

Simulations

VOIP (300ms)

Video game visuals (1.7-4ms)

Production lines

HFT $(1-10\mu s)$

Audio (6-20ms)

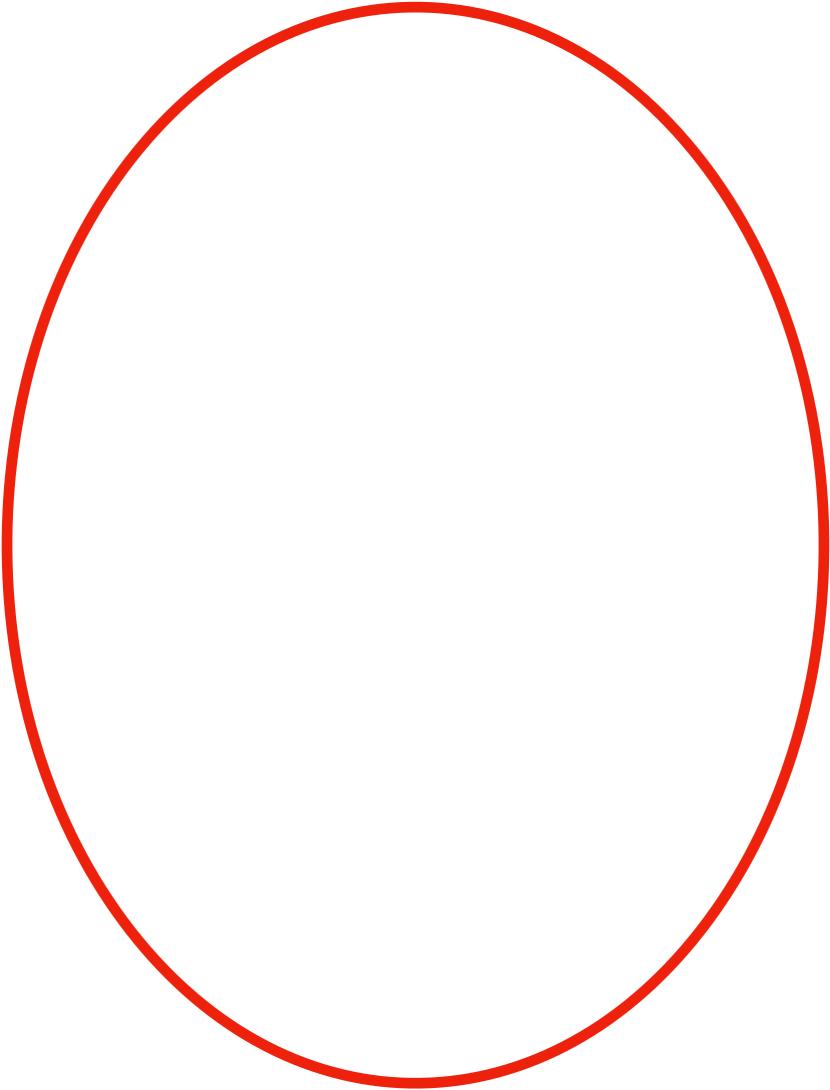
Anti-lock brakes (1-10ms)

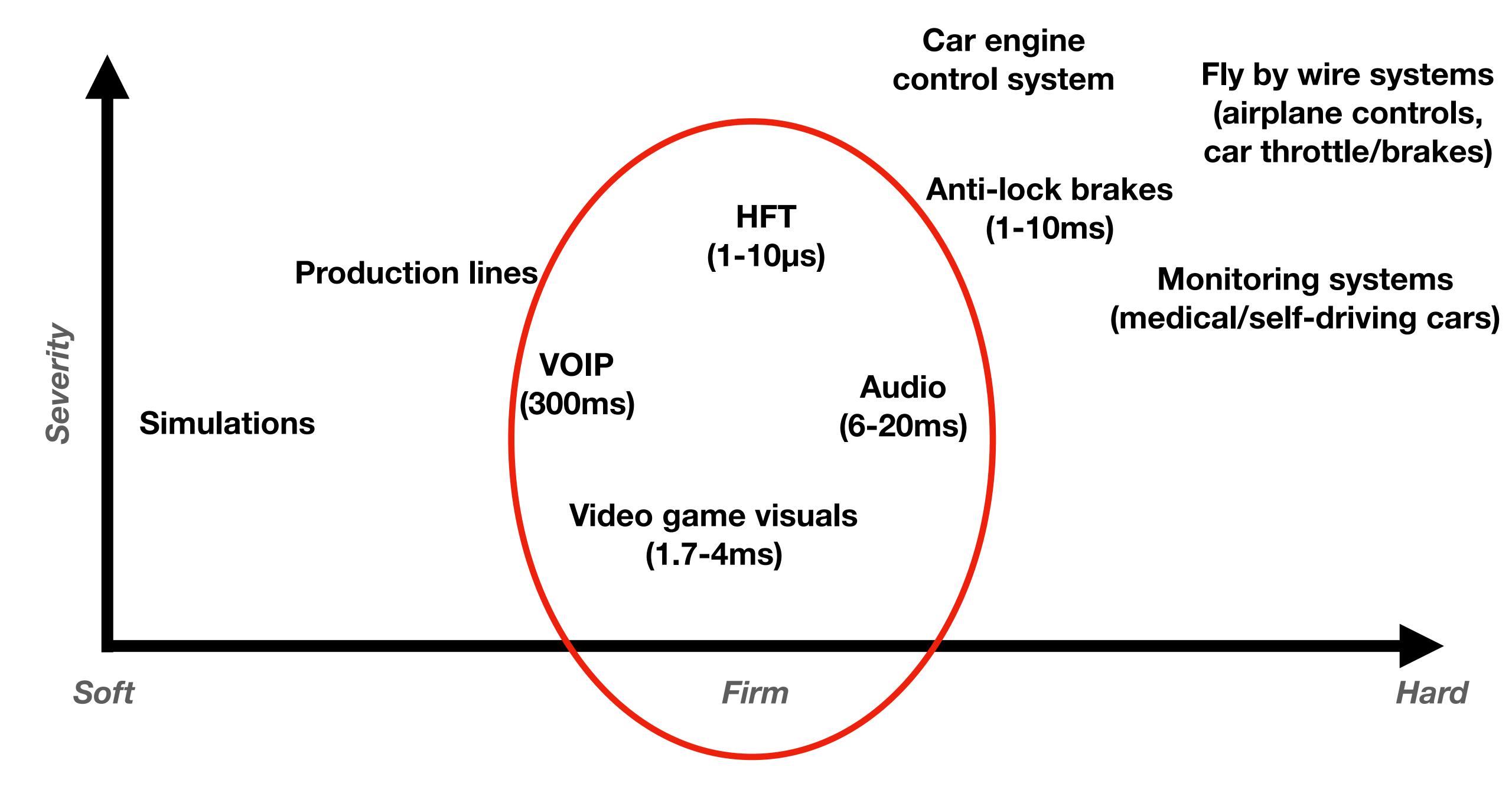
Car engine control system

Fly by wire systems (airplane controls, car throttle/brakes)

Monitoring systems (medical/self-driving cars)







Real-time Threads

- Real-time threads can give you an uninterrupted period of time to run
- If you exceed this you may be put to sleep (and hence you can miss your deadlines)
- You may be declassified as as a "real-time" thread and hence have less time next callback
- Don't miss your deadlines

https://developer.apple.com/library/archive/documentation/Darwin/Conceptual/KernelProgramming/scheduler/scheduler.html