CS/COE 0447

Introduction to:
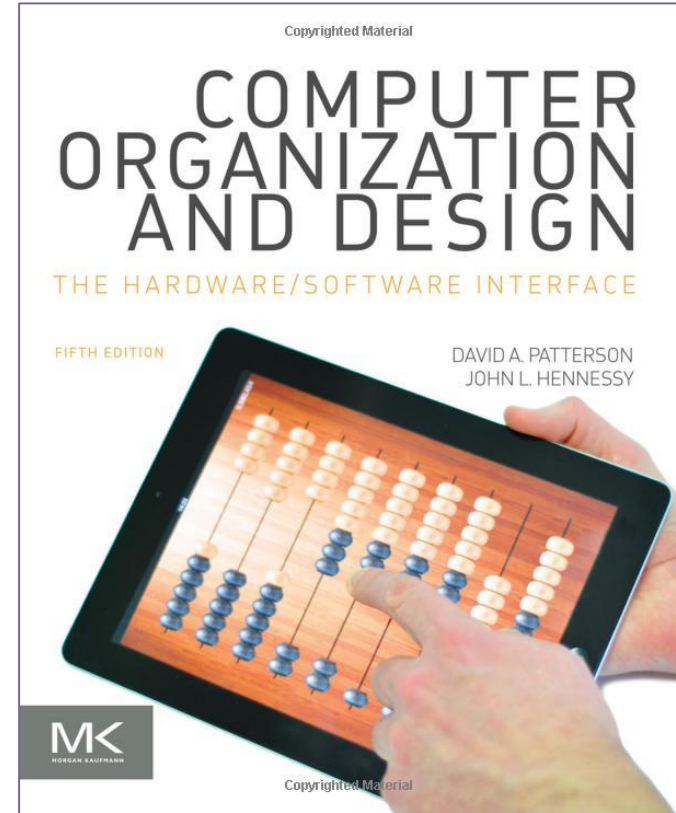Introduction to
Computer Architecture

Welcome

- Hello!
- I'm Wilkie.
- I'm currently interested in Distributed Systems and Software Preservation.
- I've worked on Social Networks, Embedded Systems, Operating Systems, and Virtualization-based software archival.
  - (I have a full-time job. Bear with me.)

- Traditional Computer Scientists think I'm "weird" I think

- I really like teaching. (taught CS 7, CS 1651 and TA'd 447/449)

All the fun Day One things…

- This is Introduction to Computer Architecture CS/COE 0447 !!!

- Course website: https://wilkie.github.io/cs447/
  - Schedule
  - Syllabus
  - Announcements
  - **LOOK AT THE WEBSITE**

- Office: 5415 Sennott Square (across from the mail room)
- Office Hours: TBA (Likely right after class time)

The Textbook

- Computer Organization and Design; Fifth Edition
- David A. Patterson, John L. Hennessy
- Cool chaps, but the book *isn't really that necessary* for this course. (It's a good book, tho)
- It goes into a lot of unnecessary detail. (Better in CS1541)
- I'll point out chapters for 'further reference' but won't assign readings.

COMPUTER ORGANIZATION AND DESIGN

THE HARDWARE/SOFTWARE INTERFACE

FIFTH EDITION

DAVID A. PATTERSON
JOHN L. HENNESSY

MK
MORGAN KAUFMANN

Grades

- I don't keep track of attendance
  - But you should come to class!
  - A lot of the concepts, logic design etc, are best demonstrated visually.

- **Labs: 20%** (Two can be dropped, will likely be around 12 total)

- **Projects:**
  - **15%** - MIPS project
  - **15%** - Logisim project

- **Midterms: 30%** (Two midterm exams; 15% each)

- **Final: 20%** (Mostly Cumulative)

Other Important Notes

- Disability Resources / Services:
  - Contact DRS **412-648-7890**; TTY: **412-383-7355**
  - They will email me, and I will listen to what they tell me to do.

- Cheating:
  - First time: 0 on the assignment, project, or exam
  - Second: **Fail the course**. (Applies to **all** involved.)
  - Pro-tip: **DON'T CHEAT**
  - Labs: You can work, optionally, with a partner.
  - The syllabus online has a more thorough policy.

- Conduct:
  - Jokes/comments about sex, gender, race, ethnicity, religion, etc are not tolerated. Includes any online spaces involved.

More Notes about Cheating

- Again, do not cheat.

- I'm not grading projects or labs, but I still look at your work.

- Ask for help (There are PLENTY of resources)
  - TAs and my own office hours
  - Undergraduate Helpdesk (CRC)
  - We want you to succeed!

- I can definitely tell when someone cheats.
  - It is very obvious.
  - **Do not do it**.
  - The University is justifiably strict about it.

- Do not publish your code until **after the semester** (if at all)

Teaching Philosophy / Pedagogy

- I don't like teaching from slides or from a book.
  - You can do that yourself. I prefer *interactivity*.

- I want to demonstrate practical applications.
  - Including humanist and artistic applications.

- I want you to walk away with a direction or goal to do something else.
  - Hopefully you find something to be inspired by.

- I trust my students that they could learn on their own.
  - But don't want them to *have* to do so.
  - Ask questions! Challenge concepts! Ask for help!