# madihNEWS <br> Volume 63, Issue 5 Friday, November 19, 1993 



# 000 Science Club <br> A Student Chapter of the ACM 

## CSC Flash

My greetings arrive on your doorstep yet again, homunculi. My CSC has had some fascinating, enlightening, and highly cultured activities recently, and, in case you had the audacity to concoct a reason for not attending some of them, a brief digest follows:

Stephen White's Internet Talk was finally held last Thursday. The inherent coolness of the Internet, along with the hands-on, live-on-the-net overhead projection system, was really impressive to anyone who was there. We ran out of doughnaughts pretty quickly at the end, too.

Prof. K. Salem's Adaptive device driver talk on November $10^{\text {th }}$ was another great CSC triumph. This technology is on the leading edge of Computer Science - you heard it here first, folks!

The Stratford Road Trip on November $12^{\text {th }}$ was a blast! Stratford has once again performed magic with Shakespeare's work. A Midsummer's Night Dream is still a must see!

After that breathtaking list, there is more enthralling material to read:

Before I enlighten you with just a small sampling of the wonderful events my CSC has planned, I would be negligent if I didn't mention the outstanding results of the

## ACM Programming Contest

As anticipated, Waterloo's team A thoroughly destroyed all competition, solving 5 of the 8 problems in under 100 minutes, no other team solving more than 3 problems in 5 hours! Congratulations go to Ian Goldberg, Ka-Ping Yee, and Seiji Ando, who along with the alternate, Zygo Blaxell, will be heading off to sunny Phoenix in February, when the rest of you are stuck in the snow.
And now... the upcoming events you are obliged to attend!

## November 24 Fractal basics hosted by Tom Rathborne

This talk will be a simple (but really interesting) talk on those wonderful computer-generated images called Fractals. All you need is a vague concept of the complex plane and you can understand how simple Mandelbrot and Julia sets are generated. As an added bonus, Biomorph and Decomposition colouring will be covered!

## December 2 VX-REXX hosted by Donald Cowan

This talk will focus on the VX-REXX visual programming language that has been developed here at the $U$ of $W$ Computer Systems group and at Watcom.
Again, you are reminded that the CSC has many useful, attractive, and underpriced items for sale. This paraphenalia will serve you well in any environment, from the Amazon to MFCF. The CSC is here to serve your computing, consulting, chatting, and cartouche needs. Read uw.csc to discover what lies in our common future.

See you in cyberspace,
Calum T. Dalek
Chairbeing

## PMC\&OC Speaks!

Well, there's good news and there's bad news. The bad news is, no bake sale. Not enough people volunteered to bake things, so that's that. Dammit, the PMC\&OC needs volunteers if it's going to continue holding these events, which have been very well appreciated in the past I might add. Don't let these events die from something as trivial as rampart lethargy! GET INVOLVED!!!
(Shakes himself, calms down a bit.) On a happier note, the PMC\&OC co-rec basketball team won its first game of the finals this past Sunday. Our team handily achieved a $48-22$ victory over the prophetically-named "Chinamen Can't Jump" team. Way to go! It looks like the way is paved for the PMC\&OC club to win the tournament, unless the next team happens to be named "PMC\&OC Gets Beat Up By Seven-foot High Ogres While Playing Basketball".

What about talks? Next Thursday at $4: 30$, in room 4041, Professor Gilbert will be speaking on "Weird Arithmetic". The talk will deal with arithmetic in complex bases, and the relationship between complex bases and fractals. I've heard Prof. Gilbert speak on this subject before and I can verify that yes, it is very weird but also very interesting. So come on out and get your brain seriously twisted!
And finally, Leon wanted me to write an editorial comment to make this article extra long, since he felt our article should be at least as long as the CSC's. (See number 7 in mathBOOZE's recent top ten list-is it just me, or it math BOOZE slipping below it's usual toilet-humour level?). But the editors aren't terribly fond of editorial blah blah blah blah blah blah blah blah there are no secret messages here blah blah blah blah blah blah blah blah blah blah blah blah.

# Peter Milley <br> probably-never-ex-president-for-life <br> <br> Free Refreshments! 

 <br> <br> Free Refreshments!}

## Cumputerized Health

Raymond Briggs, Director, Management Information Systems, Providence Centre, will be in Waterloo on Tuesday, November 23, 1993 at 3:30 p.m. in the Davis Centre, Room 1302. He is taking part in the Computer Science Department's CP Seminar Series, speaking on Management Information Systems in Healthcare. Mr. Briggs will be discussing the history of computerization in healthcare, current information technologies to improve patient care, the effect of reduced budgets on MIS, and hope for the future of healthcare technology, including handheld computers and voice recognition.

Complete information is included in the notices posted on the MathSoc bulletin boards. Everyone is welcome. Refreshments served.

Undergraduate students are particularly encouraged to attend!

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Editor: Curtis "Chewie Brownie" Desjardins, Erich "Fuzzy Catapillar" Jacoby

## Winter Term 1994 Schedules

1. Winter term schedules can be picked up at the Mathematics Undergraduate Office (MC 5115) starting on November 17 and ending on December 3, 1993.
2. We encourage you to finalize your schedule before the term begins. To help you do this, the academic advisors will have office hours on Thursday, December 2 and Friday, December 3 for approving schedule changes. A list of advisors' office hours will be posted outside the Mathematics Undergraduate Office (MUO). Some advisors also have drop- boxes for submitting schedule changes, that you can use at any time.
$3(a)$. If you are already registered in a course, you may request a preferred section (PF) in that course without obtaining your advisor's signature, as follows:
i) Make the change(s) on your latest schedule (see pages 4/5 in the Math Students' Handbook), after checking course times on UWinfo (see page 3 of the Math Students' Handbook) or in the Course Information Report (CIR) available in the MUO. The information on UWinfo will be more up to date than the printed CIR.
ii) Hand in your schedule at the MUO. WARNING: Making a PF section change can result in a course being lost.
$3(\mathrm{~b})$. If you wish to request a preferred section of a course in which you are not registered, you will need your advisor's signature.
3. Pre-determined (PS) section and permissible conflict (PC) changes can only be made starting on January 4, 1994. For such changes, you must first get your academic advisor's approval and then ask the instructor to sign the schedule. PS and PC changes are only approved in exceptional circumstances, for example, for a student nearing graduation who requires a course that is full or that has a tutorial conflict.
4. New schedules are printed Tuesday evenings and on the weekend. Please allow 48 hours for data entry. New schedules can be picked up in the MUO Nov.17-Dec. 3 and at the Registrar's Office thereafter.

## Student Responsibilities:

- Pick up your new schedule promptly, and check that all changes have been made correctly. Requests to correct "errors" after the January add and drop deadlines will not be accepted.
- If you are making course changes, be sure to check the Faculty's no-credit and course-overlap lists. The most recent list is posted outside the MUO.
- If you are making an unusual selection of courses, or are encountering academic difficulties, we suggest that you meet with your advisor (and bring your most recent grade report with you) instead of leaving your schedule in a drop - box.
- You are responsible for being aware of all program and degree requirements, as described in the Undergraduate Calendar. Ask your academic advisor if you are in doubt about anything.

Dorothy Chapman MC 5107
Dean's Office

## Party! Party! Party!

## Actuarial Science Club

Party! Party! Party! Society exams are finally over! Come and increase your mortality with us this Saturday Night. More info on the door MC 3030. The tickets for the big January convention are finally here: come and check out all the activities scheduled for that fun weekend, where 200-300 students from 7 different universities (Quebec and Ontario) will meet right here in Waterloo for this year's convention titled: "Diversity for the Actuarial Student".

Sebastien
PS - The ActSci Club is open from 12:30-3:30 Monday to Thursday in MC 3030. Come and check it out!

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## What's Wrong With Being Endowed?

Well, much has gone on in the last two weeks, as the endowment train keeps on gaining speed. We still need YOUR support in this effort, if we are going to get the Math Faculty and the University back to being the best in Canada.

After much deliberation, it seems that the structure of the Endowment Committee will be two-tiered. The Funding Council will make all the decisions regarding projects, and how much they should be supported by the Fund. This group will be made up of 24 students ( 2 from each department and the faculty programs, and 3 from each year), 2 Alumni, and 1 Faculty member from each department. As you can see, this will ensure a large student majority in all decisions that are made.

The other tier is the Board of Directors. This will be made up of the Dean of Math, 3 student-elected Directors (one for each term), one Alumni rep, and 4 students from the Funding Council. If you don't agree with this...TELL US!!. It's not too late to change something that you don't like.

Many of you may have noticed the signs around the Math Building this past week advertising a meeting at Fed Hall. It was pitiful. It makes me really wonder if any of you really care about this, or if you are just letting it wash over you. Anyway, we talked with the few people that showed about how large a Voluntary Student Contribution should be. From that meeting, and the one held last Friday, we came to the proposal of $\$ 31.42$ per term. This amount would be indexed to inflation every 4 years. Again THIS IS NOT SET IN STONE. If you don't like it, tell us, and join the committee. We're having a good time, meeting people, and finding out more and more about the University around us.

The next meeting is [BIG SHOCK] today at 2:30 in MC4067. If you want to have your voice heard, and have a hand in your future, then be there.

MEFCom
As interpreted by Eric Sutherland

## Speaker's Corner

Sittin' on the Dock of the Bay

Not much has happened in the on-going world of MathSoc. There hasn't been much controversy, or even anything funny in the last couple of weeks. The changes that were discussed at the Annual General Meeting (a couple of weeks ago) have all been brought up, and passed as discussed.
There was also some concern about lounge bookings. Apparently, a couple of weeks ago there were some problems with double bookings, which was caused by an unfortunate oversight. Hey people! We're human! Also, one group that had booked one of the lounges reportedly was rather rude to the people who were studying there, telling them to get out 'cause they were going to set up. The concern that some students expressed was it was not posted that these people had booked the lounge for this time. You may notice that now, any lounge bookings are posted, so people have a better idea of what is going on.

A slow week! Goody, it makes my life easier, but don't think that this is it for the term. The summer exec is yet to be elected, as well as honorary lifetime memberships. Stay Tuna'd!!

Eric Sutherland Speaker, Math Society

## FASS Seeks Stage Manager!

FASS is looking for volunteers to act as Stage Manager for its annual musical comedy, to be presented February 2-5, 1994 in the Humanities Theatre. The Stage Manager has the challenging and rewarding job of helping the director, technical director, musical director, and cast to produce a coordinated, tight-running show.
Interested applicants should submit their name, address, and phone number, along with a summary of their relevant qualifications to the FASS office, PAS 1069, before midnight, Friday, 19 November, 1993. Interviews will be held Sunday, 28 November, 1993.

For more information about this voluntary position, please contact Anita Kilgour, FASS President, $895-1860 \times 200$, akilgour@thinkage.on.ca, or Paul McKone, FASS Producer, x2757, pdmckone@sail.uwaterloo.ca.
FASS, an acronym for Faculty, Alumni, Staff, and Students, has been writing, producing, and performing a "home-groan" musical comedy each year since 1962.

Paul McKone

# NSERC Undergrad Research Awards 

LOOKING FOR A SLIGHTLY DIFFERENT WORK TERM OR SUMMER TERM EXPERIENCE??

## ATTENTION: Undergraduate students interested in applying for an NSERC Undergraduate Research Award

These awards are designed for senior undergraduate students interested in spending a term (Spring 1994, Fall 1994, Winter 1995) doing research work with the supervision of a faculty member who is a current NSERC grantee. Math students interested in applying should have strong cumulative averages and some potential for involvement in innovative research in any of the five departments of the Faculty of Mathematics. Reimbursement is usually commensurate with salaries for co-op work terms. If you have further questions, or wish to apply for consideration for one of these awards, please contact one of the following representatives:

| Department | NSERC grantee | Ext. |
| :--- | :--- | :---: |
| App. Math | Dr. G. Tenti | 3492 |
|  | Shonn Martin | 2700 |
| C \& O | Dr. C. Godsil | 4619 |
|  | Susan Guckenburger | 2696 |
| Comp Sci | Dr. V.A. Dyck | 4664 |
|  | Tracy Taves | 2191 |
| Pure Math | Dr. J. Lawrence | 5569 |
|  | Carolyn Jackson | 6846 |
| Stats/Actsci | Dr. R.J. MacKay | 5146 |
|  | Lucy Simpson | 5025 |

Janet Baker
Office of the Dean of Math

## MGC News

MGC Pool Tournament this Sunday (Nov. 21st, 12:00pm) at Loose Change Louie's. The tournament is open to all Math graduating students. If you're not already registered to play in the tournament drop by the MGC office (MC3029) and sign up ( $\$ 10 /$ team of 2 people). And if you don't want to play, come on by to watch the action, or the football game, or play some darts, or for some food and drinks.

The photographer will be back for Grad Photo retakes during the week of Nov. 22-26 ${ }^{\text {th }}$ (next week). The photos will be taken in Biology 1, room 266. Drop by during the week, anytime from 8:30-12:00 or 1:00-4:30 to get your photo taken or retaken.
And be sure to wish your MGC chairperson, Lisa Thurston, a happy birthday on Wednesday, Nov. 21st.
those MGC party hounds

## Intend to Graduate in '94??

> Run, while you still can

Students intending to graduate in May 1994, whose last academic term is Fall 1993, should submit an "Intent to Graduate Form" by December 3, 1993 to the Registrar's Office.

## What? No MathToon?! Again!?!

Okay, Mathtoon fans! It's time to voice your opinion! We, here at the Canadian Society for the Preservation of Stupid Math Puns (CSPSMP), have been rather perturbed at the shoddy treatment of the Mathtoon Division of our network. Now, after long and hard hours of labour (mostly during the CS 242 , STAT 231, and PHIL 140 hours of the day), our key (and sole) artist Mike "Hammer" Hammond, has decided to shed away the Fuzzy fears and come right out! He wants to know! We want to know!

So here it is-the QUESTION:

## What Do You Think About Mathtoons?

(a) "Awesome, dude! Neat stuff! Encore! Encore! We need an entire page dedicated to them!"
(b) "Hey! You darn Editors! You forgot the Mathtoon!"
(c) "Oh, yeah! Those Math cartoons! I like them!"
(d) "I laughed, I cried...it became a part of me-but not that close a part."
(e) "Bleh! Get them out of here!"
(f) "Mathtoon? What's a Mathtoon?"

Submit your highly respected responses in the BLACK BOX outside the Comfy Lounge for further scrutiny. The CSPSMP thanks you for your time and effort!

Remember: A Mathtoon a day keeps the doctor away!

> M. Krishnan
> Vice-President
> Canadian Society for the Preservation of Stupid Math Puns
P.S. For those of you who are true fans, we have an entire page of Mathtoons for your prime-time viewing pleasure! Thanks go to Curtis and Fuzzy, for finally realizing that Mathtoons deserves its own page!

## $100 \%$ Toilet-Joke Free

I've been told there are three kinds of humour. . . political humour, toilet humour, and puns. (Eric Lippert has more weird info-bits like this in his head than anyone else I know.) Well, everyone hates puns and I guess there wasn't a lot of political humour available last week because everywhere I looked toilet humour seemed to be on the rampage.

It had its origins, I think, with mathBOOZE and the "new" mathNEWS and the whole "can we say fuck in a student newsletter" debate. Back then it was still a political issue-how long is mathNEWS's leash and how long should it be? But now I'm sitting here with the latest math BOOZE in front of me, complete with 'jokes' about masturbating after an interview and co-op officials having sex with SAC members. And the last Imp'tint, as I recall, had a charming little cartoon on the letters page about public masturbation and an opinion piece by Sandy Atwal calling people who criticized capitalism shitheads. (Okay, that last one wasn't a humour piece. Bear with me.) None of the three humour pieces were made any funnier by the toilet jokes; whether they were funny in the first place is up for debate. And I don't see how gratuitous use of the word shithead helped Sandy Atwal make a point.

I'm not contesting anyone's right to print this kind of thing, I'm just making an argument for quality. I think the people who write this stuff-Speedy, Speedy, Swimmer, Scribe, and Sandy Atwal-owe it to themselves not to have to use "potty language" merely for lack of something better like real satire or valid points. Maybe, just maybe, as students of higher education we should put in an effort to rise above something as cheap and easy as toilet humour or foul language. I know being in university doesn't imply this kind of intelligence, but we can at least try.

> Peter Milley
> Who's still waiting for the good puns

## Vapid Fire

In a daringly revolutionary announcement, the Pope has given the sanction of the Roman Catholic Church for Modula-3 programmers to use contraception. Said an aide to His Holiness, "If this is successful, we'll apply the same ruling to people who agree with eugenics. It's estimated that we'll be able to wipe it out within a generation."

Joeb Hewitt

## Note to the Editor

Left on our MathSoc bulletin board
Dear Mr. mathNEWS editor:
You suck!
Swimmer
Yeah, but you swallow!
The Editors
[Editor's Note: Despite a valiant effort to make it illegible, the handwriting on this note has been correlated positively with that of a certain spoiled ballot from a certain past MathSoc election, as well as the near illegible handwriting on a few inadequate calculus assignments. The Thought Police have been notified.]

Danny the Street is Six for PhaticAntichris Sus fiel ruck is math OQZE is The riggidtole is Aerink killer Duakis A a ron Silver is
Synopsis:God made ever,ything. On the seventh day, he made the Bomber. Two days later, Flat broke \& with a splitting hangover, he created Needles Hall. Everything else is just Details...

*facts verified by Rev. $J\left(f^{2}=\varnothing, d=r, t\right) P$, church of Topolism.

## ultraCLASSIFIEDS

Rachel,
You are cut off!

Dave
Dave,
You are cut off!!

Rachel
Curtis,
Why don't you just lick my clit? You are cut off!
Rachel
Dave,
Did you get your jacket yet?? (Yes, we're sarcastic)
Popcorn
Rachel,
I'll C U Next Tuesday!
Curtis
The Curtis/Chanty Squash Classic (a game summary):
Curtis serves the ball in-play. Chanty misses with a big Whoosh! "Point." Serve in-play Whoosh! "Point." Serve inplay Whoosh! "Point." Chanty giggles uncontrollably. Serve in-play Whoosh! "Point." Giggles galore from Chanty. Serve in-play Whack! "I hit it! I hit it!" Smash!! "Point." Serve in-play. Whoosh! "Point." Serve in-play. Hit the tin. "Point." Serve in-play. Whoosh! "Point." Serve in-play. Whack! "Out of play! Point." Serve in-play. Whoosh! "Point. Point du match." Serve in-play. Smack! Tip-shot. Bloop. "Point. I win. Thanks for the game, Chanty. Better luck next time." **smirky grin**

Curtis
Pudge, What the fuck do you think you're doing, you little shit!?

Polkaroo
Roo, Where's my fucking cupcake?

Pudge
Janice,
I can't afford to keep sending you roses every time I see my other woman. Learn to live with it.

Matt
Heather,
I've changed my mind, you can let Chris live with you next term.

Jeff
Hey Blondie!
Where have you been all my life? I have never found anybody as fascinating and attractive as you. Maybe we can get together and study Algebra sometime.

Love Billy
Curtis,
Stop sticking your thing out!

## Things to do while Cayley/Napier/Descartes is down <br> or Why I Love MFCF

As many of you may have noticed, the MFCF undergrad environment is currently very much like my mind - not always there. Don't think of this as a bad thing, though. The transient nature of the UW computing environment allows those of you who would otherwise die of terminal-tan to broaden your lives a little more. But what, I hear you ask, can we do while we breathlessly wait for the whole meaning of our small, pathetic existences to come back up?

I'm glad you asked. I happen to have little list of just that sort of stuff with me.

- Play mouseball tennis using keyboards as rackets. Don't do this in the Mobius labs. Their mice don't have balls.
- Go to the MFCF windows and stare at the operators. Don't move, don't blink, just stare. If this gets boring, blowfish the window.
- Brush up on your Greek spelling.
- Cook one of your now many missed meals on a now-useless terminal. The black-and-white terminals in the Descartes lab are suitable for frying (and several of them heaped together make for a great barbecue pit). If you just want to defrost a frozen dinner, use a Zeno. (That's all they're good for anyway.)
- Big-screen monitors. VCR. 'nuff said.
- Now that the lab is empty, swap all the $M$ and $N$ keys.
- Lynch the MFCF-student-who-has-special-access-while-he's-taking-courses-and-whose-first-initial-stands-forMurray of your choice.
- Go out and get enumerated-Oops, it's a bit late for that.
- Read that "Are You A Jolt Addict?" questionnaire you've always been meaning to.
- And finally,
*** operator@descartes: System is going down NOW.

The Chris Conspiracy (Reuter and Beauregard)
Dave Brown
Ian Goldberg

## A GridWord Limerick

A limerick, submitted as a GridComment
The GridMaster was feeling a bit 'Hammer'ed, When suddenly a great idea occur'd.
So he goes and unlocks
The mathNEWS BLACK BOX,
And finds Ianman's solutions to the GridWord!

## prof QUOTES

"If in doubt, throw it up."
Barbara Pawliszyn, CS 130
A student leaves the class: (student leaves the class) "Now that he's gone, let me tell you about the final."
S. Sivanogonathan, Math 137
"You can do anything you want in a field, at least mathematically!"
A. Bondy, Math 135
"Can you think of a whole number between 0 and $1.7 \ldots$ DUH, One!"

Zorzitto, Math 137
"I just sort of felt it, and it felt right."
Zorzitto, Math 137
"A slide rule gives you a value you can really trust. A calculatior gives you a bunch of significant digits that are meaningless."

Barby, E\&CE 241
"It doesn't take more than kindergarten calculus to show that..."

Tenti, AM 261
"Because we cannot control gender usually..."
Struthers, Stat 231
"We could all sit here and sing Beatles songs! Yes! Yes! Shall we?"

Larry Smith, Econ 101
"Then the river will drop its load. Well, I can't change the terminology!"

McBoyle, Geog 102
"Last time, some people who have a pipeline to reality were showing us..."
D. Younger, C\&O 342
"I shouldn't say this, please don't quote this in the newspaper. . . maybe I shouldn't say it."
D. Younger, C\&O 342
"Lets go high-tech here for a moment... coloured chalk."
Buss, CS 466
(after polling the class and getting no response:) "Maybe this is the kind of voting that kicked out the PCs."

Buss, CS 466
"We're waiting for the second coming of Gauss, us mathematicians. Then maybe the Riemann zeta Hypothesis gets proved."
" $i$ is an index and $i$ is the square root of -1 . That's probably the biggest notational blunder in all of academia, if not the history of the universe."

Hoffman, PMATH 344
"I don't want to make you feel bad, but Gauss proved this when he was 17 ."

Hoffman, PMATH 344
"When Mozart was my age, he was dead for 15 years."
Hoffman, PMATH 344
"Things get really incestuous - it's a lot of fun."
Brzozowski, CS 360
"I tried to make it complicated so it won't make it into mathNEWS."

Young, STAT 430
"If someone in Arts asked you, 'What is a theorem?'..."
Wainwright, MATH 137
"Was it really that hard?"
"Yes."
"So?"
Labahn, CS 134
"Anyone who gets sucked into leading the Conservatives after Brian Mulroney is a little dim..."

Ashworth, PHIL 140
"In regards to your term projects... I can smell bullshit a mile away."

DiCarlo, PHIL 100
"A paradigm is worth more than 20 cents."
Becker, CS 241
"In psychology, everything we know about people can be traced to a certain species of white rat... and college students."

Naus, PSYCH 236

## "Let's fuck tonight!"

Naus, PSYCH 236
"I was late today because I was posting the results from the first exam outside...Stay put!"

Amoroso, PSYCH 254
"[Beer ads are] selling you urine. Carbonated urine in a bottle!"
Lefcourt, PSYCH 355
"Proof by Math Induction. Why are you groaning?"
Davidson, MATH 135
"How would you recognise a rational number in a dark alley?"
Davidson, MATH 135

## The Day the Earth Continued Doing What it had Always Been Doing for Thousands of Years

## or <br> Wheezer Part 6: The Search for Berj.

A small sentence in a small article in a small newsletter in a rather large math faculty in a quite average math building can produce some of the most ludicrous situations. Take, for example, the great geek fiasco of ' 93.

It all started quite harmlessly enough. No, no, really. I mean it. Well, you see, there was this slightly overzealous young frosh - you know the type, happy-go-lucky, eager to please, a little socially awkward. Anyways, to make a short funny story into a long boring one (it's one of my many talents), this certain young frosh - we'll call him BJ - decided to take the advice of his frosh leader 'Strudel'. That is, to write an article for mathNEWS. What harm could it do, right? As it turns out, the effects were awful, terrible,, horrible, catastrophic, more than the average student could stomach... OK, so the average student couldn't care less... but that's beside the point. The details of the article aren't important. Let's just say that a certain second year student, who shall remain nameless (OK, OK, twist my arm; it was me) was more than just a little perturbed at the content of the article. Well, one sentence in particular. Which sentence, you ask? Well, let's just say it made fun of a certain person's nickname, a really cool nickname for that matter. To this day, BJ maintains his innocence, but it was obvious to everyone that the article was a calculated and vicious attack targeted at one person and one person alone! And thus, the hunt began. This particular frosh crafted a pseudonym so sneaky, so devious, to blatantly obvious, that no one could discover his real name. The bounty hunters were hired, the APB's went out, the Billboards were rented, the caterers were called - no stone was left unturned, no drunk was left undrunk, and yet no trace of the fugitive could be found.
It had been rumoured that BJ used a place known as fed hall for one of his hide-outs. The spies were sent out in full force. Lucky for BJ, 'Strudel' was watching out for him. He warned BJ that he was now officially on the lamb. Socially awkward as he was, BJ had no clue about what was going on (that's why they couldn't find him - he was hiding in plain sight). So, BJ just kept on jumping around to the music drinking his overpriced frooty drink.
The bill for the caterers was really adding up, so the search party organizers decided to play hard ball. The Interrogations (now known as the Mathematical Inquisition) began. The lynch mob rounded up everybody who had even used the same oxygen as the fugitive. As it turns out, BJ didn't have all that many loyal friends, and all of the hostages sang like nightingales $\left({ }^{*}\right)$.
So, it came to the moment of truth. The show-down, showup, the you-show-me-yours-and-I'll-show-you-mine, the... anyway, it came down to that. BJ, unsuspecting, was netted in the comfy lounge - no really, they used a net! The fight was spectacular. The kicking, the biting, the swearing, the spitting and that was just the spectators! They finally took him down with a tranquilizer. Well, actually, they just read out an issue of mathBOOZE and he just passed out. We're still not sure if he woke up yet. Oh, he's been to class and stuff, but we just can't tell.

And so it ended, out dimwitted young frosh, as a punishment was branded for life. Not just any old stupid Circle K brand or
anything, but a vicious, cruel, horrible, mean, nasty, nasty and actually damn funny brand...

Lisa 'Wheezer' Toth, and
Berj 'BJ, I still can't think of a pseudonym but they call me Sniffles' Bannayan

* As it happens, they interrogators really didn't appreciate this. They had bought new thumb screws and everything!


# The Myth of Statistics 

or, Pudge's Stats Theory

Well, after being at this lovely institution since $F^{\prime} 89$, and having started my third (kinda) statistics course, I've come to the conclusion that the entire theory of probability taught at this university is shit. The reason for this is not that I hate statistics, (which I do), or that I had a bad experience with a stats prof (which I haven't yet), but rather the fact that I like to keep things as simple as humanly possible. Actually, I like things as difficult as possible, but that is beside the point.

So, here is my theory. First, the probability of an event happening is $\frac{1}{2}$. Always. It either does or it doesn't. This holds true for everything. This can present problems for the faint of mind, however. For example, the probability of this theory being accepted for a Nobel Prize in Mathematics is $\frac{1}{2}$, not zero as most people would anticipate. On the other hand, the probability that Randy Klawitter is a complete idiot is also only $\frac{1}{2}$, not 1, as previously thought (sorry Flipper).

Second, every event is independent of every other event. Just because you, say, jump off the CN Tower, doesn't mean you are going to die. Hell, you have a $50 \%$ chance of not even hitting the ground! But, assuming you do hit the ground, you still have a $50 \%$ chance of bouncing. And if you don't bounce, you have a $50 \%$ chance of not landing on something vital (like your penis). If you do land on a vital organ, your probability of living to tell the tale is still $\frac{1}{2}$. That is the marvelous property of independence. It makes life really optimistic, at least in some cases. Plus, if you are an optimist, and the probability of anything happening is $\frac{1}{2}$ disappoints you, too bad. You expect too much of life anyway.

Lastly, anything can happen, meaning you cannot have an impossible event (ie. probability of 0 ). Believe it or not, there is a professor here who is of the same mind as me on this point (scary, isn't it?). My reasoning for this is that just because something doesn't happen, doesn't mean it can't. Think about it: half of the time you won't even see an event happening! So, you can be sure to be brainwashed by professors to think that the probability of an event is something other than $\frac{1}{2}$. Well, they're wrong. You see, the reason profs can get away with this is because they only use observed events, and $n$ trials and other bullshit like that. In fact, it's as simple as this: Life is just a series of Bernoulli trials with $p=\frac{1}{2}$. Gee, that Bernoulli guy was pretty smart. Too bad he couldn't find $p$.

> Michael "Pudge" Melvin

PS - If you want to use this theory on any of your midterms or finals, just slip me five bucks in the hall, and I'll let you. Otherwise, it's plagiarism, and I'll get your profs to mark it wrong.

## From the Secret Files of Co-Op

There have been rumours going around that the quality of co-op jobs has been going down. I've heard complaints that telemarketing, door-to-door sales, changing the paper for laser printers, and other jobs which do not even require a Grade 9 education should not be counting for university-level co-op credit. Well, I launched my own personal investigation into this matter and discovered a shocking document.

Breaking into Needless Hall late last Wednesday evening I found a file folder marked "CLASSIFIED: Third Round Co-Op Jobs". Intrigued, I photocopied it, and brought it home for a close examination. Within this file I found detailed a number of co-op jobs which will be made available for students who are not placed in second rounds.

Are these 'reasonable' jobs? Should they count for co-op credit? You decide. Oh, and please do me a favour and scratch my name out at the bottom of this article. I don't want the university administration to become aware of my illegal activities.

## CLASSIFIED: Third Round Co-Op Jobs

```
    Title: Burger Counter
    Faculties: Math, Chartered Accounting
        Level: Any
Description:
```

Maintain McDonalds database of number of customers served. Update sign informing customers of current billions-served level. May require the performance of other fast-food industry related duties in the culinary preparation area.

```
    Title: Co-op counselor
    Faculties: Psych, Philosophy
            Level: Senior
Description:
    Convince malcontents with the co-op system that everything
is really running fine. Includes prescribing anti-depressants and
explaining that, in the big scheme of things, it doesn't really
matter if you actually get a job or not.
```

Title: Federation of Students Gang Member
Faculties: All
Level: Any

## Description:

Promote the Metrowide student telephone savings plan. Involves setting up booths in public places and aggressively encouraging students to enroll in this plan. We want people who just won't take no for an answer. Will also involve promoting other businesses affiliated with past Federation of Students executive members. Salaries will be paid by the Federation of Students from student Fed fees.

## Title: General Co-op Assistant

Faculties: Any

## Level: Any

## Description:

Perform general duties for Needless Hall employees. Includes repair work to houses, lawn work, babysitting, cooking and cleaning. Does not pay, but counts for work term credit for any faculty and level.

Title: Freedom Fighter
Faculties: PoliSci, Peace and Conflict Studies Level: Any
Description:
Aid in political restructuring of a small Latin American country. Much valuable hands-on experience to be gained in such diverse areas as machine operation and medicine. Looting privileges may be granted depending on performance in conflict situations.

Title: Midnight Sun III Engineer
Faculties: Gen Eng
Level: Graduate Students

## Description:

Perform analysis of Midnight Sun I solar car in an attempt to reconstruct nonexistent records of its design. Analysis of Midnight Sun II solar car in an attempt to insure none of its design concepts are incorporated into Midnight Sun III. Fundraising to cover $\$ 30,000$ debt from Midnight Sun II. May include production of solar car Midnight Sun III if time permits. We're looking for people who think finishing second-last in the world is pretty good.

Title: Network Chaos Computing Engineer
Faculties: CS
Level: Senior
Description:
Shut down math undergrad computing environment on nights before CS assignments are due. Reboot the next morning. Remove all traces of tampering, and records of down time.

```
Title: Periodical delivery person
Faculties: Arts
Level: Intermediate, Senior
```

Description:
Deliver daily news journals to customers homes. Collect weekly remuneration for said deliveries.

Title: Employer Escort
Faculties: Rec, Kin, Bio, Physics
Level: Any, but junior will be paid more
Description:
Provide personal massage and general entertainment for potential co-op employers. Excellent opportunity for developing interpersonal skills, and making valuable connections. Attach nude photos to resume. Actually, forget the resume, just send the photos.

```
        Title: Infra-Structurer
    Faculties: Civil Engineering, Urban Planning
        Level: Senior
Description:
```

Participate in one of many exciting urban repair projects. Gain valuable hands-on experience with many state of the art of construction and deconstruction tools. Sit around in the sun and drink coffee while blocking traffic.

Chris "Strunoph" Norman aka Ahmoras the Dragon aka Reverend Slash

## The CS Assignment Drinking Game

Thanksgiving. A time of rejoicing. A time to see relatives. A time to eat delicious home-cooked meals. A time to reunite with old friends. A time to go out to bars with these friends and drink heavily. A time to fool around with girls who are still in high school.

That's what Thanksgiving usually means to me, but not this Thanksgiving. This Thanksgiving I spent locked in my room working on a CS241 assignment. I now realize why many CS majors are skinny geeks-and its not because of genetics. Try spending four years locked in a room with no windows staring at a grainy screen and typing all day. Ten to one you'll emerge a pasty faced troll-like creature with crooked trembling fingers, inch thick glasses, and a slight drool. If you're really unlucky, you might end up looking like a TA.

Like many CS majors, I try and deny my fate. I exercise and attempt to have a social life, but I know I am only delaying the inevitable. As I progress in years, I can see the trend which marks my doom. Hell, I can graph it and find its partial derivatives. The trend in question is my needing to spend more and more time on CS, and less and less time on things which regular humans do such as eating, sleeping and drinking. Luckily I can eat Doritos while programming, and I can sleep in class. Drinking however was more of a problem, until I developed the CS Assignment Drinking Game.

## How Does it Work?

Its verysimple. There are a number of occasions which commonly arise when doing a CS assignment. Whenever one of these conditions arise, you take a drink of a beverage (usually alcoholic). Whether you do beer, rum, or rubbing alcohol is your choice.

Note, for those of you who do work in the computer labs, most TAs will not approve of you drinking alcohol while working on your assignments-unless you share it with them. An effective way of dealing with this situation is to give the TA a vodka bottle filled with water and a dash of lighter fluid. Chances are they won't be able to tell the difference.

## Explanation of Terms

Shot: Take one shot of your beverage. If you don't have a shot glass, take a good strong drink from the bottle.

Chug: Drink the entire bottle. Whoops! Was that a 40 -ounce bottle of tequila in your hands? Ok, a suitable compromise is to chug until you're body begins to convulse.

The following rules dictate when shots and chugs should be taken. There are general rules, and rules for specific courses. Feel free to follow the rules for courses other than your own. If you're in CS130 and you get a 400 -level CS error, go ahead and drink. Hell, take two drinks, you deserve it.

## All Courses:

## Shot Situations

- Compile fails / syntax error.
- More than one screenful of errors/warnings on compile.
- The computer you're working on crashes, before you save.
- The computer crashes, the night before the assignment is due.


## Chug Situations

- Assignment completed!
- Assignment completed more than one day before the due date!
- You attempt to submit your assignment 1 min after due date.
- Pick up someone cute in the one of the Xterminal rooms.

CS 100:

## Shot Situations

- Successfully remember your password.
- You can't figure out how to turn the computer on.
- You can't double-click fast enough to activate icons.
- Hairy TA demands sexual favours for assistance with spreadsheet.
Chug Situations
- Drool shorts out your keyboard.
- Successfully write "hello world" program.
- You try to use the mouse while it's upside down.
- Get scared of computer. Run home crying.

CS 130:
Shot Situations

- Endless loop.
- You print your assignment more than once by accident.
- Successfully steal someone else's lab time.
- Get lab done in allotted lab time.

Chug Situations

- Drag your assignment into the trash can instead of the printer.
- Browbeat someone who has signed up for computer time to let you have it.
- Screw up printer so everyone has to wait 1 hour for it to be fixed.
- Screw up printer so everyone hands in their assignment late (chug 3 times).


## CS 134: (Pascal)

Shot Situations

- Accidentally comment out over half of your code.
- Successfully prove the order of a function.
- Use writeln statements to fake program output.
- Give up on using the mac lab, and find someone with Turbo Pascal.


## CS 241: (Scheme/Modula-3)

## Shot Situations

- Attempt to dereference Nil.
- Compile takes more than 10 minutes.
- Find yet another bug in the scheme interpreter.
- Reading alt.tasteless causes you to comment your code with obscenities.


## Chug Situations

- Write a useful program in Scheme.
- Write a C++ compiler in scheme, and then perform a recursive compile ( $\mathrm{C}++$ to Modula- 3 to Scheme to C++ to...)
- Create a regular expression that can identify goodlooking women from their email address.
- Create a finite state machine that will do your assignments for you.


## The Oracle's Advice Column

## Burning Questions Our Specialty

What does Bill Gate's wife look like?
alt.fan.bill-gates Check out the latest issue of Wired (with the blue cover), page 30. Her name is Melinda French Gates, and frankly she reminds me of the dark-haired Sweeny sister from Saturday Night Live, without the black fright wig.

I have a huge CS assignment. How do I get out of it? Should I pour scalding hot soup on my hand, or would that only be good enough for an extension? and would it hurt?

Kritter
I have consulted the local expert on soup-related injuries and he assures me that the sensation is quite painful and "annoying", but he informs me that it's only good enough for an extension. I would recommend you should drop the course, await your zero, or (a favourite) arrange for you to get jury duty during the assignment. For the dramatic or not so lucky, you could get a friend to stage a hit-and-run in front of the prof's office or in class. Use as much fake blood as possible.

I've just murdered my CS 354 partner. Unfortunately, he didn't finish his half of the project before I killed him. What should I do?

Name withheld by request
If you can make it look like suicide, you may be able to get away with the "incomplete" mark "due to emotional trauma". However, seeing as only two people in 354 died during the course, it's going to be pretty obvious that you're the surviving partner and you have committed homicide. I think that you've actually done better than Kritter by getting away with not having to finish your assignment: by having a prision term. My suggesstion is to drop this issue of mathNEWS, run for it and try and get out of the country (or at least the province) before the assignment is due. Haiti is good this time of year.

So, when is T.A.G. starting?
Purity
If you're involved, then you were already at the meeting yesterday evening. By now you should have your Tapeball and be quite paranoid. If not then you aren't going to last long or you're already out.

I just took the 1500 question purity test, scoring at $70.1 \%$ What's the lowest and highest scores ever?

Macho Wonder-Stud The highest score reported for the 500-question purity test was a 98\%, by an Electrical Engineering student with the funkiest voice next to Barry White and the young Lenord Cohen. A nun took the same test and got approx $96 \%$. The lowest scores admitted to me were by women who are/were students here at Waterloo: $23 \%$ and $18 \%$. To those who don't know what I'm talking about, the Purity Test is 500 or more questions to test how innocent you are. Higher scores reflect more pure innocent virginness.

## Why are children's nursery rhymes so violent?

They Call Me Guru At the time, they were not considered violent. "Violent" is a relative term; in Tibet, baseball is pretty shocking. If you think the stories you hear are violent it's because you're not used to the amount of gore or hostile action that was a normal part of life centuries ago. Consider American movies: Platoon was shocking to many people, and Boyz in the Hood was called disturbing. but
a watcher of snuff films (illegal movies where people are filmed dying during the production) will call them tame. If you want to have nicer, gentler nursery rhymes, I suggest you should take up Satanism and chainsaw juggling.

Looking for answers? I've been getting some serious questions, which I enjoy, but I can't give a serious answer unless I get them before Production Night (I need to sacrifice a woodchuck to the Elder Gods, and they're scarce on Mondays). The Library of Alexandria question will be for next issue.

The mathNEWSOracle

## continued from page 11

CS 246: (Modula-3)

## Shot Situations

- Compiler generates an unintelligible error message.
- Magic-number error.
- Adding a comment causes code which previously crashed to work.
- Simultaneously program and read the online copy of mathNEWS
Chug Situations
- dbx crashes.
- dbx doesn't crash, but its so useless you wish it had.
- Compile takes more than 1 hour, on the night before the assignment is due.
- Modula-3 Fairy turns you into a toad.

CS 342: (SMURF)
Shot Situations

- Spoiled smurfberry error.
- Smurfette pregnancy overflow.
- Clumsy .kill function kills someone else's processes.
- Accidentally hum smurf cartoon theme song.


## Chug Situations

- You have a sexual fantasy involving Smurfette.
- Clumsy function corrupts the kernal, crashing the undergrad environment.
- You refer to your genitals as "happy smurf".
- Smurfs start crawling around your room (chug 6 times)

CS 400+: (CS Major courses)
Shot Situations

- Compile uses up more than $50 \%$ of machine's CPU resources.
- You've been programming for more than 24 hours straight (one shot/hour)
- Each hour spent on a MUD/MUSH while simultaneously programming.
- Run out of Doritos.

Chug Situations

- Program uses $100 \%$ of CPU resources, and spawns programs on other machines to use their resources too.
- Your object files fill /tmp on all machines you have access to.
- Program becomes sentient.
- Program becomes sentient and is smarter than you (chug three times).
(Reverend) Chris "Strunoph" Norman aka Ahmoras the Dragon aka Horny Smurf


The seconds turned into minutes,
the minutes into hours, and the hours into four and-a-half hours, which is a hell of a long time to


Using his incredible Mathie Intellect, Aaron searched for a solution to his

problem...


What will Aaron find 3 behind the Ominous

Something good? Something bad? Something even mildly a musing!?


Time to play every Trekkie's favorite game- Spot the Continuity Errors! It's more fun than kissing Wombats! Really!
Time to play every Trekkie's favorite game- Spot the Continuity Errors! It's more fun than kissing Wombats! Really!


He found the solution in an ARTS ELECTIVE he an ARTs ELE
had Taken once!


Well, you're gonna have to wait two weeks, cause
I just ran out of

## 

 "handcraftsmanship:

## mathNEWSquiz \#5

Hello, everybody! (Hi, Dr. Nick!) Okay, it's time to do the 'Squiz. ... as if there's nothing better for me to do! (No, I'm not bitter about any all-nighters or anything!) So these are the answers already: British Columbia: History 1) 1885; 2) "54-40 or fight!" ( 54 ' 40 " is the lowest latitude of the Alaskan Panhandle); 3) 1866 ; 4) Bill Vander Zalm; Alberta 1) The Tyrell Museum, best known for its dinosaurs; 2) Movie Springs in in Idaho, Fernie is in B.C., and Quifter is made-up. All the others are real Alberta towns; "Weird Al" Yankovic 1) Alfred; 2) Lynwood, California; 3) Wendy Carlos; 4) My Bologna, The Knack; 5) Peter Gabriel, Phil Collins, and Janet Jackson have all appeared in polkas, but haven't been parodied. The rest have been; Ren \& Stimpy 1) (Any three of:) Scribble, Gamey, Monotony, Pure Cheesy, Misery Date, and Loaf. (Yes, there were six. Sorry.); 2) Screamin' Lederhosen; 3) Muddy Mudskipper; 4) Because he talks to his farts.

There were 3 entries again this week. Sorry for the nontraditional categories, but I don't have time to go to movies or listen to music. (mathNEWS, on the other hand...) The entries were: Ian "Ianman" Facey with 2 (and you didn't get any of the Al questions right!); Jeff "Call the police" Hart with 7; and our winner, Alex \& Dan, with $7 \frac{1}{2}$ ! (Half a mark for getting "My Bologna" as Al's first release, but claiming it to be by the Cars.) Congratulations, Alex \& Dan! You can pick up your 'Squizprize in the MathSoc office!

Good luck on this 'Squiz! Answers should be submitted in the BLACK BOX by November 30, for the last issue of the term!

## Saskatchewan

Third in a sequence of filler categories about the westernmost Canadian provinces

1. Name the only Prime Minister who came from Saskatchewan.
2. Name the two rivers upon which Saskatchewan's largest city lies.
3. Name the man to whom the creation of Saskatchewan (as in, "If it weren't for what he did..." is generally attributed.
4. Complete the punchline to the following joke:
"An elderly couple from the southern United States were driving through Canada on their vacation, and got lost. Worried, they pulled over to the side of the road as soon as they saw someone they could ask directions from. "Excuse me," said the elderly man, "could you tell us where we are?" "Saskatoon, Saskatchewan" was the reply. "Oh, how quaint," said the elderly woman, "they don't..."
5. Which of the following are real towns in Saskatchewan: Legal, Ruthilda, Battleford, Biggar, Jolson, Estevan, Zoolapa

## Disney's Latest Animated Flicks

1. What is the name of the (animated) feature film to be released in Summer 1994?
2. Name the pop/rock musician who is co-composing the music for the above film.
3. Who provided the singing voice of Princess Jasmine in "Aladdin"?
4. Who are Ariel's sisters in "The Little Mermaid"?
5. Which animator of "The Beast" and "Aladdin" is the son of the artist of a current comic strip?

Sorry about the short 'Squiz, but like I said, I just don't have time to do both this and such quality back covers! Ciao for niao!

Mala "'SquizRudin" Krishnan Mike "'SquizHammer" Hammond

Brian "Pilot In Hell" Spencer

## gridCOMMENTS

Well, I can't express just how excited I am this week. (That's 'cause I'm not. :-) Response to my first GridWord was, if not overwhelming, if not astonishing, at least existing! We had a grand total of 6 Cryptic solutions and 2 (count 'em, 2) solutions to the first Conventional of the term!

And now, what you are so eagerly waiting for... the list of winners. The winner of the cryptic, from the 3 correct submissions, is The Burning Stickmen. Both Conventional solutions, however, are incorrect. So I'll grant the prestigious award to the most correct solution, submitted by Boom aka Laka Boom Boom. Congrats, people! You can pick up your fabulous prize in MathSoc.

As for everybody else, the other correct Cryptic solutions came from The Trio and Jeff "stop beating...ur, hammering a dead horse GridHammer!!" Hart. (What dead horse? You can't prove anything!). Incorrect Cryptic solutions came from Boom aka Laka Boom Boom and Ian "Ianman" Facey. The other incorrect Conventional solution came from Ian "Ianman" Facey, as well. (I'm sorry about the top ten list, Ian. But is that any reason to call me Cruciverbally challenged?)
The Creativity Paragraph: Comments, in no particular order, were: "For Christ's sake don't print my name if I'm wrong!!"; "Satan says: ' $\varphi(666)=6 \times 6 \times 6$ "; "I used grep for the Conventional, but the Cryptic is clean."; a limerick which I'm printing elsewhere, and a single uncommented submission. Favorite thing to do during the ACM programming contest: "Calculating random digits of $\pi$. .; "1)a) Do the GridWord b) Read the rest of mathNEWS 2) Tap into the network by modem or something and cause a crash in the part of the network allocated for the ACM programming contest!"; "Arson-burn, baby, burn!"; "'Watch TV, eat corn chips and masturbate' - Bruce McCullough"; and "Stay at home. It's a bloody Saturday, people!"
The astute among you may have noticed that there isn't a Grid for this week. That's the bad news. The good news is that we'll be printing all the solutions to all the Grids we've printed so far this term...next issue. That's all, and remember, people, be careful out there!

Mike "GridHammer" Hammond

## Deep Thoughts

MGC needs "deep thoughts" about math for a page in the yearbook. Please submit your strange or deep thoughts now to the MGC. We need them by the end of November at the latest.

## Attention: Subscribers

Last issue we served notice that next term, mathNEWS subscription rates would be changing, specifically that off-campus subscriptions would become cheaper and on-campus ones would have a fee. However, upon re-evaluating our printing costs, we have revised these rates further (lowered them), and they will be as follows:

- On Campus: $\$ 2.00$
- Off Campus (Canada): $\$ 5.00$
- Off Campus (USA): $\$ 6.00$
- Off Campus (Foreign): $\$ 7.00$

As always, stacks of free issues will always be distributed to easy access areas for Mathies and whoever else wanders by.
the Editors

