CSE 591: Introduction to Graduate Study in CSE

Class 1
Prof. Roger Chamberlain
Plan for today

Welcome & introductions
Class logistics
Today’s discussion
Intro to research
The Ph.D. process
Introductions

I’m your course master
Contact: email roger at wustl dot edu. Set up appointments by stopping by Bryan509 (dept. office) to see Jayme (jayme@seas.wustl.edu). If my door is open and I’m not in a meeting I’ll see you right away. You’ll see many different faculty over the course of the semester, but I’m in charge of logistics.

A little bit about me
I’m originally from NE Oklahoma and went to college and grad school right here at Wash U.

I work in computational science using non-traditional computer architectures. I’ll give a research talk later this semester.

Now, how about you?
What is this course?

An intro to research in CS&E
A primer on various skills you will need as a Ph.D. student
A survey of research done in the department
A lot of help in finding a research advisor

Remember – to stay in the program, you need to find an advisor by next summer. Most students are picked up in December to February.
Your responsibilities in CSE 591

Come to class and engage during discussions
Do some simple assignments (lit reading)
Do two rotations to experience research in different groups

Arranged by agreement with individual faculty
A plan needs to be in place before the start of the rotation
You must produce a short project report (and give a brief oral presentation) at the end of each rotation
Living the Ph.D. lifestyle (© Jorge Cham)
The Ph.D. in pictures

Matt Might: The Illustrated Guide to a Ph.D.

All human knowledge

Elementary school

High school
The Ph.D. in pictures, contd.

Bachelor’s degree

Master’s degree

Reading research papers
The Ph.D. in pictures, contd.

At the boundary, you focus

Then you push

One day, the boundary gives way
The Ph.D. in pictures, contd.

That’s the Ph.D!

Your perspective has changed!

So don’t forget the bigger picture

And keep pushing!
Literature searches (© Jorge Cham)
How does research get done?

Understand current state of knowledge
Conceive of an idea
Develop a proposal to support the idea
Do the work
Communicate the results