

C++ Club UK Meeting 118

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Firsts in 2020 (or, A little dose of good news)

- Herb Sutter
 - Reddit

C++20 ISO standard published

- ISO
 - Reddit

C++ at the end of 2020

- B. Filipek
 - Reddit

B. Stroustrup on The Continuing Evolution of C++

- Video on IDA
 - Reddit

No Diagnostic Required podcast from JetBrains

- Twitter: ndr_cpp
- YouTube: nodiagnosticrequired

Concepts appreciation thread

- [Reddit](#)

C++ executors

- **Reddit**
 - CppCon 2019: Eric Niebler, David Hollman "A Unifying Abstraction for Async in C++"
 - P0443R14 - A Unified Executors Proposal for C++
 - libunifex (Facebook)

Do you use C++ in your day job? If so, what did it take to get there?

- Reddit

Easily currying functions in C++

- [Reddit](#)

```
1 // Existing, non-curried function
2 auto f(int a, int b, int c) noexcept -> int {
3     return a * b * c;
4 }
5
6 auto g = fn::curry(f); // g is the curried form of f
7
8 int main() {
9     return g(2)(5)(10); // returns 100
10 }
```

C++ and passing by value

- Matt Godbolt
 - [Reddit](#)

Cheerp 2.6 rc1: C++ compiled for the Web

- Carlo Piovesan

repr: return printable value

- GitHub
 - Reddit

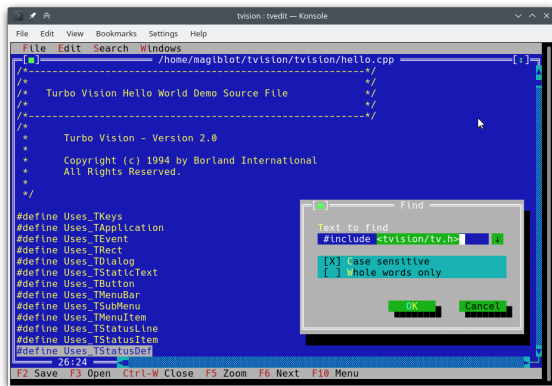
The problem with C

- Corentin Jabot
 - Reddit
 - Reddit

Turbo Vision

A modern port of Turbo Vision 2.0, the classical framework for text-based user interfaces. Now cross-platform and with Unicode support.

- [GitHub](#)
- [Reddit](#)



Fold expressions work inside constraints

- **Reddit**

```
1 template <template <typename> class FooT, typename... T>  
2 requires (... && Bar<FooT<T>>) struct Baz {};
```

Without fold expressions:

```
1 template <template <typename> class FooT, typename... T>  
2 requires([]() {  
3     std::array arr = std::array{Bar<FooT<T>>...};  
4     return std::reduce(arr.begin(), arr.end(), true,  
5         std::logical_and<bool>{});  
6 })() struct Baz {};
```


consteval-huffman

A C++20 utility for compressing string literals at compile-time to save program space. The compressed data can be decompressed at run-time through the use of a decoder that follows `std::forward_iterator`.

- [GitHub](#) (C++20, Public domain)
- [Reddit](#)

```
1 | auto data = "This is my string of data"_huffman;
```

Taskflow 3.0.0

A General-purpose Parallel and Heterogeneous Task Programming System

- [Home page](#)
 - [GitHub](#) (C++17, MIT)
 - [v3.0.0](#)
 - [Reddit](#)

Project from scratch in C++ (for beginners)

- Reddit
 - YouTube
 - Blog

Game dev C++ vs Regular C++

- Reddit

Some companies are stuck on the 98 standard, may God have pity on their souls, and others have weird requirements to avoid things because a manager had an issue with them 10 years ago. ➡

Bona - A C++20 based modern file information viewer

- [Reddit](#)

Obsolete function will stay

```
# you may think that this function  
# is obsolete, and doesnt seem to do  
# anything. and you would be correct.  
# but when we remove this funtion  
# for some reason the whole program  
# crashes and we cant figure out why,  
# so here it will stay.
```