New Student Orientation

Department of Computer Sciences
College of Engineering
Florida Institute of Technology
Melbourne, Florida USA  32901

http://cs.fit.edu

2010 – 2011 Academic Year
Table of Contents

1. Mind Your P’s
2. Mind Your Q’s
3. MAPS for Student Success
4. Mind Your Other P’s and Q’s
RICHARD STALLMAN!
YOUR VIRAL OPEN SOURCE LICENSES
HAVE GROWN TOO POWERFUL.
THE GPL MUST BE STOPPED
AT THE SOURCE.
YOU.

AH! MICROSOFT LACKEYS!
SO IT HAS COME TO THIS.

A NIGHT OF BLOOD I'VE LONG AWAITED.
BUT BE THIS MY DEATH OR YOURS,
FREE SOFTWARE WILL CARRY ON!
FOR A GNU DAWN! FOR FREEDOM!

...HEY, WHERE ARE YOU GOING?

MAN, YOU'RE RIGHT,
THAT NEVER GETS OLD.

LET'S DO ERIC S.
RAYMOND NEXT.

OR LINUS TORVALEDS. I HEAR
HE SLEEPS WITH NUNCHUCKS.
Everyone Has Potential To Learn
Learning Requires Pondering
Learning Requires Practice

I could restructure the program's flow
or use one little 'goto' instead.

Eh, screw good practice. How bad can it be?

goto main_sub3;

*compile*

[Diagram showing a person sitting at a desk, coding, and another person sitting in a chair, looking out the window.]
Hi, I'm Randall. Welcome to my TED talk.

It's an honor to speak to you, some of the brightest innovators from so many fields, about a problem in desperate need of your attention.

How do you end parenthetical statements with emoticons? I can't figure out a good way.

...Linux (or BSD :) would...
...Unix (or BSD :) would...

Conferences I'm banned from:
- Siggraph
- EuroCrypt
- Defcon
- PyCon
- International Astronomical Union
- Canadian Paleontology Conference
- Every American Furry Convention
- American Baking Society
- Asia Dolphin-Training Convention
- TED
Participation Encourages Learning

YOU

So like I was saying...

EVERYBODY ELSE

I always read that blog

Awesome!

Didn't John wrote about them?

www.searchenginepeople.com
Learn About Professions

- Astronomy: sharpening telescope images
- Biology: DNA sequencing/matching, phylogeny, splice junctions, protein secondary structures
- Business: credit card approval, fraud detection
- Chemistry: visualizing 3D molecular structure
- Civil Engineering: traffic control
- Environmental science: changes in vegetation over time
- Finance: trading, mortgage-pool allocation, securities
- Geography: maps (driving directions, GPS)
Learn About **Professions**

- Marketing: recommendation systems, targeted advertisement
- Medicine: automated diagnosis
- Physics: muon tomography
- Psychology: identify the profile of criminals
- Political Science: electronic voting, public initiatives
- Public health: epidemiology
- Sociology: six degrees of separation, communities, "tipping points"
Play Stimulates Learning
A GUIDE TO UNDERSTANDING FLOW CHARTS
PRESENTED IN FLOW CHART FORM

START

DO YOU UNDERSTAND FLOW CHARTS?

YES

GOOD

YES

6 DRINKS

HEY, I SHOULD TRY INSTALLING FREEBSD!

NO

LET'S GO DRINK.

SCREW IT.

BUT YOU JUST FOLLOWED THEM TWICE!

NO

(I THAT WASN'T A QUESTION.)

YES

... AND YOU CAN SEE THE ONES LABELED "NO?"

NO

OKAY, YOU SEE THE LINE LABELED "YES"?

YES

... AND YOU CAN SEE THE ONES LABELED "NO?"

NO

BUT YOU SEE THE ONES LABELED "NO."

YES

WAIT, WHAT?

NO

LISTEN.

I HATE YOU.
Value Quality

REMEMBER, QUALITY IS OUR TOP PRIORITY.

QUESTION: IS IT MORE IMPORTANT THAN SAFETY?

OOH... I FORGOT ABOUT THAT ONE.

QUESTION: IS QUALITY MORE IMPORTANT THAN OBSEYING THE LAW?

WELL, PROBABLY NOT.

IF WE COULD MAXIMIZE SHAREHOLDER VALUE BY SELLING LOWER QUALITY ITEMS...

...WOULDN'T WE HAVE A FIDUCIARY RESPONSIBILITY TO DO IT?

HMM

I'M SURE IT'S IN THE TOP FOUR.

WHAT IF WE HAD TO LIE TO ACHIEVE QUALITY?
I have the ability to quantify the unquantifiable.

That is why they call me Dogbert the quantifier.

Who calls you that?

Eight people.
Learn To Qualify Answers

I Has A Grammar
MAPS For Student Success

- Attention
- Processing
- Memory
- Sequencing
Maps For Student Success

- Every member of the faculty is an adviser, use the barber shop algorithm when you need one
- Talk to your teachers and their assistants
- Learn how the department’s staff can help
- Use the department’s Academic Computing Help Desk in Olin Engineering, 132
Maps For Student Success

- Participate in Association for Computing Machinery activities
  
  http://www.acm.org
  http://acm.fit.edu/

- Join our forum
  
  https://lists.fit.edu/sympa/info/cs-forum/

- Use the CS portal
  
  http://cs.fit.edu/portal

- Attend seminars — Fridays @ Noon in Olin Engineering 118

- Party at tea time — Wednesdays @ 3, Harris Center third floor
Faculty and Some of Their Interests

- Computational Sciences — Debasis Mitra, Bill Shoaff
- Cryptology and Distributed Negotiations — Marius Silaghi
- Database — Phil Bernhard
- Graphics and Vision — Eraldo Ribeiro
- Machine Learning and Data Mining — Phil Chan
- Networks — Jerry Marin, Bill Allen
- Programming Languages — Ryan Stansifer
- Security — William Allen, Richard Ford
- Self Organizing & Coordination Systems — Ronaldo Menezes
- Software Testing — Cem Kaner, Keith Gallagher
- Software Evolution — Keith Gallagher, Scott Tilley
Staff Members

- Administrative Assistant — Karen Brown
- Harris Institute Administrative Assistant — Dee Bonilla
- Student Coordinator — Rosalyn Bursey
- Systems Administrator — Nathan Moreau
Hey, check it out: \( e^{\pi} - \pi \) is 19.99909979. That's weird.

Yeah. That's how I got kicked out of the ACM in college.

...What?

During a competition, I told the programmers on our team that \( e^{\pi} - \pi \) was a standard test of floating-point handlers -- it would come out to 20 unless they had rounding errors.

That's awful.

Yeah, they dug through half their algorithms looking for the bug before they figured it out.
Plagiarism Does Not Encourage Learning

Calvin and Hobbes:

Today at school, I tried to decide whether to cheat on my test or not.

I wondered, is it better to do the right thing and fail... or is it better to do the wrong thing and succeed?

On the one hand, undeserved success gives no satisfaction... but on the other hand, well-deserved failure gives no satisfaction either.

Of course, most everybody cheats some time or other. People always bend the rules if they think they can get away with it... then again, that doesn't justify my cheating.

Then I thought, look. Cheating on one little test isn't such a big deal. It doesn't hurt anyone.

But then... I wondered if I was just rationalizing my unwillingness to accept the consequence of not studying.

Still, in the real world, people care about success. Not principles... then again, maybe that's why the world is in such a mess... what a dilemma!

So what did you decide? Nothing. I ran out of time and I had to turn in a blank paper.

Anymore, simply acknowledging the issue is a moral victory.

Well, it just seemed wrong to cheat on an ethics test.
Do Not Allow Yourself To Be Quarantined

YOU

EVERYBODY ELSE

They suck!

They're too cool!

They who?

www.searchenginepeople.com
Learn how to write before graduating
Learn C before graduating
Learn microeconomics before graduating
Don’t blow off non-CS classes just because they’re boring
Take programming-intensive courses
Stop worrying about all the jobs going to India
No matter what you do, get a good summer internship
Mind your P’s and Q’s

- Be positive
- Don’t quit