of one of the dowels but it leaked in my wood a bit more than I was expecting, so I would recommend painting it with a brush and probably letting it dry more than I did.

5.) Sew the felt together to make a loop for your dowel to go through. If you're not really one for sewing you can also just glue it. For one banner, I sewed the loop and sewed around the banner in a couple different colours to make it pretty. For the "Meh", I used some hemming tape from IKEA, but hot glue will work.



6.) Tie the yarn to the dowels on each side of the banner.



7.) Hang it up and enjoy!!
Note: If you live in rez, use tape or one of those removable hooks to attach your banner. I don't want you to be getting in trouble for putting nails in your walls, and also your walls are most likely concrete and that shit does not lend itself to being





COLUMNS

If they invented cement their dating advice must be sound



- DATING WHEN GREEK -



Julia Philosophus
- ACSE III -

Greetings fellow engineering students and iron times enthusiasts! My name is Julia and I'm just starting my third year of arch eng but I've realised that I still don't have my life together yet. In fact, there are still many subjects that continue to baffle me despite my increasing number of years on this planet.

Perhaps the most prominent gap in my knowledge is the ability to understand my fellow humans. This isn't helped by the fact that I am a hermit and tend to avoid unnecessary social interactions.

I have had a love for the iron times since my first year at Carleton and have contemplated writing a column for some time now but could never decide on a topic. Most people write about topics they know well but I decided to do something different. In the coming months I'll be writing about the things I DON'T understand about relationships and people in general. I hope at least some of you can relate but if not, I hope you at least enjoy a hermit's view on relationships.

I'm single. I have been for a while. In fact, I'm perma-single. Sisters before misters, fries before guys and everything. You may think I'm exaggerating but the closest I've gotten to a committed relationship is my decade long obsession with the Harry Potter book series (and I'm pretty sure that doesn't count). When you've been single as long as I have, the whole concept of dating becomes one big mess of confusion. There's so many things to consider when you're dating that sometimes I wonder if it's even worth the effort or if I should just accept my life's calling and become a crazy cat lady now.

I don't have the time or energy to figure out what other people are thinking of me and when I try, I often guess wrong. It's for this reason that I believe I would be much better suited to dating in Ancient Greece than in today's society. I am an avid Greek folklore dancer and through that I've learned a little about the old Greek courting customs.

It all starts at a festival or gathering. Picture it, it's a warm Greek evening and the entire village has gathered in the square. A group of musicians ready their instruments for an evening of merriment. A strapping young man spots the girl of his dreams so he goes and talks to her father.

They discuss very important matters like who the boy's family is and how many goats he owns.

If his answers are acceptable, he can ask the girl to dance. If she likes him, they'll share a lovely partner dance and be married in a week. If not, she has the chance to dance horribly and scare him off before their marriage is arranged. Quick and straightforward.

I mean, I'm not too keen on the idea of my dad pimping me out for goats but other than that it's a pretty solid system. Both parties know immediately if the other person is interested and they can avoid the guesswork all together. Not interested in a serious relationship? The solution is

It's not that much Crazier than Tinder.

simple, avoid the dance floor when a partner dance starts.

Don't even get me started on what a time saved this is. As a future engineer I am drawn to the idea of efficiency and what would be more efficient in the field of dating than a single dance deciding your future? There's no thinking of date activities, waiting for texts or even the financial burden of dating to prevent you from finding true, arranged, love.

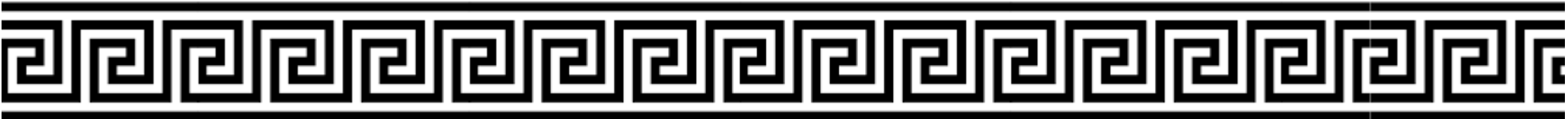


And while we're on the topic of finances, imagine the savings! Who wants to pay for dinners, movies and all kinds of nights out when you could give ten bucks to a musician to play a song and be done with it?

This may seem a little crazy but if you think about it, it's not that much crazier than Tinder. With Tinder however,

there's still a ton of guesswork that goes into analyzing your matches and everyone's profiles. Plus there's the added bonus of this interaction being face to face which eliminates the potential for inaccurate photos.

It's a fast passed, high risk, high reward version of love! No, in my opinion the Greeks had it right but of course there's probably a reason I'm still single.



COLUMNS

See Gabe is actually productive in boring classes

C-Eng Funk: An Uptown Funk Parody



Gabriel Wong
- AERO III -



(Doh. Bernoulli Bernoulli Ber-doh)x4

This hit that thermo, that race car runs
without black gold
This one's for them MECH Eng, them ARCH Eng not
Architects

Flightsuits, CMAS, headin' on o'er to Leo's
Gotta bus out from St. Laurent
Got a lab to write, too early

It's too hot (hot damn!)
Too much Coulombs in that circuit man
Too hot (hot damn!)
Too much M-C-times delta T
Too hot (hot damn!)
BIOMED ain't science kids
Too hot (hot damn!)
'Gonna make all dat money, break it down

SREEs hit your hallelujahs
SOFTs hit your hallelujahs
CIVEs hit your hallelujahs
Cause C-Eng funk 'gon give it to ya (x3)
Saturday night we ain't doin' labs
Don't believe me just watch. Come on!

(Doh. Bernoulli, Bernoulli hoo-ah!)
Don't believe me just watch!
(Boh. Bernoulli, Bernoulli hoo-hah!)
Don't believe me just watch! (x4)

Stop! Integrate it

Fill my cup pour some coffee in it
Take a sip, write the test
Fourier? Do your best!

Head to Solids, Circuits,
Minto and Mackenzie
If we show up, we gon'
show up
And listen to a long dry
lecture

Yeah it's too hot (hot
damn!)

Got an AERO Eng making rocket ships
Too hot (hot damn!)
Got ELEC's pokin' 'em 'gator clips
Too hot (hot damn!)
Engineers, we're Number 1
Too hot (hot damn!)
There's an ENVE with some waste, break it down

COMMs hit your hallelujahs
PHYS hit your hallelujahs
SYSCs hit your hallelujahs
Cause C-Eng funk 'gon give it to ya (x3)
Saturday night we ain't doin' labs

Don't believe me just watch. Come on!
(Doh. Bernoulli, Bernoulli hoo-ah!)
Don't believe me just watch!
(Boh. Bernoulli, Bernoulli hoo-hah!)
Don't believe me just watch! (x4)

Hey, hey, hey, ow!

Before we leave
Imma tell y'all a little something

C-Eng funk you up. C-Eng funk you up (x4)

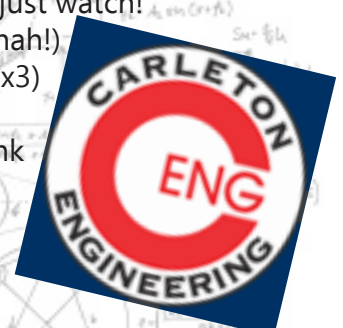
Come on math, just solve it
If it's thermo then burn it
Make circuits, don't short it
If it's fluids flow with it

Come on math, just solve it
If it's thermo then burn it
Well it's Saturday night we ain't doin' labs

Don't believe me just watch. Come on!
(Doh. Bernoulli, Bernoulli hoo-ah!)
Don't believe me just watch!

(Boh. Bernoulli, Bernoulli hoo-hah!)
Don't believe me just watch! (x3)

C-Eng, funk you up! C-Eng funk
you up! (x8)



Hope y'all enjoy it!

Hey Carleton Engineering
Students!

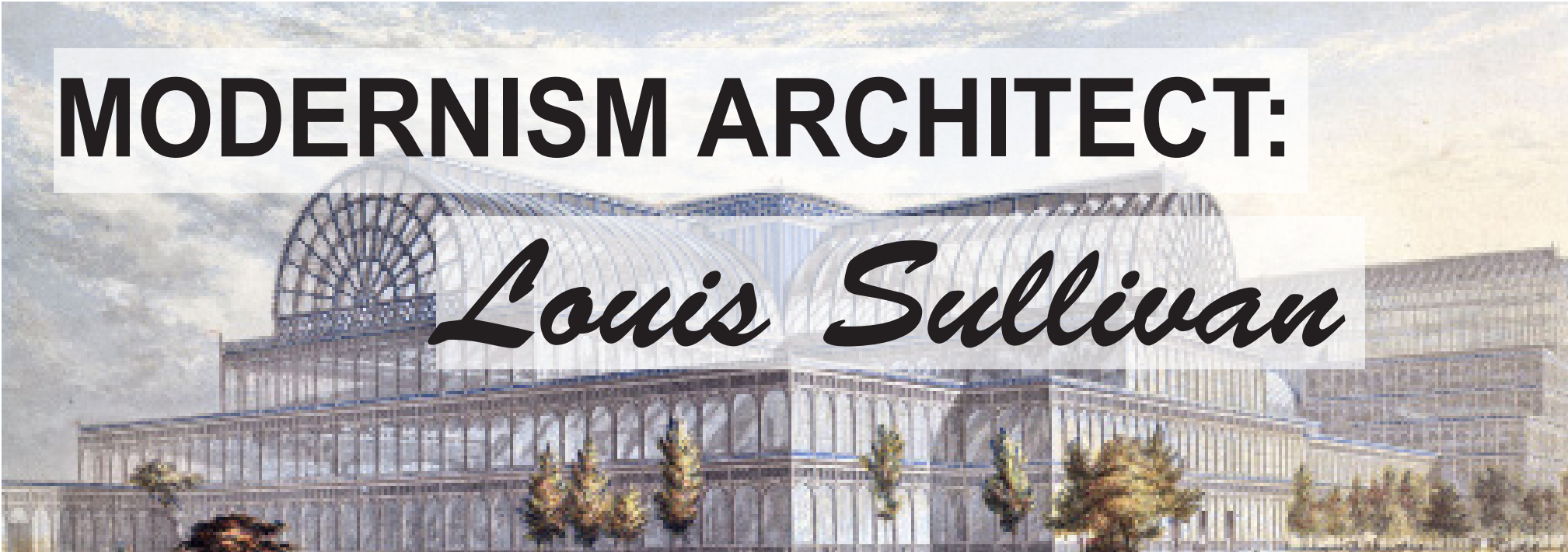
My name's Gabriel and
I am entering my third year of
Mechanical Engineering.
I'm writing these parodies be-
cause they're simply fun to read
and sing either in your head,
around the house, on your resi-
dence floor, or in the middle of
the library (not recommended by
the way).

The parodies I'll be writing
all have to do with engineering,
science, or math. We all know
how difficult engineering can be,
so why not conquer those mid-
term blues with a bit of engineer-
ing humour?



COLUMNS

See you can actually learn things from this paper



Holly Parrinello
- ARCH IV -

Modernism is arguably the most subjective style of architecture. Though the roots of the style are debated by those who study modernist structures, a starting point to look at modernism is Joseph Paxton's Crystal palace, constructed in 1850 for the Great International Exhibition in England. This massive iron and glass structure housed the Exhibition, and arguably signalled a shift in architecture. Up until around this time, architecture was largely cyclical, with architects creating variations on Classical and Gothic architecture depending on the time period. Though the Crystal Palace included stylistic elements that alluded to Gothic and Classical roots, it was an inherently modern building. This is, however, not to say that every modernist building has the same stylistic characteristics as the Crystal Palace. Each architect who considered themselves to be modernist had their own take on the style, because they wanted to create something new, which would be functional for the modern age. Because of this, one is able to understand modernism through the eyes of the individual architect. Louis Sullivan, whose work contributed to a sub-style within modernism called the Chicago School, is

considered by many to be the father of modernism, and, naturally, the first architect in this series.

Louis Sullivan was born in 1856 in Boston, Massachusetts. During his childhood, he experienced a deep connection with nature, and that connection permeated through to the ornamentation of his buildings. He received a mixed architectural education, studying at the Massachusetts Institute of Technology (MIT), and the Ecole des Beaux-Arts in France, both for only a year. At MIT, Sullivan received an education based in the Gothic style, and at the Ecole des Beaux-Arts, mainly a Classical education. He also studied under William le Baron Jenney, a pioneer in steel frame construction. It was not until Sullivan met the architect and engineer Dankmar Adler where his notable work began.

When they began working together in 1880, the work of Dankmar Adler and Louis Sullivan were preoccupied with the demands of the city, which included small office buildings, warehouses, and department stores. The early buildings were designed before the invention of elevators, and were therefore limited to six floors, the structure was either steel, masonry, or a combination of the two, which was also expressed on the facade, and offered a Classical approach to facade division, clearly dividing the base, middle, and top. Though these traits may seem unimpressive or uninspiring, they are what led to the definition of the Chicago School.

The Chicago School can be

characterized by the primarily commercial architecture emerging out of Chicago in the 1880s and 1890s. Many of the buildings designed by architects in this sub-style on early modernism had similar materiality and stylistic expression. While a Chicago School could have varying ornamentation, the vocabulary of both the construction and ornamentation was simple if there was any, and, most importantly, non-historical. The motifs, especially those used by Louis Sullivan, did not reference Classical or Gothic architecture explicitly, but derived from nature. Because of the Great Fire Chicago experienced in 1871, all of the steel frame buildings built had some form of fire protection, either through fire-proof tile, steel members encased in masonry or concrete (which is still a common practice today), or through some other means. Chicago School buildings also expressed their

structure and materiality on the exterior, in keeping with Sullivan's famous belief that form should follow function. The division of structure by thinner, less ornamented columns drew attention to the fact that the buildings were not masonry alone, but something new, and ultimately modern. This expression of structure and form continued throughout the style of modernism, with architects like Ludwig Mies van der Rohe drawing attention to the fire-proofed and encased steel structure of his buildings by placing I-beams on the exterior where the actual structure held up the building. And, in keeping with the aesthetics of modernism, each architect within the Chicago School had their definitive interpretation of the style, and there many derivatives of the style.

Adler and Sullivan's fame began with the Auditorium Building in Chicago, a derivative of the Chi-



COLUMNS

Mmm yes, red brick is the least imposing



cago School style. Though keeping with Sullivan's statement that form follows function, this building was different because it featured ornament that was historically based. Built in 1886 on half a block of the Chicago grid, the modern opera house also housed eleven storeys of hotel accommodation and offices. The opera house was located in the centre of the building, following the main function, and is flanked by the hotel and offices.

The Wainwright Building ... arguably his greatest contribution to the Chicago school.

The opera house was state of the art, attesting to Adler's engineering imagination. He met demands of variable capacity with ceiling panels and vertical screens that sealed off parts of the house, without compromising acoustics. The architects used a steel truss system in order to support the vast open spaces of not only the auditorium, but for the lobbies of the hotel and the office space. The ornamentation of the Auditorium Building in Chicago does reference historical motifs, perhaps making reference to opera house vocabulary, which is traditionally very ornate and rich decoration. Sullivan however, unlike his contemporaries, varied the cladding to break up the height and mass of the building, and to define spatially the interior on the exterior. The ornamentation is free flowing and the motifs connect with one another. For example, the colonnade of the hotel veranda is echoed by motifs of the tower, where Adler kept his office, and in the band of decoration around the arched win-

dows of the interior. His ornamentation breaks up the facade of this massive multiuse building, and the change in materiality clearly defines the facade, and alludes to the function on the interior.

Though the Auditorium Building made them famous, the finest Chicago School example of Sullivan's work is the Wainwright Building, built in 1890-91 in St. Louis, Missouri. It was Sullivan's first commission where the entire

structure was of iron and steel, his greatest attempt at giving a definitive form to the multiuse office building, and his first true skyscraper. The standard technical elements of the Chicago School are all present, including fireproofing, a riveted and braced steel frame, skylights on the ground floor, and reinforced concrete footings. The ground floor is as open as possible, but yet the structure is still very clearly defined through the columns of the envelope. Above the base of large, inviting windows, identical stories rise, topped by an attic where mechanical systems for the building are stored. To emphasize the potential aesthetic quality of the height of the building, he created a series of pier-like bands that give the building vertical thrust on the elevations facing the street. He created a clearly defined and strong base, and made the upper storeys feel lighter with the controlled ornament of the recessed panels and the strong verticality of the piers. Because the

building is less ornamented than others by Sullivan, the building can feel a bit flat and plastic. The red brick cladding attempts to give texture to the building make it seem less imposing. Though not located in Chicago where Sullivan practiced, it arguably his greatest contribution to the Chicago school.

While he is not credited with the invention of the skyscraper, Sullivan is credited with the design of an architectural canon of the modern skyscraper. With the articulation of the structure, the opening up of the ground floor,



and the controlled and non-historical ornament of his most notable work, Louis Sullivan inspired many modernist architects to continue this tradition. The father of modernism succeeded in using all of the characteristics of the Chicago School, and developing his own as well, many of which we are able to see in the commercial districts across North America, and many conventions we still use today.

CSES
Textbook Trade

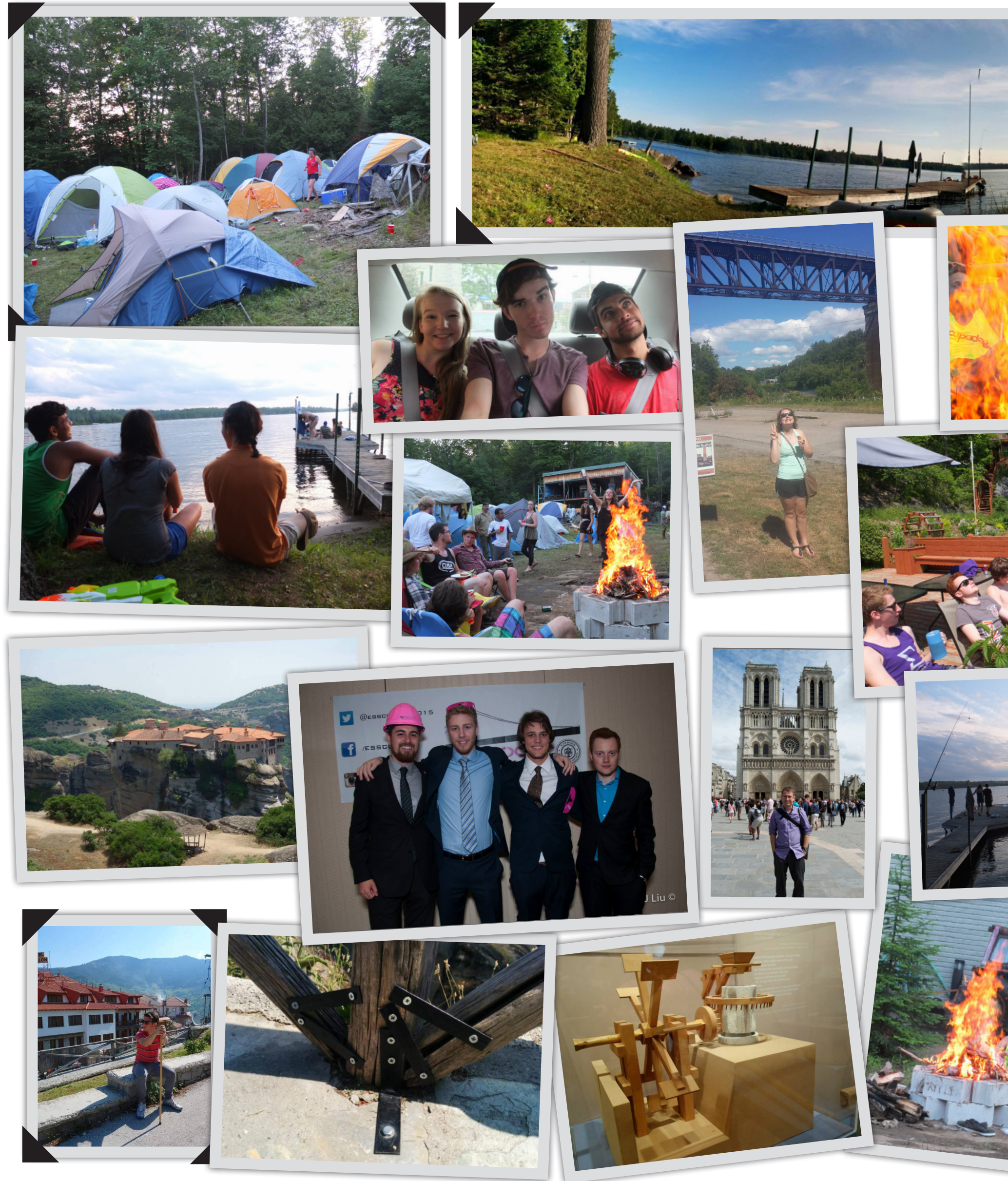
Coming this September to an office near you!

Owning textbooks: makes you feel like you're putting in effort



GALLERY

The hall of shame for the photogenic engineers



GALLERY

Engineers sure know how to stand in front of things



These are the people incharge of CSES

WHICH WHILL YOU CHOOSE!?

CSCE

Canadian Society for Civil Engineering Carleton Chapter
<http://www.csce.engsoc.carleton.ca/>
3336 Mackenzie Building
carleton.csce@gmail.com

WISE

Women In Science
<http://people.scs.carleton.ca/~wise/>
5270 Herzberg Building
wise@carleton.ca

CSCS

Carleton Students Communications Engineering Society
<http://cscs.engsoc.org/home.html>
communications@cses.carleton.ca

CMAS

Carleton Mechanical and Aerospace Engineering
<http://cmas.carleton.ca/>
3397 Mackenzie Building

IEEE

Institute of Electrical and Electronics Engineers
<http://ieee.carleton.ca/>
4238 Mackenzie Building

CLUBS AND SOCIETIES

Eng Phys

Carleton Engineering Physics Society
carleton.ceps@gmail.com

SREE

Sustainable and Renewable Energy Engineering Society
<http://www.sree-society.engsoc.com/>
president@sree-society.ca

Eng musical

Carleton Engineering Musical
<http://cengmusical.com/>
carletonengineeringmusical@gmail.com

CEWB

Carleton Engineers Without Borders
<http://carleton.ewb.ca/>
Carleton@ewb.com

CUBES

Carleton University Biomedical Engineering Society
<http://biomed.engsoc.org/>
cubiomed@gmail.com

Archi- tects Asso-

Azrieli Architecture Students Association
<https://archiblog22.wordpress.com/>
carleton.blog22@gmail.com

CURC

Carleton University Robotics Club
<http://carletonrobotics.com/>
info@carletonrobotics.com

ND SOCIETIES

SEEDS

Society of Environmental Engineering,
Development, management and Science
<https://seedsottawa.wordpress.com/>
3432 Mackenzie Building
info@seedsottawa.ca

SAE formu-

Ravens Racing
<http://cufsae.wix.com/cufsae>
3149 and 2332 Mackenzie Building
fsaecarleton@gmail.com

JK, YOU CAN
CHOOSE THEM ALL!



REPORTS

Now you just need to learn how to sew.



Engineering Student Societies' Council of Ontario

Presidents Message

Hello students of Ontario engineering schools! I am Jake Lipohar, the President of the Engineering Student Societies' Council of Ontario for the 2015-2016 school year. This role places me as the leader and voice of ESSCO, an organization that represents the collective ideals of the 14 member societies to government, industry professionals and external organizations.

ESSCO was created in 1994* as a response to the student's lack of a voice in their education and how universities prepared them for industry. Through a four member executive and 14 member council, we work alongside Professional Engineers Ontario, Ontario Society of Professional Engineers and the Canadian Federation of Engineering Students to improve your educational experience and make Ontario's engineering graduates the best in the country (and one day, the world!)

An engineering degree will teach you problem solving, resourcefulness and innovation. To improve on these aspects, ESSCO is starting a Charity Fund geared towards sponsoring conferences that connect students together, and university teams that showcase the engineering spirit. Design teams from each school will be able to apply for access to this fund, and corporate sponsors will be rewarded for their charitable donations. We hope to accomplish this over the next couple of years!

As well, ESSCO wants to understand what the Ontario engineering student experiences on a daily basis. Through a carefully crafted survey, we expect to produce meaningful data that will be shared with the community at large in hopes of increasing the quality of our education and the livelihood of our classmates.

I am honoured and excited to be in this position. With the adoption of our new Strategic Plan, ESSCO has a clear vision of what we want to accomplish over the next five years. We are in a great place to make effective changes that can strongly affect students across the province. I sincerely look forward to what we may soon accomplish.

Kind regards,

Jake Lipohar
President
Engineering Student Societies' Council of Ontario
www.essco.ca



Something new is coming to the Carleton engineering community this year!



The Patch Shop is making its debut on the flightsuit patches market. The Patch Shop is the cheapest place to get patches for your flightsuit and it is conveniently located on campus! We carry everything from Star Wars to cute animals – there's something for everyone! Run by the dynamic duo of Brittany Roberts and Miriam Rutledge, The Patch Shop is sure to be the next big thing in engineering at Carleton. Even if you don't have a flightsuit (yet) you should still check out our stock. You may find something you really like!

Okay, everyone.

Here's how you order your new bundle of patches:

-  Go to our website at www.thepatchshop.tictail.com
-  Browse our stock using the categorized lists on the side of the page
-  Pick your favourite patches and add them to your cart
-  Once you're done shopping, head to checkout
-  Enter your name and your email and whatever you want for the rest of the form (We don't need your address because all patches will be paid for and picked up in person at Carleton)
-  ENTER THE PROMO CODE "PICKUP". This is very important so that you can pay in person instead of online. If the site forces you to pay online, try again and make sure you use the promo code. It should make your total equal to \$0.
-  Wait for your confirmation email. Once your patches are ready for pick up, you will receive an email letting you know!
-  Go to The Patch Shop at Carleton during our opening hours with exact cash to pick up your patches (hours and location can be found under the "About" section of our website)

It's that simple! If you have any questions or want to request a patch that's not in stock, email us at thepatchshop@hotmail.com. If you like what you see and want to keep up on our newest stock or have a say in which new patches we get, like us on Facebook (<https://www.facebook.com/ThePatchShopCarleton>) or join our Facebook group (<https://www.facebook.com/groups/545581835579876/>).

Happy Shopping!
-The Patch Shop

By Brittany Roberts

REPORTS

Now with instant autotune in the microphones

AUDITIONS: SEPTEMBER 14th - 18th
WANTED: Singers Dancers Actors Musicians



THE CARLETON ENGINEERING MUSICAL PRESENTS:

MACKENZIE

loosely based on the musical Chicago

www.cengmusical.com

carletonengineeringmusical@gmail.com

CARLETON ENGINEERING HAS A *Musical?* YES!

The Carleton Engineering Musical is entering its fifth year of production and boy do we have some great things planned out for this year! Our artistic director Saskia Mattern has taken the project by the horns and is excited to dish up "MACKENZIE THE MUSICAL" loosely based off of Chicago. With her right hand lady Holly Parrinello as assistant director and her left hand man Adrian Soble (me) as producer, the completely original script will be different than previous years.

Our goal when beginning the project was to create as many fun speaking roles as possible. Instead of having a handful of leads who hog all the stage time, this year there is a gradient of roles from high, medium to low commitment. If you are interested in having lines, you will get lines! As a result, this year we will be needing a huge and diverse cast of actors, dancers, singers and musicians. All are welcome (especially first years), and we intend to cast people we believe will carry the roles well.

This production is an actual production, like literally. What I mean by that is, it takes a lot of time! If you are interested in signing up for the musical you will be spending many hours a week at rehearsal. Historically speaking, if you have a lead role, you will have to attend about 10 - 15 hours of rehearsal a week. Now, we (Saskia Holly and I) will be doing our best over the school year to make sure we are running rehearsals as efficiently as possible in order to avoid wasting everyone's times.

As a result, if you are cast you are expected to show up on time and know your lines for that scene before we start rehearsal, just like how an actual production works.

Now you're probably thinking "this sounds like an awful lot of work! I am in engineering/architecture/IMD and I don't have a lot of free time, I don't think I can handle that and is it even worth it?". Let me tell you right now, IT IS SO WORTH IT. The musical is a community, and being part of the family opens the campus up. When you spend 10 - 15 hours a week with people, you get to know them, and they get to know you. It is a great way to make friends, make connections and really feel like a part of Carleton Engineering.

We are super excited to start receiving applications (FIRST YEARS ARE WELCOME), and you can sign up for being an Actor, a Dancer, or a musician in the live band at www.cengmusical.com. Auditions are the week of Sept 14th - 18th.

Our fabulous production team: Brady, Noah, Michael, Tegan, Jamiee, Darcy, Hailey, Adam, Alaina, and Steph are excited to meet the new faces of the Carleton Engineering Musical and can't wait to start working with the cast.

Put it in your calendars now Friday & Saturday March 4th & 5th 2016 are the show dates.

**GET
EXCITED
AND WE HOPE TO
SEE ALL OF YOU AT
AUDITIONS!
ESPECIALLY
THE FIRST YEARS!**

By Adrian Soble

Can you tell we want first years involved?



COLUMNS

I recommend star gazing; my textbook and I thoroughly enjoyed it.

50 Fun Date Ideas

That Aren't Just Dinner and a Movie



Samantha Champagne
- Arch-Eng IV -



- 1. Explore one of Ottawa's many museums, there is something for everyone! (Bonus: Most museums are free on Thursday evenings)
- 2. Check out an art gallery and unleash your inner artsie
- 3. Grab some Leo's sandwiches, find a scenic spot, and have a picnic



- 4. Spend a day at the beach (beach day is the best day)



- 5. Do a tour and beer tasting at one of the local craft breweries
- 6. Show off your athleticism (or lack thereof) in a game or bowling or mini putt
- 7. Go to the zoo
- 8. Grab a coffee and walk through a book store
- 9. See a live show
- 10. Have a good laugh at a comedy show
- 11. Try Go-Karting
- 12. Sing your heart out at karaoke
- 13. Attend a poetry slam
- 14. Explore an adult store (Not recommended as a first date)
- 15. Go for drinks and/or dancing at a club, bar, or lounge
- 16. Have a board game night (if you don't own many of your own games, check out Monopolatte or the Loft)
- 17. Spend a day exploring the Byward Market
- 18. Go out hiking or walking on one of Ottawa/Gatineau's many hiking trails or along the Rideau Canal
- 19. Challenge each other at rock climbing
- 20. Go to Sky Zone Indoor Trampoline Park
- 21. Take dance classes (swing, salsa, etc.)
- 22. Go skating on the Rideau Canal and be sure to get a beaver tale
- 23. Unleash your inner ski-bunny and go skiing/snowboarding



- 24. Go swimming or check out a water park
- 25. Go canoeing/ kayaking (Rentals are available)
- 26. Go on a walking tour (Haunted Walks, Heritage Tour Walks, etc.)
- 27. Get away from the city lights and go star gazing
- 28. Grab some drinks and watch the sun set
- 29. Watch the sun rise
- 30. Volunteer together
- 31. Re-create your first date
- 32. Go window shopping (or actual shopping)
- 33. Bake something together
- 34. Hold an "Earth Hour," light some candles and go an hour without using any electricity
- 35. Go thrift shopping
- 36. Re-live your childhood and build a blanket fort
- 37. Go to Build-A-Bear
- 38. Go to the gym together
- 39. Try a new recipe and make dinner together; pretend to be cooking show hosts as you struggle to cook palatable food
- 40. Have a painting date: buy some cheap paint and canvasses at dollar store and unleash your inner artist (even if the result is terrible this is still good for a laugh, see also: comedy show)
- 41. Check out the animals at the pet store, find a theoretical pet, or find your future 12 pet cats and name them
- 42. Grab some blankets and snacks and have a TV show or movie marathon night
- 43. Go biking/roller-blading and grab some

- ice cream
- 44. Attend one of Carleton's many free lectures in a topic that actually interests you
- 45. Go apple picking
- 46. Check out a haunted house
- 47. Spend a day at the Sugar Bush
- 48. Carve pumpkins together
- 49. Go tobogganing, make a snow fort, have a snowball fight
- 50. Read the Iron Times together



MONOPOLATTE

EDITORIALS



On this page we study polarity.



COMMUNITY STARTS HERE

Carleton Engineers Love Engiqueers

Greetings first years! This is a momentous time for you. As you begin your new life in Carleton Engineering, you say goodbye to your previous life. You say goodbye to those silly mandatory English classes, you say goodbye to your beloved high school friends and most importantly you say goodbye to the fear of being judged for who you truly are.

You have come to university to better yourself. To try new things and grow as a person. You are lucky enough to be surrounded by other people your age with similar interests, dreams, and desires. In your time here at Carleton you will change, you will discover things about yourself you didn't even know were part of you. And as you change, the friends you make will change with you.

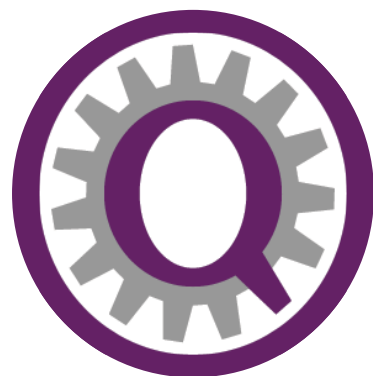
What I am trying to say in my roundabout way is that: here in Carleton Engineering its okay to be gay, its okay to be different, and you don't have to worry about being yourself around the upper years or your peers. We are all here to find ourselves and we must all accept each other as we grow. I know it may be intimidating to

walk into the quad on the first day of frosh and see all the screaming people but from day one your facils dye their skin purple, wear crazy outfits and scream at the top of their lungs to prove to you that it's okay to be different. Your Facils are #shameless. They are comfortable in their skin and they want you to be comfortable in yours. They want to meet you, the real you.

Q is Carleton's queer engineering society. In truth we are small group, but we are still here. Over the term we will have several get-togethers to encourage queer engineers to come out of the woodworks. If you are interested in hanging out with some awesome people who may or may not be queer (you don't have to be gay to play) join our Facebook group called "The New Q".

You may feel like you are alone, but there are 499 other frosh in the same shoes as you. Look around, make friends and be yourself. And if you happen to be gay, that's okay, I am too.

Welcome to Carleton!



Warning:

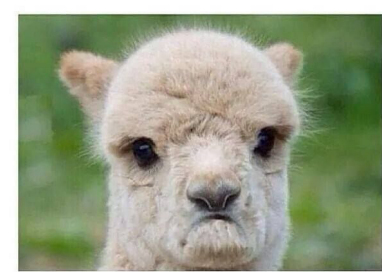
the following article may be seen as quite crude and appalling. As such we have included cute memes to distract you. Enjoy.

ASKBAE

Hello and welcome to ASKBAE, The Iron Times' newest anonymous advice column. If you need guidance, simply write it in the feedback loop, starting with "Dear Bae," and we'll tell you how to fix your shitty problem in your shitty life in our next shitty article.

shouldn't get you mom to check if you have them. Crabs (Pediculosis Pubis), also known as pubic lice, is

when you miss bae



When bae falls asleep, but you're still wide awake



Our first question comes from Freddy Firstyear who asks: "Dear Bae, I used the first floor Minto bathroom last week during ECOR1010 and now my crotch itches. Is this the disease 'Froshitis' I keep hearing about?" - Freddy Dear Freddy, boy do I have some bad news for you. Froshitis is just a jovial name given to the common cold that many get from sleep deprivation during frosh week. Symptoms of Froshitis include: runny nose, relentless sneezing, disruptive coughing, compulsive chanting, fatigue, binge drinking (water and/or tea), sore throat, and congestion. You do not have that. What you have is Crabs. Crab lice are a lot like head lice except they're on your junk and you

an STI most commonly picked up from sitting on public toilet seats and going to Hull. We cannot recommend doing either of those things; just take care of it when you get home. If you do find yourself with Crabs hang your head in shame because you're disgusting and stop scratching your genitals because you look like a fool. Secondly, get your ass down to the drug store and get some Kwellade lotion. Use that shit every day for the next week and wash everything that touched your genitals. Everything. Your pants, your underpants, your flightsuit, your hand, your

when bae won't shut up



When Bae Tweets "I had a great time with him last night" And You Wasn't With Her



fleshlight, your jammies that your mom sent you, your girlfriend, your dog's mouth, your bedsheets, and your towels. Don't think that shaving will get rid of them unless you plan on shaving your ass crack too because lice aren't too good to hide in your bum. And DO NOT try to kill them with fire. Once you're finally rid of your lice get yourself down to the sexual health clinic and get tested for other diseases because if you got lice you probably live like an animal and I wouldn't be surprised if you have something else. Good luck kid -Bae



20



CARLETON
STUDENT
ENGINEERING
SOCIETY



Alexander's Office
2090 Minto Case



/MyCSES



www.cses.carleton.ca



@MyCSES

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
Jasmine Shaw

"4TH YEAR BIOMED MECH. Hey C-Eng! I can't begin to tell you how excited I am to be President of CSES this year! For those of you that are new, CSES is the one-stop-shop for all engineering students' needs: be it social, academic, or professional. We run tons of fantastic social events; a textbook trade, library, and exam library to help you get the A, and so much more! As President, my portfolio dabbles in a bit of everything - I'll make sure you get the glorious red leather jacket you've been dreaming of, and I will also be overseeing all of Exec & Council's activities to make sure they're getting their work done. I would encourage you all to stop by our office and say hello - we are here to help and serve you."



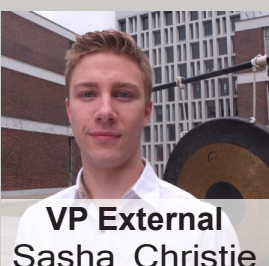
VP Finance
Justine Godin

"3RD YEAR AERO. I'm Justine, and I can't wait to really start this year as your VP Finance! This year I will be working on keeping the finances of CSES as public as possible. I will also be putting a major emphasis on the two funding opportunities that CSES offers. Both Student Group Funding, which distributes \$30,000 to student groups and clubs to help them complete their yearly tasks, and Networking Event Sponsorship which is to allow student groups to offer their members better networking opportunities. If you have any questions for me about finances, my life, engineering or are looking to get involved with finances please feel free to contact me!"



VP Publications
Ryan Waddell

"3RD YEAR ARCH-ENG. I'm Ryan, and I am so excited to be your VP Publications this year! I'll be working on this lovely newspaper, our website, designing EngSwag, developing a mobile app, and covering the CSES media. You all should definitely get involved in the eng community, if you're not already, it'll make your university experience so much more exciting! If you're looking to get involved in with publications, or you just have questions about life, feel free to contact me!"



VP External
Sasha Christie

"2ND YEAR CIVIL-ENG. Hey guys my name is Sasha Christie and I'm your VP External this year! I'll be attending conferences at various universities around Canada as Carleton's head representative. There are lots of different conferences during the year so if you like networking and exchanging ideas with people, make sure to apply as a delegate to attend a conference. These conferences are a great way to meet students from other eng socs and share your experiences and ideas with them. There are also a lot of leadership seminars at these conferences which are great for developing and honing your networking abilities. If you have any questions or concerns please feel free to contact me!"



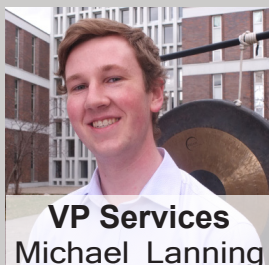
VP Social
Erin Hemm

"3RD YEAR ACSE. Hi C-Eng! I'm Erin and I'll be your VP Social. I'm looking forward to a really exciting year planning some of your favourite events from the semi-formal and formal, Whirlwinds and Reflections, to facilitation the Engineering intramural teams. My job is to ensure you have outlets to have fun and let loose from your heavy course load and make sure you're up to date with all the fun things happening around you in the Engineering community! If you have any questions, or are interested in helping out with a specific event, be sure to drop into my office hours or send me an email!"



VP Internal
Julia Dalphy

"4TH YEAR ARCH-ENG. Another year, C-Eng! Hola! For those who may not yet know me, my name is Julia Dalphy and I'm CSES' VP Internal this year (new portfolio, new fun!). That means that I'm responsible for the inner workings which keep the society running. These include: our weekly eNewsletter, General Meetings, Elections, First Year Conference, the pancake breakfast for EngFrosh, and more. This year I'm really going to focus on keeping you all updated on what's going on with CSES and the student groups that we umbrella! Here's to another sweet year!"



VP Services
Michael Lanning

"3RD YEAR ELEC. Hey guys and gals, I'm Michael, your VP Services for this year, and a third year electrical! I run things like the textbook trade and library, the equipment loan program, as well as overseeing Leo's Lounge! I am also involved in a couple neat projects like T-Bog! (Concrete Toboggan Race). You can usually find me hanging around in Leo's, CMAS, the office or Ollie's! Make sure you get involved with the society, and meet all sorts of people!"



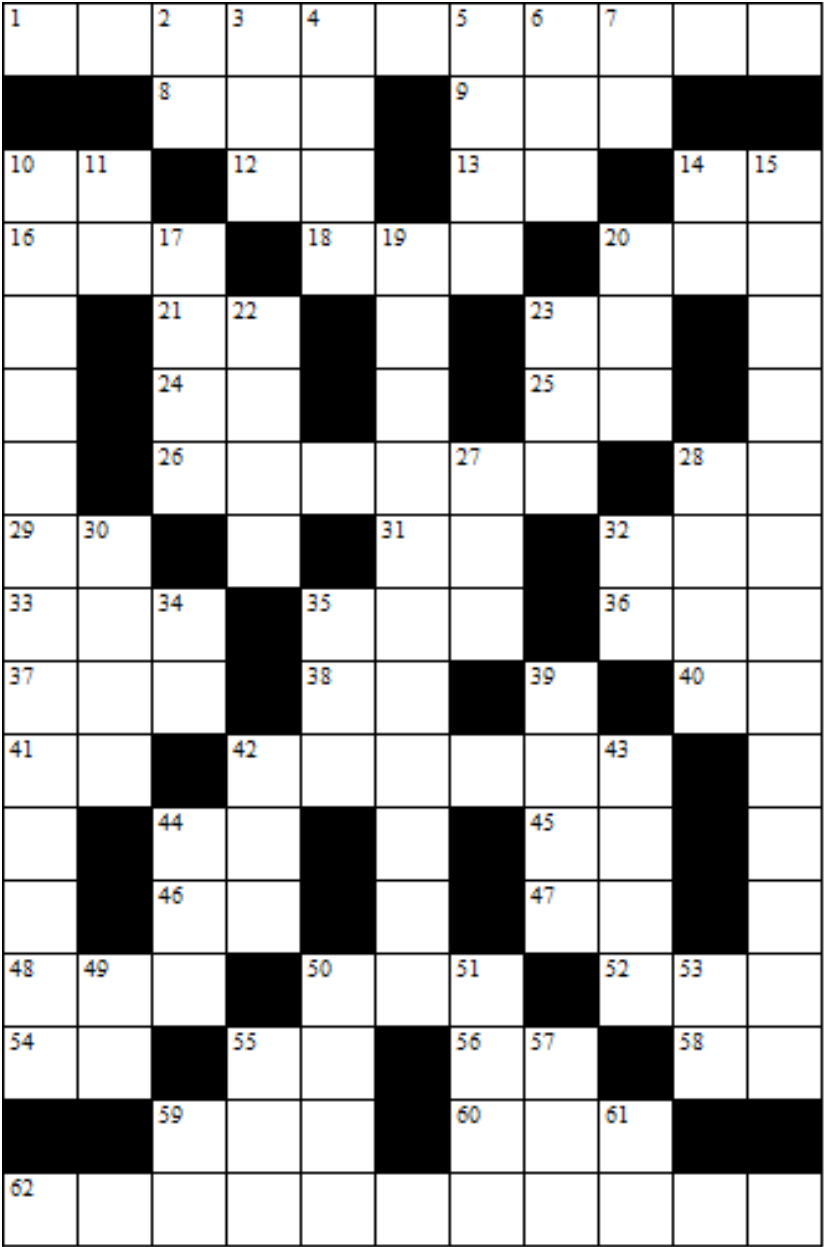
VP Academic
Donovan Martin

"3RD YEAR ACSE. Hey everyone, my name is Donovan and I am a third year Arch Eng student, I'll be your VP Academic this year. Being involved in the carleton community has really made my experience here a lot better and i would highly suggest it. Some of the things I do for the engineering community include, running multiple educational events throughout the year, keeping the academic resource library organized and being the liaison with the faculty of engineering and other departments for academic concerns. If you have any questions feel free to email me or if you see me around feel free to come and say hi."

JUST TALK TO ANYONE INVOLVED IN CSES, OR FIRE OFF A MESSAGE! EVERYTHING FROM DIRECTORSHIPS, TO EVENT PLANNING, 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, AND EVEN MORE IMPORTANT THAN FAMILY: EVERYTHING COUNTS FOR FLIGHTSUIT STAMPS.

PROCRASTINATION

Too bad the crossword made of callsigns isn't appropriate for print



- ACROSS

 - 1. Device for translating lower frequencies to higher frequencies (2 wds.)
 - 8. Mr. de Forest's first name
 - 9. Keyboard key
 - 10. This website's name (w/17 Down)
 - 12. Chemical symbol for molybdenum
 - 13. Chemical symbol for gallium
 - 14. Type of current flow (abbr.)
 - 16. A keyboard key
 - 18. The design component of total product cost (abbr.)
 - 20. Digital storage oscilloscope (abbr.)
 - 21. Army-Navy specification prefix
 - 23. Chemical symbol for rubidium
 - 24. Chemical symbol for iron
 - 25. Coefficient of temperature (abbr.)
 - 26. Computer messaging service (pl.)
 - 28. Electrical safety organization (abbr.)
 - 29. Band between RF and BB
 - 31. Type of component package (abbr.)
 - 32. Family of ICs with a certain component density level (abbr.)
 - 33. 30 MHz to 300 MHz
- DOWN

 - 2. Chemical symbol for chlorine
 - 3. Original Equipment Manufacturer (abbr.)
 - 4. A common lamp tube gas
 - 5. Enhanced Datarates for Global Evolution
 - 6. Government program to bring electricity to farms (abbr.)
 - 7. Chemical symbol for thallium
 - 10. The imaginary part of apparent power (2 wds.)
 - 11. Start frequency (abbr.)
 - 14. Chemical symbol for arsenic
 - 15. Part of CMOS
 - 17. This website's name (w/11 Across)
 - 19. Opposition to the flow of an electrical current (pl.)
 - 20. Relative power level unit (abbr.)
 - 22. Electric enclosure standard organization (abbr.)
 - 23. A common RS-232 serial bus command (abbr.)
 - 27. Stock symbol for Lockheed Martin
 - 28. A compiler directive
 - 30. Type of spread spectrum that does not use direct sequence spreading (abbr.)
 - 32. Local Oscillator (abbr.)
 - 34. Chemical symbol for francium
 - 35. Printer output resolution unit (abbr.)
 - 39. Form a resistor lead
 - 42. Code for a type of electrical wire insulation (abbr.)
 - 43. Do a total memory transfer
 - 44. Finite-Element Model
 - 49. Chemical symbol for copper
 - 50. Vacuum tube element
 - 51. Million multiply accumulate operations (abbr.)
 - 53. Analog-to-Digital (abbr.)
 - 55. Large unit of apparent power (abbr.)
 - 57. Common gateway interface (abbr.)
 - 59. Mate to an RX
 - 61. Centimeter (abbr.)
- 35. Logic gate output configuration (abbr.)
 - 36. Original Equipment Manufacturer (abbr.)
 - 37. Resistive component of a capacitor's lumped element model (abbr.)
 - 38. Last stage in a transmitter (abbr.)
 - 40. Chemical symbol for selenium
 - 41. Unit of time (abbr.)
 - 42. Added solder to tip of iron
 - 44. Unit of inductance (abbr.)
 - 45. Greek letter used for frequency
 - 46. Modern battlefield technique (abbr.)
 - 47. Decimeter (abbr.)
 - 48. Electronic warfare defense (abbr.)
 - 50. Global System for Mobile Communications (abbr.)
 - 52. Precision approach radar (abbr.)
 - 54. Chemical symbol for ruthenium
 - 55. Chemical symbol for krypton
 - 56. Unit of frequency (archaic, abbr.)
 - 58. Chemical symbol for dysprosium
 - 59. Television Interference (abbr.)
 - 60. Feedback system used to maintain constant level (abbr.)
 - 62. Base 16 number system

Horoscopes

Aries

You've got 99 problems... and it's only September.

Taurus

OCtranspo has it out for you, better work on your 100m dash if you ever hope to catch a bus

Gemini

You develop an aversion to cafe food, and it hasn't even been a month, aren't you glad you splurged for the unlimited meal plan?

Cancer

You spent a little too much time out in the sun this summer, let's just say purple dye doesn't mix well with orange skin

Leo

You enter the tunnels one day when it is raining, you won't see the light of day until reading week

Virgo

Your team takes the frosh theme very seriously and attempts to actually take over the world, needless to say you are no longer allowed into the parliament buildings

Libra

You are the first of your friends to successfully find all five Tim Horton's on campus, but it'll take you until the end of the semester to find your Friday morning tutorial.

Scorpio

Your boat will sink, sorry

Sagittarius

You show up super early to all of your lectures and sit in the front, beware of the people you meet there, they are just as crazy as you

Capricorn

You're registered in four different lab sessions that run on alternate weeks, good luck — you'll need it

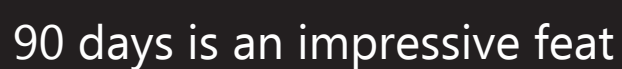
Aquarius

You get placed in the Stormont-Dundas residence, how fitting

Pisces

The lack of social interaction over the summer proves detrimental to your attempts at making new friends, good thing you won't have time for friends anyway.

<http://theoatmeal.com>



“Notice all the computations, theoretical scribbles, and lab equipment, Norm. ...
Yes, curiosity killed these cats.”

LAST CALL

Man, we forgot to ask them to show us their elbows.

The Iron Man

Don “Cock Rocket” Jackson



Hometown: Leamington, ON
Stream and year: Civil 3rd year
C-ENG Involvement: EngFrosh Planning, Photography, Troitsky, Media Team, Eng Swag Design
Describe yourself in three words: Original Old School
Favourite Supervillain: Stewie Griffin – not even out of diapers and already he’s mastered cloning. Dimensional travel, mind control, laser guns, and time travel.
If you could eat only one food for the rest of your life what would you chose: Guinness (That counts as a food right?)
If you were trapped in an elevator who would you choose to be trapped with: Macgyver, pretty sure he could get us out of the elevator.
If you were an ice cream flavour, what would you be: Maple Walnut Crunch (Definitely Canadian and a little nutty)
If you were granted three wishes what would they be:
1. Readily absorb and comprehend any book read.
2. The ability to travel at will, anywhere without financial worry.
3. 365 days of perfect motorcycling weather.
Would you rather be able to fly or breathe underwater: Breathe underwa-
ter since there is far more to discover below the water than there is above.
Steel, concrete, or wood: wood
Favourite thing about CENG: The community spirit.

USES for the CHARLATAN

- > Use as TP, its thicker than the stuff you’ll get in res anyway
- > Blend into make-shift caulking to “water proof” your boat
- > Convince Leo’s that Charlatans have nutritional value
- > Pretend to read it in com-
mon area to pick up arts students
- > Build elaborate sculptures in attempt to apease the architecture professors
- > Shred and use as a hair peice to cover up those bald spots
- > Gather hords of it and reate a nest in the parking garage to keep warm on boat building day
- > Make some fashionable footwear
- > Choose it as the focus of your redesign project, its simple enough
- > Have a stack handy to use as disposable plates and pr cutlery, no dishes!
- > ~~You could read it~~

The Iron Lady

Leah ‘Tweedle-Dum’ Morrell



Hometown: Calgary, Alberta
Stream and year: Mechanical with co-op, IV
C-ENG Involvement: EngFrosh Facil (2012, 2013), Head (2014), Procurement (2014), and EngFrosh 2015 Co-Director! FSCP (2013/14 flightsuit committee).
Describe yourself in three words: Organized, Dedicated, EngFrosh
Favourite Supervillain: MegaMind
If you could eat only one food for the rest of your life what would you choose: AAA Alberta Beef
If you were trapped in an elevator who would you choose to be trapped with: My dog Emma!
If you were an ice cream flavour, what would you be: Green Tea
If you were granted three wishes what would they be:
Get to finish off my last year without all of the hard work
A job straight out of school
Winning the lottery.
Would you rather be able to fly or breathe underwater: Fly
Steel, concrete, or wood: Steel
Favourite thing about CENG: I love that C-Eng is a giant family!

Editor -in-Chief
Rebecca Feddema

VP Publications
Ryan Waddell

Thanks To:
All of the fantastic writers, col-
umnists, photographers, and
the like who filled these pages
with their wonderful nonsense.

- Footnotes -

This Issue Brought to you By:
• The letter π and the number e
• 82 google searches
• 12 8tracks playlists
• The forceful efficiency of waiting till the last minute
• And last year’s editor redily available on facebook messaging

Apologies:
That’s an October prob-
lem, I mean if we were
able to offend you in the
first issue we deserve an
award!



THE IRON TIMES SHALL RISE AGAIN IN October