[[realtime_safe]]

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https://youtube.com/clip/Ugkx1Jwq6D5zMKhQODI7JEeD0gxupJOHsLY9?si=vUVLIg9cb7Te1PbF

Cppcon 2021 The C++ Conference | October 24-29

Timur Doumler

Real-Time programming with the C++ standard library

```
struct random_sample_gen
{
    // returns a random float in the interval [0, 1)
    float operator()()
    {
        auto x = float (rng() - rng.min()) / float (rng.max() + 1);
        if (x == 1.0f) x -= std::numeric_limits<float>::epsilon();
        return x;
    }

private:
    xorshift_rand rng { std::random_device{}() };
};

void process(buffer& b)
{
    std::ranges::fill(b, random_sample_gen{});
}
```

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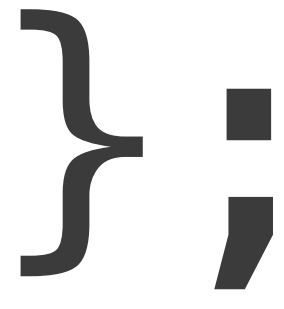
```
realtime_context rc;
```

```
void run_rt_thread()
```



```
do_mutex_lock_unlock (m);
```

```
get_file_size();
```

```
do_vector_reserve();
```

```
do_malloc_free();
```

```
do_read_file();
```

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