Class Meetings

• We are scheduled to meet in person, and that is the plan for the semester… *as I write this*

• With treatments and >90% of UK vaccinated, COVID is less deadly, but *still very contagious*
  – Follow UK/CDC guidance
  – Use class online resources to keep up

• I *encourage masks* for in-person meetings unless socially distanced
Course Overview

• There will be Verilog, and you’ll design stuff
• A lot more of the advanced stuff
  – Fancy things inside processors
  – Lots of parallel architecture
• There may be some higher-level simulation
Advanced Stuff?

Frontier Supercomputer:
8,730,112 cores, 1.102 Exaflop/s
M-Unit Sales, Global Personal Electronics

https://www.grandviewresearch.com/industry-analysis/personal-consumer-electronics-market
Textbook

- The text is: *Computer Architecture, 6th Edition: A Quantitative Approach*, by Patterson & Hennessy
- Same text as was used in CPE480… and only loosely followed here too
- Lots of additional materials… text is for reference only
Grading & Such

- Midterm exam, ~20%
- Final exam, ~30%
- Material cited from the text, from lectures, from canvas, or from the course URL: http://aggregate.org/EE685/
- Homeworks and projects, ~50%
- Can’t get more than 1 letter grade above min(exam average, project average)
- I try not to curve much; always in your favor
Course Content

• Precise content depends on you:
  – How many of you took CPE380? When?
  – How many of you took CPE480? When?

This course is sort-of ++CPE480...

• The syllabus is posted, but it’s pretty vague because things will vary significantly based on the backgrounds of students in the course
Me (and why I'm biased)

- Hank Dietz, ECE Professor and James F. Hardymon Chair in Networking
- Office: 203 Marksbury
- Research in parallel compilers & architectures:
  - Built 1st Linux PC cluster supercomputer
  - Antlr, AFNs, SWAR, FNNs, MOG, ...
  - Various awards & world records for best price/performance in supercomputing
- Lab: 108/108A Marksbury – I have TOYS!