

# CSGF Survey Summary

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# Stumped you!

How would you describe how you use “None”

- (a) Never
- (b) beginner
- (c) regular user

# Background on this Survey

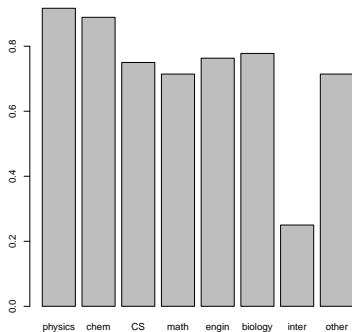
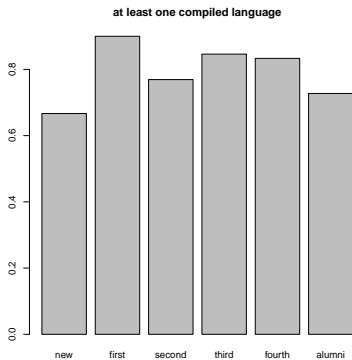
- Me = biologist
- My first year at CSGF = clueless
- My answers to the survey = “Never heard of it”

# Themes

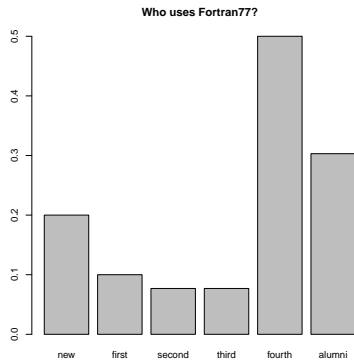
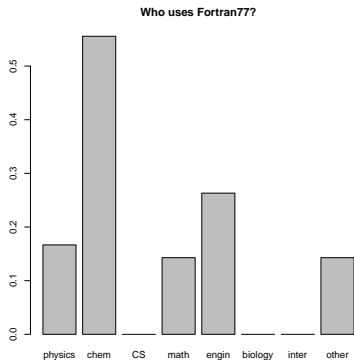
- ① How do we compute? High level/low level? Parallelization?
- ② Good Practices
- ③ Communication / Tech
- ④ Breaking down by year, field, etc

# So what languages do we use?

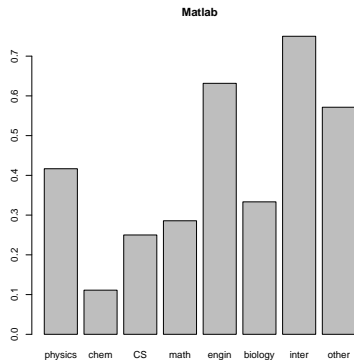
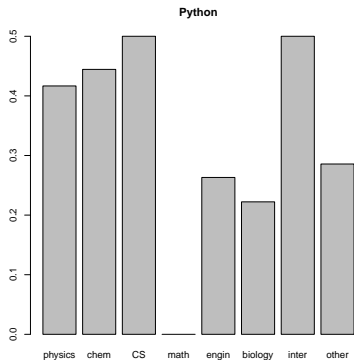
# Compiled languages



# Who uses Fortran77 “regularly”?

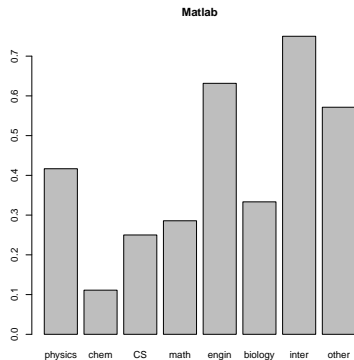
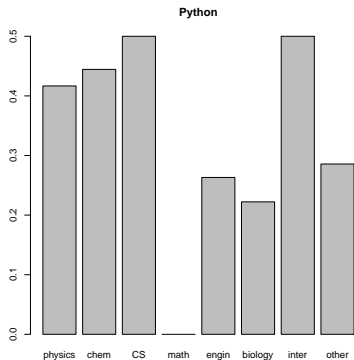


# Mathematicians don't use Python

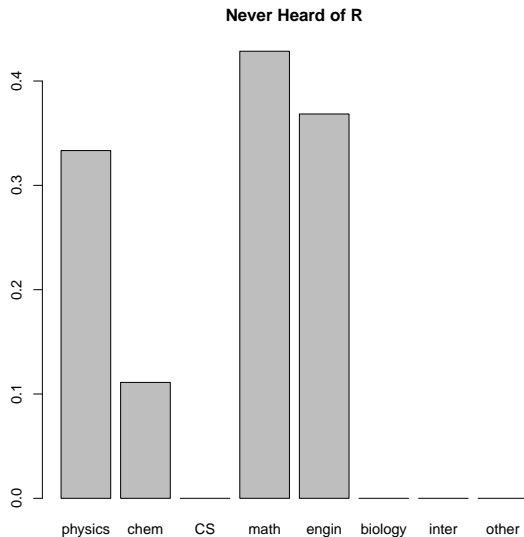




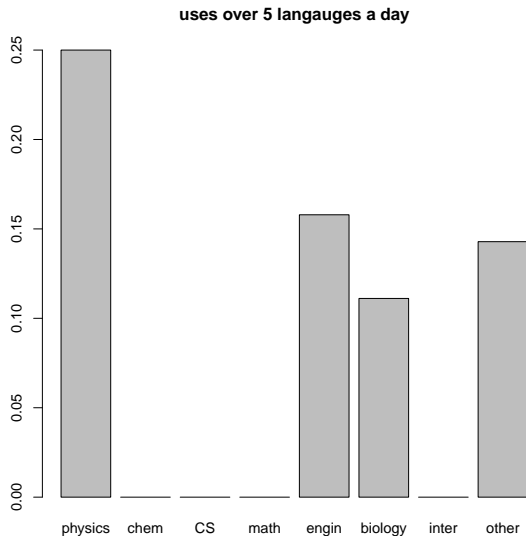
# Mathematicians don't use Python



... then you're probably a physicist

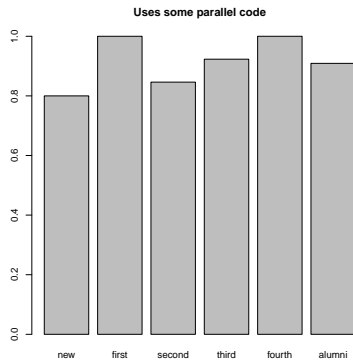
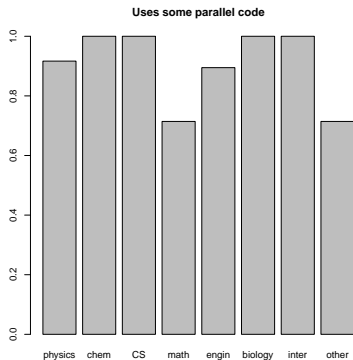


which means you're either multilingual or schizophrenic

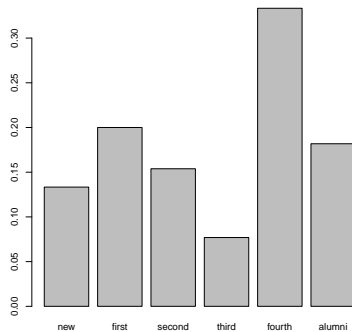
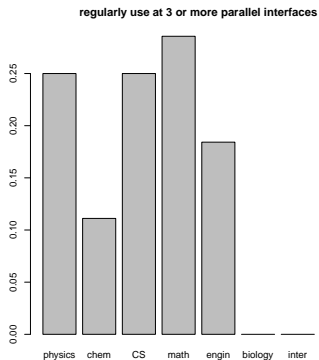


How about Parallel code?

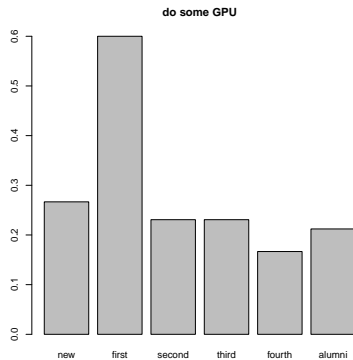
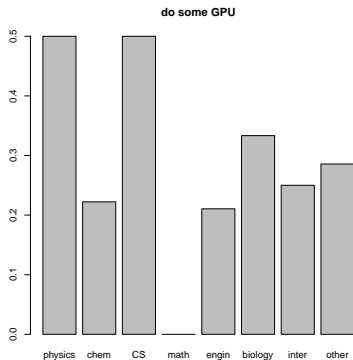
# Almost everyone uses at least occasionally!



# And some get carried away



# Over 25% of us are exploring GPU computing

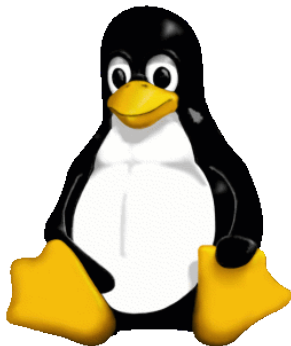


We all use  $\text{\LaTeX}$ , we can get by in HTML, but don't ask us about web development!

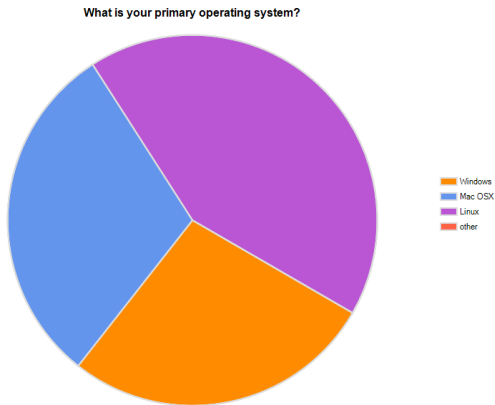


and our favorite operating system is. . .

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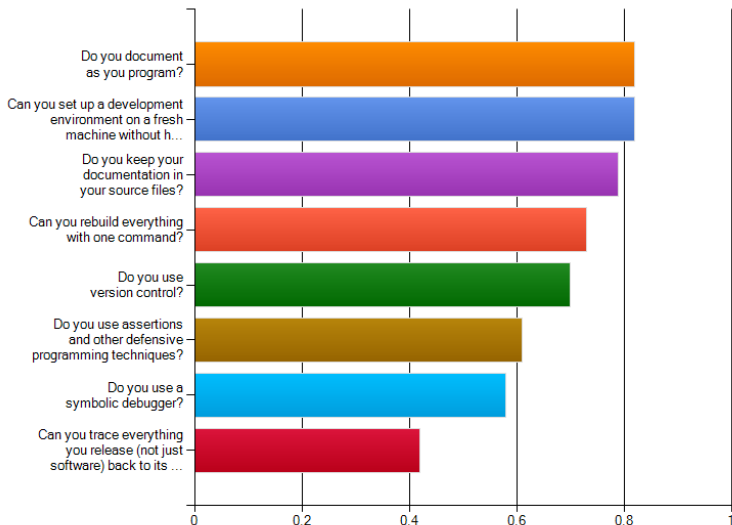
and our favorite operating system is. . .



## II. Good Software Practices

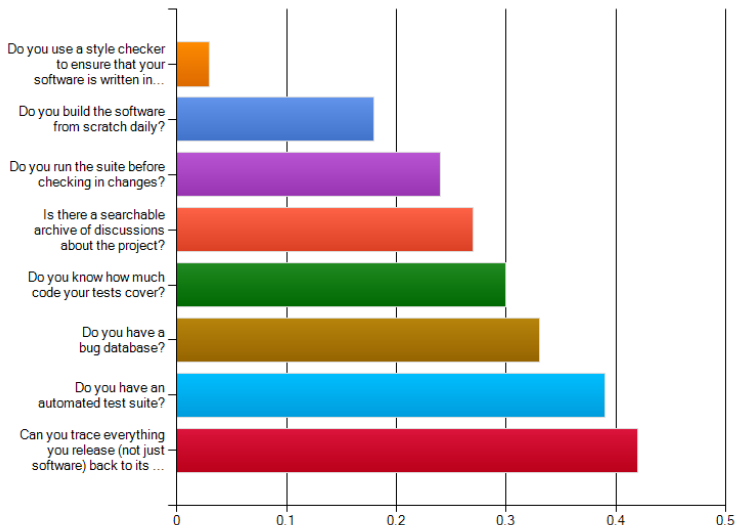
# Software Carpentry Quiz

Software Carpentry Quiz: Good practices in programming



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Software Carpentry Quiz: Good practices in programming

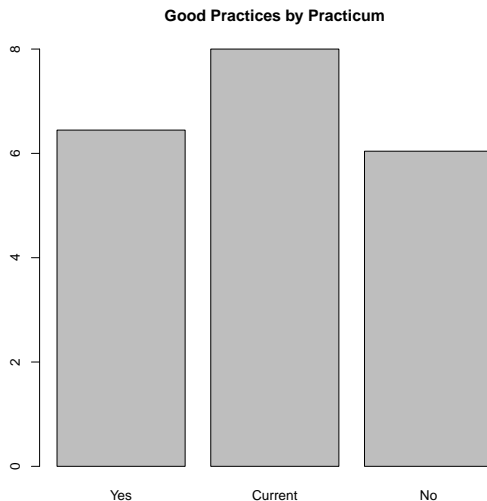


No strong pattern here by year or PhD...

How about having been on practicum?

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How about having been on practicum?





- Version management: Mostly subversion, some cvs
- Documentation: Mostly by detailed comments. Some Doxygen, 1/4 use self documenting and readme's.

# Visualization

We mostly visualize with stuff we've never heard of...

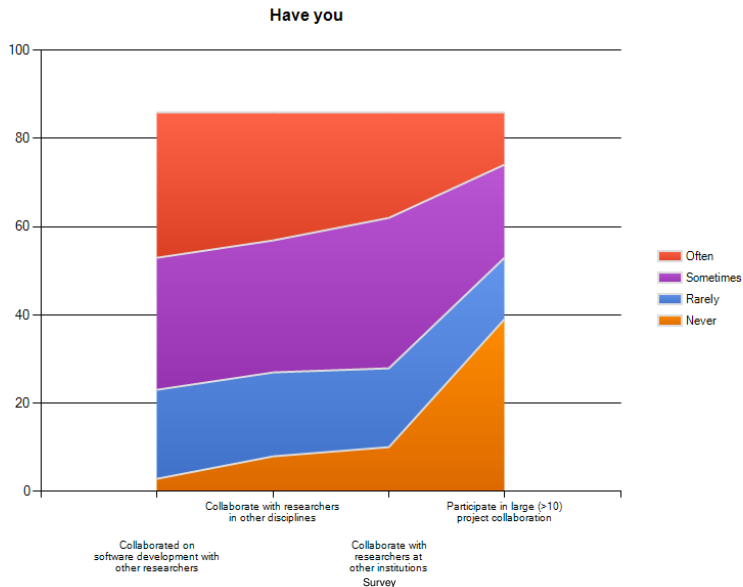
CSGF 2010 Survey

What visualization tools do you use?				
	Never heard of it	Use sometimes	Use regularly	Response Count
gnuplot	26.8% (22)	43.9% (36)	29.3% (24)	82
R	68.5% (50)	19.2% (14)	12.3% (9)	73
Matlab	8.2% (7)	40.0% (34)	51.8% (44)	85
Python	41.8% (33)	31.6% (25)	26.6% (21)	79
Matplotlib	63.8% (51)	20.0% (16)	16.3% (13)	80
mayavi	88.2% (67)	11.8% (9)	0.0% (0)	76
VTK	75.0% (57)	18.4% (14)	6.6% (5)	76
ParaView	79.2% (61)	11.7% (9)	9.1% (7)	77
VisIt	67.1% (53)	17.7% (14)	15.2% (12)	79
Tecplot	73.1% (57)	21.8% (17)	5.1% (4)	78
IDL	79.5% (62)	16.7% (13)	3.8% (3)	78
VMD	81.6% (62)	9.2% (7)	9.2% (7)	76
GGobi	94.9% (74)	5.1% (4)	0.0% (0)	78
Excel	32.5% (26)	47.5% (38)	20.0% (16)	80
Other	66.7% (26)	5.1% (2)	28.2% (11)	39
			Other (please specify)	15
answered question				91

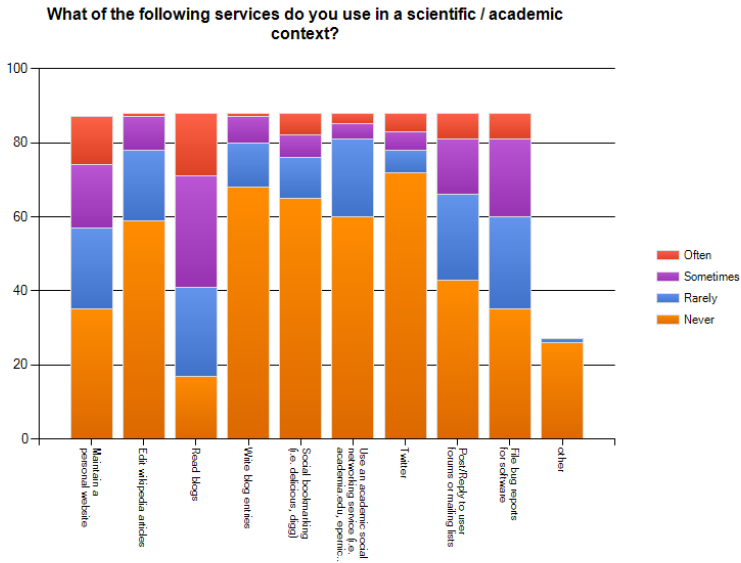
# III. Communication / Web 2.0 tools

# Collaborations

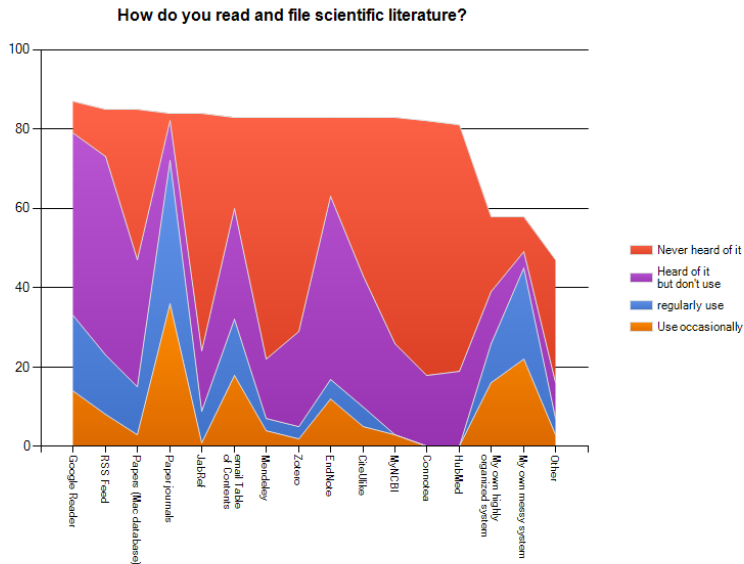
We're quite collaborative



... but socially illiterate?



# Read what?



# Somewhat open

