

Official newsletter of the Engineering Student Society stream A

#### All the news that's fit to wrap your fish in, since 1988

Monday, July 11, 2011

Fishue  $2\pi^e/9$ 

## **Engineering Evening Excursion #2!**

**Scavenger Hunt**, the 2nd EEE of the summer, will be happening Friday, July 22nd.

Tickets are \$15. It will start at Felicita's, where you will get your awesome T-shirt (which will also act as your scavenger hunt sheet). Buses leave for the next venue at 7:00.

Tickets are \$15 and go on sale Tuesday, online at ess.uvic.ca or in person at the ESS office. Anyone can buy tickets, UVic student or not. Buy them now, because they sell out every time!

Questions and/or praise can be directed to Nigel at nsyro@uvic.ca



## Foosball fixed, tournament Friday!

The Foosball table is fixed! Jeremy White (the ESS's semi-officially-titled "Director of Foosball") is hosting a Foosball tournament Friday, July 15th at 1 PM.

The signup form is on the foo ladda, or online at bit.ly/nljiua (or scan the QR code)



Apologies to Dr. Gebali for misspelling his name in the last Fishwrap. I made a mistake in the translation from Arabic.

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#### Picture of the Week

ESS Prez Peter Root trying to get cell reception in the ESS office



Heard a prof or fellow student say something embarrassing or incriminating? Send it to fishwrap@engr.uvic.ca "You can say, 'I'm going to plug my compressor into the grid' but that will be a long wire if you're powering an aircraft"

-R. Bhiladvala, Mech 295

"I don't want you to learn anything!" -I. Ray, Mech 462

"You're old enough to know these facts: 1, there is no Santa Clause. 2, this clock edge does not occur at the same time as the input."

-F. Gebali, CEng 241

"I don't want you to spread the legs on my part. I want you to use three consecutive holes." -P. Chang, Mech 455

## **Events & Announcements**

#### **Hockey Night**

Hockey night is Friday, July 15th, 9:15-10:45 at Oak Bay recreation centre. It's \$10 including skate rentals.

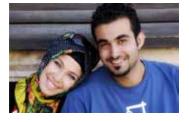
Signup sheet is on the ESS office door.

#### Islam presentation

On Tuesday, July 12th, Muneeza Rafi will be speaking on Islamic culture: why women wear the hijab, the roles women and men play in the culture, and what it is like to be an Islamic woman in Canadian culture.

The presentation is in ECS 660 from 1-2 pm.

RSVP is not necessary but would be appreciated to know how much food to buy. RSVP Tiffany at: tyu@uvic.ca





#### **Slushie Fridays**

Still happening every Friday in the ESS office. Slushies are free, cups 50¢

## Give co-op site feedback, win ESS schwag!

The co-op office wants your feedback on the new site. Go to ess.uvic.ca/coopfeedback (or scan the QR code) to fill out the feedback form. You can fill it out anonymously if you like.

By giving your feedback, you will be entered into a draw to win 1 of 3 ESS bandanas or shot glasses.

#### **Elec 260 Final Exam Prep**

Tutorial TA Iman Moazzen is offering an exam review session during the last week of classes. Since Prof. Adams will be away during the final week of lectures, Iman can do 2-3 crash-course review sessions during that week, in preparation for the final. However, for this to happen, there needs to be a minimum of 10 students willing to attend. Please talk to Steph or Tiff if you are interested. They can also be reached at sfulcher@uvic.ca or tyu@uvic.ca.

#### **APEGBC** student video contest

APEGBC has recently launched a Student Video Contest for Undergraduate Engineering and Geoscience Students in BC. APEGBC wants the students to show the world why they love Engineering or Geoscience! We are asking students to send us your video on "Why I Love Engineering or Geoscience". The winning submission will win a trip to APEGBC's Annual Conference & Annual General Meeting in Kelowna BC on October 14-16, 2011 and a \$1000 prize.

To submit, or for more information, go to: http://www.apeg.bc.ca/students/maps/studentnewsletter/%20June2011/videocontest.html (or scan the QR code)



## You know you're a UVic Engineer when:

- your diet consists of 90% pizza.
- you've written a report on the feasibility of harvesting rabbits.
- you know the rules to supplemental exams very well, but have no idea how the Math department's multi-section grading policy works.
- you don't realize it's a gorgeous day outside until you step out of the ECS/ELW for the first time at 5:30.
- safety is a must!
- your prof tells you modular code is important in case a UFO tries to land on your bridge.
- you hear "Butters" and the South Park character isn't the first person you think of.
- you quit looking both ways before crossing any road.
- you use engineering computation paper for absolutely everything.
- the foosball table breaks and your productivity increases three-fold.
- you hate working with Vex kits, yet you've thought about all the cool things you could build if you owned one.

- you don't find it odd to see people drinking out of red cups in class on Fridays.
- you regularly confuse the acronyms ESS, ECS, and ECE.
- your prof tries to sell you a used Lada.
- you can name every role in the Order of Pi.
- you've estimated the circumference of Ring Road in your head.
- rabbit population is used as an example of a differential equation.
- your Engr 141 prof spends the entire first lecture making you scared of him, then begins the second lecture by telling you everything is made of wind, water, fire, and earth.
- you include RobotC on your resumé.

More next issue!

Have more? Send them to fishwrap@engr.uvic.ca!







IREEPANELSOUL.com

matthew boyd - ian mcconville

## The Love Engineer

## **Engineering Females and "Normal" Females**

This summer I've noticed an increase in romance, especially between some engineering males and engineering females. I was so stoked that people were actually asking me for advice, so here is some advice on how to attain a female friend, specifically the non-engineering female, and the engineering female.

```
if (female == single)
     takeMyAdvice();
else
    you = screwed;
```

Step	Goal	Engineering Female	Non-Engineering Female
1	Make female notice you	Sit beside her in class so she knows of your existence, and make small conversation	Depending on how much you know her, this one is a bit tricky. If you spotted her on campus and fell in love, don't creep her from afar. Just introduce yourself. If you kinda know her, make excuses to keep bumping into her and keep increasing conversation between you two.
2	Get a good con- versation rolling	A fool proof plan would be to start off talking about something school related if you're super nervous. However, once you've started talking, change the subject to something non-engineering related so she doesn't think you're using her to copy her homework. (har har har)	To me, this one seems pretty simple. You start off with something you have in common (for example, how you met or how you bumped into her) and from then on it's like a "getting to know someone" conversation. Examples are "what you like doing, interests, passion, things you are into at the moment" If you are nervous and out of ideas, google "good date topics".
3	Avoid attaining "creep" status	Don't hound her down in class everyday or she'll start thinking you're desperate. If she is in another stream, well, that sucks. If she is in another year, you'll have to talk to her in a lab or catch her at an engineering event.	If you are constantly bumping into her in different places, do not add her to facebook right away. Chances are, she did not tell you her last name right off the bat (unless she was weird and gave you some business card) and guys that magically find girls ALWAYS creep girls out, even if she thinks you're cute.
4	Attempt to hang out	Start off studying with her, or talking with her enough to get her number and then you can ask to hang out OUTSIDE of school (or away from the engineering buildings) from there. You want to show that you have more in common than just school. If you're so weird that you're willing to fly out to hang out with a girl on coop you barely know in another city, well, then you're officially scary.	There's not much to say about this one, you pretty much have to straight out ask her out. I guess this is a good time to bring up the fact that it's ALWAYS better to straight up ask a girl out (not "do you want to be my girlfriend" but "do you want to do this" sort of deal). Do not beat around the bush about it. It is the most annoying thing a girl can experience. Oh and do not ask her out through Facebook or else you deserve to be blocked and deleted.

## In(day)

With so much sun, so many games and such great food, how could we not have had fun. ln(day) was a blast and we will definetely do it again next year. Big thanks to Quinn Calverley for saving the day with the BBQ...



### Word of the Week

## Nerdjacking

In conversation, digressing into extreme and/or unnecessary detail about one's passion (music, coding, gaming) to an otherwise uninitiated layperson, without awareness or acknowledgement of the listener's rapidly waning interest or lack of understanding of the subject at hand.

Clyde held Stella's attention briefly, until he began nerdjacking the conversation by talking about World of Warcraft for 4 uncomfortable minutes.

### What Grinds My Gears

#### **Dubstep**

I'll admit - a lot of the sounds in dubstep are pretty cool. It kind of sounds like a Transformers having sex. Or maybe a Transformer having sex with an electrical transformer (given that many of its sounds are so reminiscent of 60 Hz electrical hum). About once a month or so, I get a craving to listen to dubstep. I put some on, and about 20 seconds in I'm reminded why I don't listen to it: IT ALL SOUNDS THE SAME! Sure, "WOOB WOOB WOOB wiwiwiwiwi screeeeeawww WOOB WOOB voovoovoo" might sound cool, but you can't make an entire song out of it. Heck, apparently most dubstep artists can't even make an entire bridge out of it, given that even the sounds in any 20-second slice already get repetitive. If you've heard 20 seconds of a dubstep song, you've heard the whole genre.

Of course, there's one secret that dubstep artists don't want you to know, and that's the secret of how their music is made. To make your own dubstep, all you need to do is find a 56k modem from 1998 and sample the sounds of it trying to connect to the internet. That's it. Just add some filters and boost the bass and you're done. Maybe throw in some samples of "NINTENDO SIXTY FOUR!!!" kid.

#### Footnote:

1. I'm pretty sure the dubstep artist known as Skrillex named himself after the sounds in his music.

#### **Auto-flush toilets**

Auto-flush toilets are a great idea, in theory. There's nothing worse than coming to a washroom when you need to go #2 really badly, only to find every stall is a mess because nobody flushed. Plus, public washroom toilet flusher handles are disgusting, and it's best to avoid touching them at all costs.

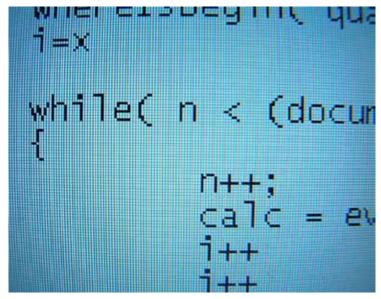
But the majority of auto-flush toilets I have ever used suffer from the same design flaw: the flush sensor is way too sensitive! I'm sitting there, doing my business (and likely playing Angry Birds), I lean forward ever so slightly, and WHOOSSSSHHHHHHHHH. This happens several times before I'm done. Then, when I'm actually done, it doesn't flush, and I have to press the germ-infested flush button anyway.

Seriously, do they not test these things? Can't they put a sensor in the door that makes it trigger when the door opens, or something else along those lines? Instead, they've got a terrible system that wastes a ton of water and gets your ass wet.

# Why You Can't Just Tell Your Computer What You Want It To Do

by Tyler Style, Systems Architect for MySolutions IT http://www.nirdvana.com

I was taking my morning constitutional through reddit today when I clicked through to the blog post "We need a programming language for the rest of us". It's basically a short rant about programming being hard and it not being fair to the average Joe who can't speak computerese and dammit why ain't the gubmint doin' sumpin' 'bout it??? I left a long comment in reply, and thought



it would make a good blog post of my one. So without further ado, here is why you can't just tell your computer what you want it to do in plain old English.

The problem with programming languages isn't that they're too complicated, or even that they're "unnatural". Programming languages are in fact laughably simple when compared to human languages. There are only a very few syntactical rules, and they have a vocabulary of just a couple hundred words at most. Learning a programming language is FAR easier than learning a human language, no question about it.

No, the problem is that computers are *stupid*. Incredibly powerful calculating engines and inhumanly fast, to be sure, but unbelievably stupid by any other human standard. Computers do not *understand* ANYTHING. I mean, how many times have you slammed your head into your keyboard, screaming "NOOOOO! DAMMIT, JUST DO WHAT I WANT YOU TO DO!!!"? More than once, I'm willing to bet, and if you're a programming you've probably already invested in a nice padded keyboard to keep your forehead from scarring up too much.



So, computers are definitely dumber than a sack full of doorknobs. To be able to parse a natural language like English, a computer would need to be able to comprehend context and semantics. In order to do that, it unfortunately seem to need to be just as intelligent as

a human is; all the research seems to point to the idea that in order to understand what humans are gibbering about, you have to more or less be as smart as a human. Smarter, actually, if you really want a computer that will completely understand what you mean when you say something. After all, there is still plenty of room for misunderstanding between two average human language speakers even when doing something like giving directions to drive a car from point A to point B. Unfortunately, artificial intelligence like that is still well beyond the state of the art and will be for some decades to come. Which is why you tell a programmer what you want and the programmer (who is hopefully as smart as you and can understand what you mean) writes a program instead of you telling the computer what you want and having it write a program to do what you want.

It is the stupidity of computers that is what makes programming hard, not a programming language's syntax or it's construction or the math and logic used in a program. You have to explicitly outline everything in excruciating detail, because *computers don't understand context or subtext*. THAT is where the perceived com-

plexity of programming languages comes from: having to go into that level of detail, instead of the computer just being able to understand what you mean when you tell it "draw a cartoon of a man running between his house and his car and slipping on a banana peel". And the closer to the metal you are, the worse it gets as you're having to be more and more explicit as there are fewer and fewer interpretative layers between you and the computer's processing. That's why many people can usually fumble their way around with high level scripting languages like Javascript or Python well enough, but start to stumble when C type languages rear their ugly heads. Being able to provide meaningful instructions to something so stupid and literal minded that it only understands a dozen rules of grammar and only knows a couple of hundred words requires the person doing the instructing to do a LOT of thinking and explaining for it using those extremely limited language constructs. It's exhausting and frustrating!

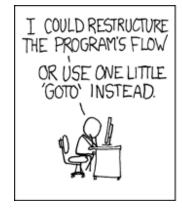
Even using a high level language with libraries of functions and methods that others have built before you to call on, it's *still* incredibly time consuming and frustrating. You still need to know those functions and methods and when to call them, because the computer DOESN'T. Remember, it's stupid. It doesn't understand context, not even a little bit. So while to you or me it's obvious *from context* that to draw a stick figure

cartoon man you're going to need a circle for a head, a line for the body, and some angled lines sticking off the main line for the arms and legs... a computer still needs to be told that all, every time, explicitly. You're going to have to tell it to call those libraries to draw those shapes and how to arrange them all in relation to each other, using the very simple and extremely limited tiny little programming language it can barely parse.

To give you an example, imagine explaining to a four year old child how to drive to the grocery store, get all the groceries you'll need for the week, pay for them, and then bring them home and put them away for you. Got it? Ok, now also imagine that the kid is also deaf, dumb and blind and can only be instructed via tapping morse code on the tip of it's left pinky finger while it dances the hokey-pokey. Go on, imagine it. I'll wait right here for you to uncurl from the fetal position and overcome the horror associated at the idea of having to do that before I continue. Alright, now that you've recovered I can tell you: a computer is not even as capable as that kid.

And THAT is what makes programming hard: not the language, which is really very simple in nature, but having to write reams and reams and reams of instructions for a complete idiot who can never just 'get' what you mean, using just the few words it can understand, over and over again.

#### XKCD: goto









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## A man in a hot air balloon...

A man is flying in a hot air balloon and realizes he is lost. He reduces height and spots a man down below. He lowers the balloon further and shouts, "Excuse me, can you tell me where I am?"

The man below replies, "Yes, you're in a hot air balloon hovering approximately 30 feet above the ground. You're between 40 and 41 degrees north latitude and between 59 and 60 degrees west longitude."

"You must be an engineer," says the balloonist.

"I am," replies the man. "How did you know?"

"Well," says the balloonist, "everything you have told me is technically correct, but I've no idea what to make of your information and the fact is, I'm still lost. Frankly, you've not been much help at all. If anything, you've delayed my trip by your talk."

The man below responds, "You must be in management."

"I am," replies the balloonist, "but how did you know?"

"Well," says the man, "You have risen to your position due to a large quantitity of hot air. You don't know

where you are or where you're going, but you expect people beneath you to solve your problems. The fact is, you are in exactly the same position you were in before we met, but now somehow it's my fault."

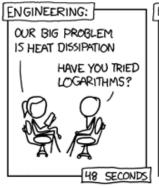
## Top 10 Things Engineering School didn't teach

- 10. There are at least 10 types of capacitors.
- 9. Theory tells you how a circuit works, not why it doesn't work.
- 8. Not everything works according to the specs in the data book.
- Anything practical you learn will be obsolete before you use it, except the complex math, which you will never use.
- 6. Never try to fix hardware with software.
- 5. Engineering is like having an 8 a.m. class and a late afternoon lab every day for the rest of your life.
- 4. Overtime pay? What overtime pay?
- 3. Managers, not engineers, rule the world.
- 2. If you like junk food, caffeine and all-nighters, go into software.
- 1. Dilbert is a documentary.

#### **XKCD: Impostor**

MY HOBBY:

SITTING DOWN WITH GRAD STUDENTS AND TIMING HOW LONG IT TAKES THEM TO FIGURE OUT THAT I'M NOT ACTUALLY AN EXPERT IN THEIR FIELD.









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Pisces (Feb 19 - Mar 20)

## Engr-Scopes by P. Gordon



**Aquarius** (Jan 20 - Feb 18) Your aura is bright pink this week. Dress accordingly.



Leo (Jul 23 - Aug 22)

You are in the depths of despair, Leo, but it's nothing a little belly rub won't fix.



You may or may not get a job done today, and I mean maybe.



**Virgo** (Aug 23 - Sep 22)

Let your creativity show by putting a window into the right side of your cranium.





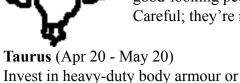
**Aries** (Mar 21 - Apr 19)

You'll find yourself attracted to good-looking people this week. Careful; they're mole people.



**Libra** (Sep 23 - Oct 22)

The current alignment of stars makes this the best time to fall for your dentist.



stay away from packs of wild dogs.



Scorpio (Oct 23 - Nov 21)

Do something nice for a sad, lonely, millionaire.





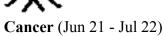
**Gemini** (May 21 - Jun 20)

If you had any finances to manage, this would be a good time.



**Sagittarius** (Nov 22 - Dec 21) You will have a run-in with a waddle of penguins. Carry a camcorder.

22 Ion 10)



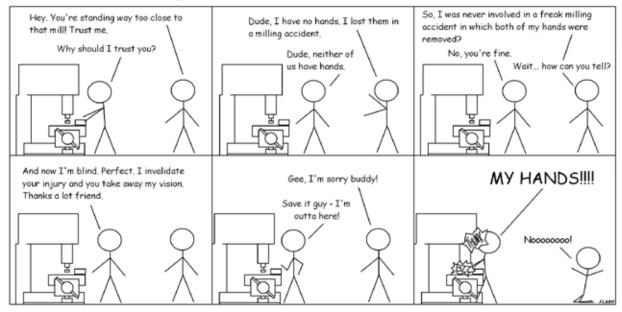
Time to give your facebook friends the Turing test. Then unfriend the humans.



Capricorn (Dec 22 - Jan 19) Someone in Hollywood is coming up with your screenplay idea, right now. It will flop.



#### Two-dimensional Milling



## The Fun Page!

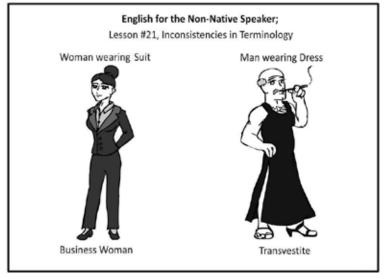
## Jigsaw Sudoku

This works like regular Sudoku, except the boxes aren't square.

As always, the first person to bring this completed puzzle to the ESS office wins a free shot glass.

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

#### MENTAL DEPREDATION by Golden Perogi



#### **Dominosa**

Circle pairs of adjacent numbers (horizontal and vertical) to form dominoes. To solve the puzzle correctly, one of every possible combination of two numbers must be circled.

4	4	3	3	0	1
4	4	3	1	1	0
0	1	2	1	0	3
1	0	0	4	2	2
3	2	2	3	4	2

Example a solved 0-3 puzzle would look like this:



#### **Editor's Note**

The great thing about an editor's note is that you can make it as long or as short as you want in order to fill space! And because it's an editor's note, you can talk about whatever you want, like how much you love cake!

Got something you want to see in Fishwrap? Send it to fishwrap@engr.uvic.ca

Joel Geddert ESS Director of Communications

#### This week's list of people who are awesome (and submitted to this Fishwrap)

Mike Anderson	Flash Gordon
Golden Perogi	Piper Gordon
Tiffany Yu	Calvin Tripp