EE 200 Multithreading in modern C++

Steven Bell
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Tufts
UNIVERSITY

The setup

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but we can't run the chip faster than about 4 GHz.

So how we can make computers faster?

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So how we can make computers faster?
Put multiple cores on the chip, and run code in parallel!

Creating threads in C++

pthreads is a popular threading library for C (and C++)

But threading is built into C++ standard library as of C++11

Using std::thread

Threading is easy

but sharing data between threads turns out to be really, **really** hard.