C++ Club UK Meeting 110

Gleb Dolgich

2020-07-09

June mailing

- mailing2020-06
 - Reddit

Select papers

- P2184R0 HOPL: Thriving in a Crowded and Changing World: C++ 2006–2020
- P2164R1 views::enumerate
- P2093R0 Formatted output

C++20	Proposed
<pre>std::cout << std::format("Hello, {}!", name);</pre>	<pre>std::print("Hello, {}!", name);</pre>

Best online data structures /algorithms c++ courses?

Reddit

Links

- Coursera: Algorithms, Part I (Prinston University)
- Book: Competitive Programmer's Handbook, by Antti Laaksonen, 2018

C++ is brilliant

Reddit

What is the "difficult" part of C++?

Reddit

C++ is kind of like quantum physics: the more you understand it the less you understand it. #

In a hypothetical situation, backwards compatibility is no longer an issue in C++. What would you change about the core language or the standard library?

- Reddit
 - · Rust gets mentioned!

C++ is too slow to compile

Reddit

Tools

- Build time profiler for Clang
- Clang Build Analyzer

Microsoft: Rust Is the Industry's 'Best Chance' at Safe Systems Programming

- Microsoft
 - Reddit

Rust is a great language. Like C++, it trusts the programmer, and like Java, it doesn't trust the programmer. #

CXX — safe FFI between Rust and C++

C++11 Guide: A Practical Guide for the Everyday Programmer

- Stuart Wheaton
 - Reddit

C++11 posted on June 14, 2020?

Illustrative Boost 1.73 epoch report

- Report
 - Reddit

Hiding C++ template parameter packs in a tuple

• Raymond Chen

std::chrono cheatsheet

- Gist
 - Reddit
- Howard Hinnant's date library

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

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

Modern C++ Template

- Filip Dutescu (GitHub)
 - Reddit

A template for modern C++ projects using CMake, clang-format and unit testing

Quick reference of C++ value categories

- Part 1
- Part 2

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

- · Bartek Filipek
 - Reddit

Cefal: library of functional typeclasses using C++20 concepts

- GitHub (C++20, BSD-3-Clause)
 - Reddit

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

- B. Filipek
 - Reddit

Taskflow

Modern C++ Parallel Task Programming

- Home
- GitHub
- · Taskflow 2.5 announcement on Reddit
- Taskflow C++ Parallel Tasking System, by Manoj Rao

Library: NameOf

• GitHub (C++17, header-only, MIT)

The Darkest Pipeline - Multithreaded pipelines for modern C++

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

C++ based Rest web server for large scale production environment

- Reddit
- C++ libraries for restful micro services development

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.

Lambda Lambda

- Barry Revzin
 - Reddit



Michael Park @mcypark

🤵 @BarryRevzin

Haskell: λ

Rust: lambda

C++: laaaaaaaaaaambbdaaa

thread

10h • 18/06/2020 • 15:11

C++ STL by Example

- Douglas Schmidt, YouTube playlist
 - Reddit

Quote

Colin Yates @yatesco:

The biggest lie in Software Engineering is that it is about computers and not people.

The importance of choosing the right data type

how showers are supposed to work

int temperature;

how showers work

bool temperature;