C++ Club UK Meeting 111

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2020-07-30

2020-07 mailing available

- Mailing
 - Reddit
- · Selected papers:
 - P2000R2: DIRECTION FOR ISO C++ notable additions
 - P1659R1: starts_with and ends_with
 - P1679R3: string contains function
 - P2186R0: Removing Garbage Collection Support
 - P2192R0: std::valstat transparent return type

Bjarne Stroustrup interviews

Thirty Years C++. Interview with Bjarne Stroustrup

• Roberto V. Zicari, ODBMS Industry Watch

Bjarne Stroustrup:

Education is important, but not everyone who wants to write software needs the same education.

Ask Me Anything with Bjarne Stroustrup, hosted by John Regehr

- YouTube
 - Reddit

C++ Russia — Interview and Q&A with Bjarne Stroustrup

YouTube

Initial Support For C++20 Ranges in Visual Studio 2019 V16.6

- Blog post
 - Reddit

eCAL - enhanced Communication Abstraction Layer

- GitHub (Apache-2.0)
 - Reddit
 - ROS

spdlog V1.7.0

- GitHub
 - Reddit

How To Add A GUI To A C++ Program

Reddit

std::polymorphic_value + Duck Typing = Type Erasure, by Jonathan Müller

- Article
 - Reddit
- polymorphic_value (GitHub)
- Better Code: Runtime Polymorphism Sean Parent

Runtime Polymorphism with std::variant and std::visit

- · Bartek Filipek
 - Reddit

C++ Lambdas, Threads, std::async and Parallel Algorithms

- B. Filipek
 - Reddit

The Darkest Pipeline - Multithreaded pipelines for modern C++

- GitHub
 - Reddit (Header-only, C++17, Boost Licence)

Testing a Modern C++ workflow by coding a base85 decoder from scratch

- German Diago Gomez
 - Emacs
 - Meson
 - C++20
- · Tom's Data Onion

An Introduction to Parallel Computing in C++ (2016)

Notes

The goal of these notes is to introduce the reader to the following.

- Parallel computing in imperative programming languages and C++ in particular, and
- Real-world performance and efficiency concerns in writing parallel software and techniques for dealing with them.

5 Curious C++ Lambda Examples

- B. Filipek
 - Reddit

Lambda Lambda

- Barry Revzin
 - Reddit



Michael Park @mcypark

🤵 @BarryRevzin

Haskell: λ

Rust: lambda

C++: laaaaaaaaaaambbdaaa

thread

10h • 18/06/2020 • 15:11

A C++14 Lambda Library

- Peter Dimov
 - Reddit

Before

```
int count_even(int const * first, int const * last)
{
   return std::count_if(first, last, [](int x) {
    return x % 2 == 0;
});
}
```

After

```
int count_even( int const * first, int const * last )
{
   return std::count_if(first, last, _1 % 2 == 0);
}
```

The importance of choosing the right data type

how showers are supposed to work

int temperature;

how showers work

bool temperature;