

# CS 241 Honors

## Git tutorial and surfing the high Cs

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# Sailing the C-s

- Inspired by  
<https://stackoverflow.com/questions/132241/hidden-features-of-c>

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  - Linux Kernel
- I'm better than a stupid machine right? Right?!?!
  - Manual branch prediction benefits from you knowing more about the program than the CPU



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- Let's take a look at some simple code

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  - If we understand the compiler's behavior, we can write code that seems less efficient, but is better (abstractions like vectorization that don't change code)

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  - Functions as first class objects (almost like functions pointers)

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  - Not exactly a closure, but the next best thing

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- Useful to determine if code will run on computers with limited resources

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- Can combine this with some macros (`_Generic`) we're not going to cover tonight that allow for much greater control

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- Getting easier to write code that lets you think at a high level but control all the little details



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- Too many high level features, and you lose low-level control...