

C++ Club UK Meeting 122

Gleb Dolgich

2021-02-18

“Why C and C++ are Awful Programming Languages”

- Article by Ian Barland, Radford University (!)
 - Reddit
- Modern C++ Won't Save Us, by Alex Gaynor

What (relatively) easy to implement features would you like to see in C++23?

- [Reddit](#)

Possibility of adding operators to handle nullptr easier (“??”, “?→”)

- [Reddit](#)

Purely academic purposes Compile-time Turing Machine in C++20

- GitHub
 - Reddit

X-Macros

- Arthur O'Dwyer
 - Reddit

Interesting technique, I hate it. #

C++ HTML

- J.F. Bastien

“Why is C++ so terrible when it comes to date/time manipulation?”

Spoiler: it isn't

- [Reddit](#)

Is Zero a Butterfly?

- Shafik Yaghmour
 - Reddit

Polymorphism Decision Table

- Kilian Henneberger

Infix Function Calls with Boost HOF

- Jo Boccara
 - Reddit

Before

```
1 | const bool b = isPrefixOf(prefix, text);
```

After

```
1 | const bool b = prefix <isPrefixOf> text;
```

YAVE: Functional reactive visual programming language written in C++20

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

Adding elements to arrays and changing variables during compilation – imperative meta-metaprogramming in C++

- Dugi
 - Reddit

Data-Oriented Design and Avoiding the C++ Object-Oriented Programming Zimmer Frame

- Article by Leigh Johnston
 - [Reddit](#)

When can the C++ compiler devirtualize a call?

- Arthur O'Dwyer
 - Reddit

std::optional and other useful types

- **Reddit**

Variants suck. But you can get good performance with esoteric tricks. And even if you don't use them well, they'll still be faster than virtual inheritance

- [Reddit](#)

With `std::variant`, you choose either performance or sanity

- Reddit

MSVC build performance

- Improving code generation time with C++ Build Insights
- Faster C++ builds, simplified: a new metric for time
- The Coalition Sees 27.9X Iteration Build Improvement with Visual Studio 2019
- Faster C++ Iteration Builds
 - Reddit
- C++ Build Analyzer
 - C++ Build Insights SDK

The most thoroughly commented linker script (probably)

- Stargirl
 - GitHub
 - Reddit

How can I write a C++ class that iterates over its base classes?

- Raymond Chen
 - Reddit

Template specialization and instantiation

- Xiang Fan, Microsoft
 - Reddit



Bea Hughes @beajammingh

Next interview I ever have, when they ask "do you have any questions for us?" I'm going to demand they reverse a linked list for me.

