

# **EE 200** Lecture 17: Multithreading and callbacks

Steven Bell

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# Why talk about multithreading?

# What good is multithreading?

List as many reasons as you can why you might want code with multiple threads.

# The C way: pthreads

thread struct

optional parameters

```
int pthread_create(pthread_t *thread, const pthread_attr_t *attr,  
void *(*start_routine) (void *), void *arg);
```

function pointer



start\_routine(arg)

argument  
to function



# Let's build our own version of SDL addTimer()

addTimer(3, function to call, args)  
          time  
          delay

Main thread

addTimer() —————> pthread\_create()

New thread

threadHelper() -> targetFunc()

**When should you use threads?**

**Classwork 13 is in your Github repo**

Assignments 12 + 13 are on Gradescope