Introduction

EE685, Fall 2021

Hank Dietz

http://aggregate.org/hankd/
Class Meetings

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

- **Masks must be worn for in-person meetings**

- Delta is *much worse* than other strains
  - If you might have COVID19, get tested
  - If you are under quarantine, stay home
  - Quarantine is an excused absence, and I will help you keep up with recordings, etc.
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 will be some higher-level simulation
Advanced Stuff?

Photo by Hiroko Hama - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/wiki/index.php?curid=102551957

Fugaku supercomputer - 7,630,848 cores
Textbook

• The text is: 

• Same text as 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...

• I’ll distribute a complete syllabus next class
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**!