C++ Club UK Meeting 116

Gleb Dolgich

2020-11-05

mailing2020-10

- mailing2020-10
  - Reddit

Select papers

- P1206R1 `ranges::to`: A function to convert any range to a container
- P2214R0 A Plan for C++23 Ranges
- P2226R0 A proposal for an idiom to move from an object and reset it to its default constructed state
- P2237R0 Metaprogramming

Named Parameters in C++20

Peter Dimov

- Reddit

C++ in Visual Studio Code reaches version 1.0

Julia Reid

- Reddit

C++ Talk Index

Website

- Reddit

The terrible **size_t**

Reddit

juCi++: a lightweight, cross-platform IDE

- GitLab
- Installation guide

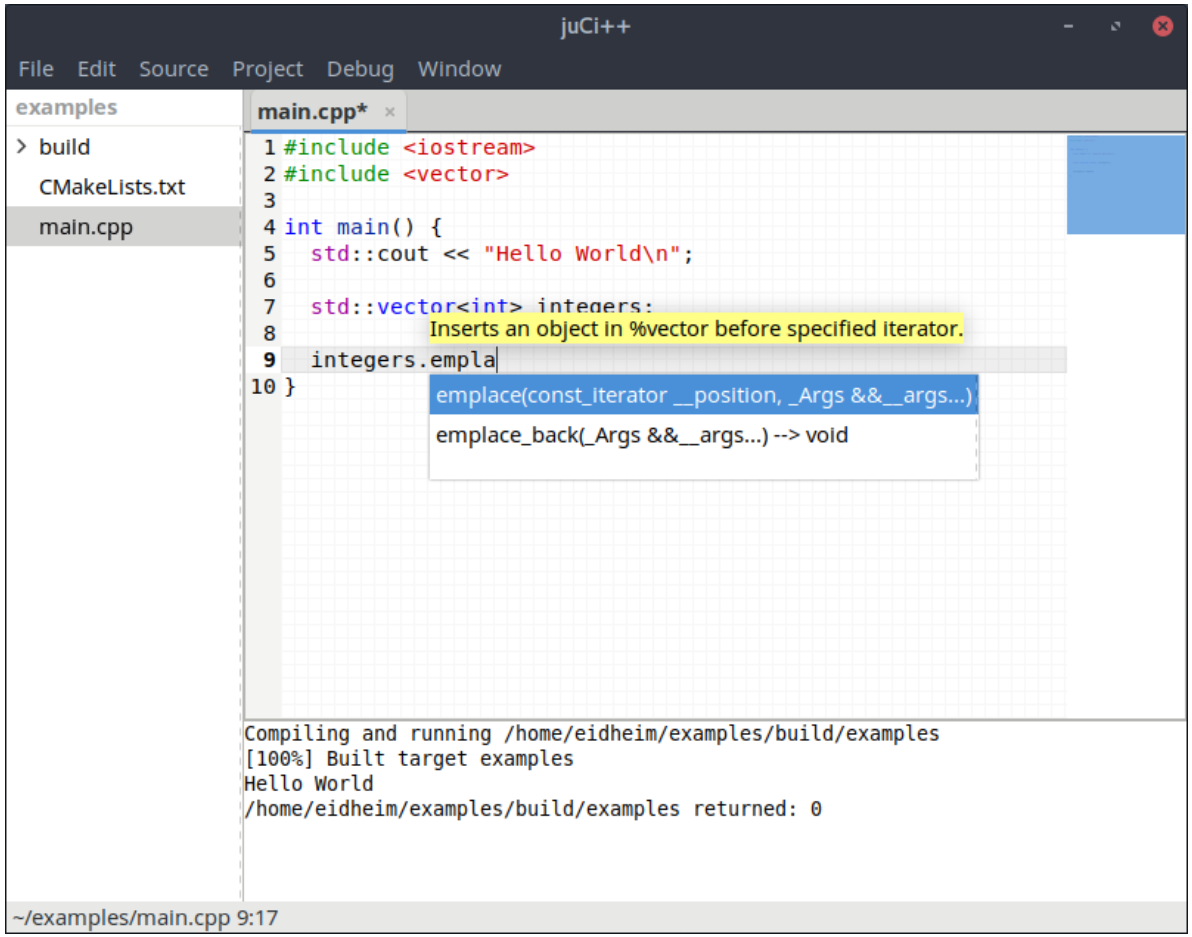


Figure 1: Screenshot

Library: cpp-lazy

GitHub

Cpp-lazy is a fast and easy lazy evaluation library for C++14/17/20.

Lazy evaluation is an evaluation strategy which holds the evaluation of an expression until its value is needed. In this library, all the iterators are lazy evaluated.

This library is not a replacement for `ranges::v3` but rather a (smaller) alternative.

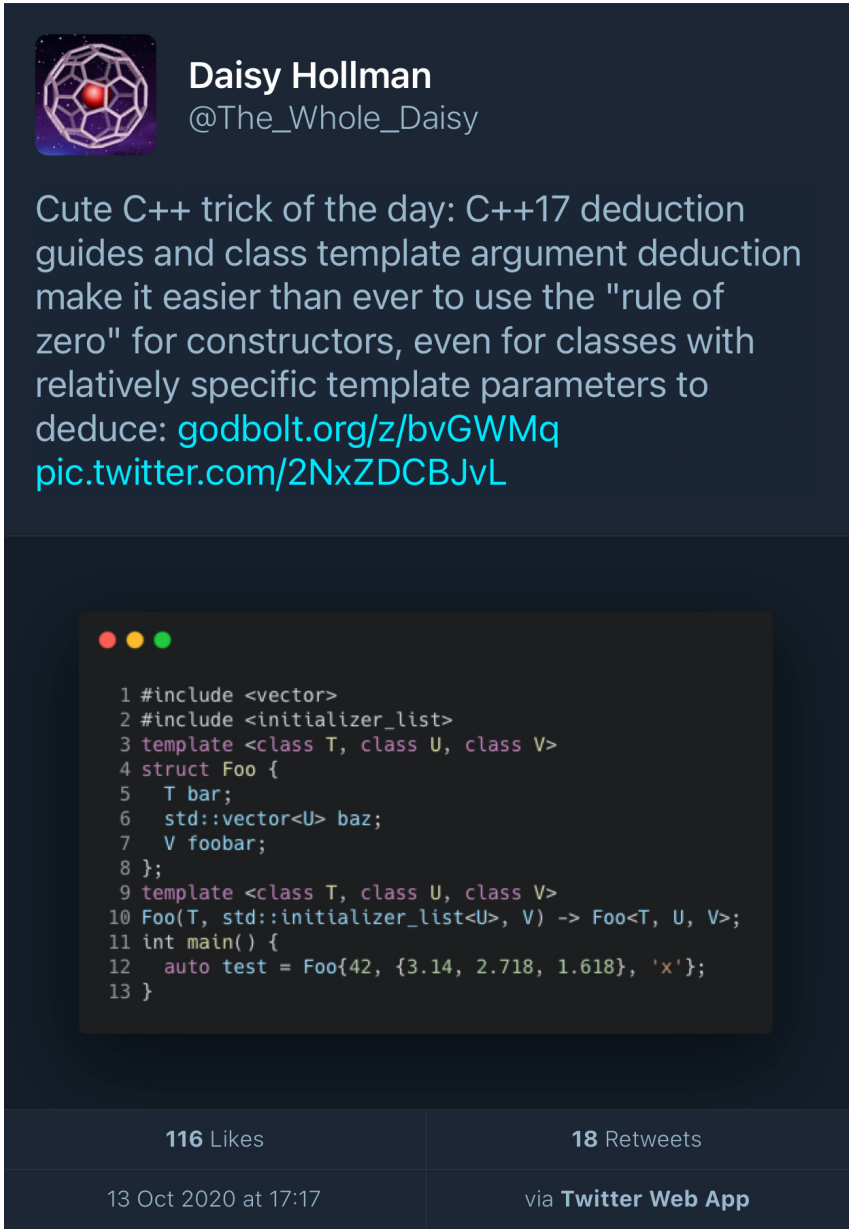
Library: Crypto3

- Home page
- Boost mailing list announcement
- GitHub
- Reddit

Library: AAA - Auxiliary Arithmetic Algorithms

- GitHub (MIT)
- Docs

Daisy Hollman's deduction trick



Daisy Hollman
@The_Whole_Daisy

Cute C++ trick of the day: C++17 deduction guides and class template argument deduction make it easier than ever to use the "rule of zero" for constructors, even for classes with relatively specific template parameters to deduce: godbolt.org/z/bvGWMq
pic.twitter.com/2NxZDCBJvL

```
#include <vector>
#include <initializer_list>
template <class T, class U, class V>
struct Foo {
  T bar;
  std::vector<U> baz;
  V foobar;
};
template <class T, class U, class V>
Foo(T, std::initializer_list<U>, V) -> Foo<T, U, V>;
int main() {
  auto test = Foo{42, {3.14, 2.718, 1.618}, 'x'};
}
```

116 Likes | **18** Retweets

13 Oct 2020 at 17:17 | via **Twitter Web App**

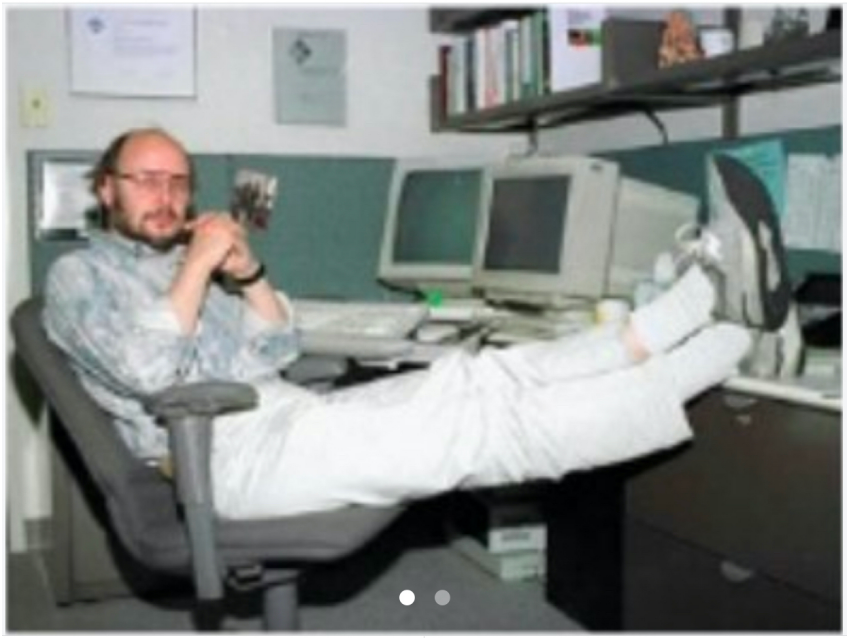
Figure 2: Deduction guides

How it started/How it’s going

S is for Shafik who stared into the void too long
@shafikyaghmour

How it started: How it's going:

#cplusplus pic.twitter.com/cINZFGUJLN



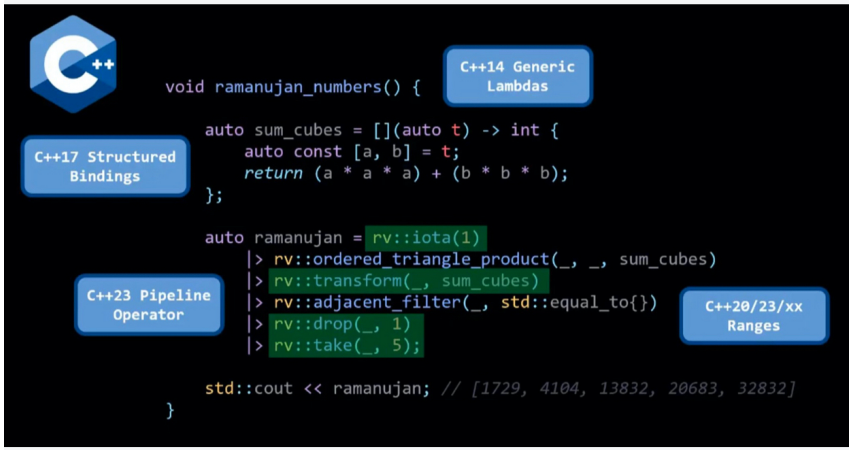
92 Likes | **9** Retweets

12 Oct 2020 at 05:10 via **TweetDeck**

S is for Shafik who stared into the void too long
@shafikyaghmour

How it started: How it's going:

#cplusplus pic.twitter.com/cINZFGUJLN



92 Likes | **9** Retweets

12 Oct 2020 at 05:10 via **TweetDeck**

Halloween logic