

# Live-coding Audio in C

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# JACK Audio

- ▶ Process callback delegates to a function pointer
- ▶ Passes a pointer to a preallocated memory area
- ▶ Main thread can change the function pointer

# Dynamic Reloading

- ▶ `dlopen()`, `dlsym()`, `-ldl`
- ▶ Race condition: don't unload running code
- ▶ Double buffering: `dl` caches aggressively

# Detecting File Changes

- ▶ `inotify`
- ▶ if `go.c` changes: compile it (by calling `make`)
- ▶ if `go.so` changes: make a copy and load it

# Where

- ▶ performance tonight!
- ▶ `claudio@mathr.co.uk`
- ▶ `https://mathr.co.uk/clive`