

C++ Club UK

Gleb Dolgich

2019-10-31

<https://itnext.io/the-case-for-c-4122a5b47130>

[https:](https://www.reddit.com/r/cpp/comments/dnm77y/the_case_for_c/)

[//www.reddit.com/r/cpp/comments/dnm77y/the_case_for_c/](https://www.reddit.com/r/cpp/comments/dnm77y/the_case_for_c/)

P1863R0 by Titus Winters

[https:](https://www.reddit.com/r/cpp/comments/dnr2e1/abi_now_or_never/)

[//www.reddit.com/r/cpp/comments/dnr2e1/abi_now_or_never/](https://www.reddit.com/r/cpp/comments/dnr2e1/abi_now_or_never/)

C++ Epochs won't help as they only touch syntax, not ABI.

<https://www.scapix.com/introduction/>

<https://github.com/scapix-com/scapix>

https://www.reddit.com/r/cpp/comments/cjvc1u/automatic_c_bindings_for_various_languages/

https://www.reddit.com/r/cpp/comments/ckf44x/scapix_java_link_modern_c17_jni_wrapper_library/

Swish

- <https://github.com/lamarrrr/swish>
- https://www.reddit.com/r/cpp/comments/c8q0wh/a_modern_c_17_http_client_library_for_humans/

CPR

- <https://github.com/whoshuu/cpr>
- <https://whoshuu.github.io/cpr/>

<https://github.com/martinmoene/span-lite>

A C++20-like span for C++98, C++11 and later in a single-file header-only library.

- Implementation <https://github.com/kokkos/mdspan> (BSD 3-Clause)
 - Intro <https://github.com/kokkos/mdspan/wiki/A-Gentle-Introduction-to-mdspan>
 - r/cpp https://www.reddit.com/r/cpp/comments/cl127i/mdspan_productionquality_reference_implementation/
- Kokkos <https://github.com/kokkos/kokkos>
- Multi-dimensional strided array views in Magnum <https://blog.magnum.graphics/backstage/multidimensional-strided-array-views/>
- P0009R9 **mdspan**: A Non-Owning Multidimensional Array Reference <http://wg21.link/p0009r9>
- CppCast with Bryce Adelstein Lelbach <https://cppcast.com/bryce-lelbach-mdspan/>

Enums, warnings, and default

<https://brevzin.github.io/c++/2019/08/01/enums-default/>

https://www.reddit.com/r/cpp/comments/cubah9/enum_switch_warnings/

GCC & Clang:

```
1 | -Wswitch-enum
```


Reddit

- PyTorch <https://pytorch.org/features> -- has a pure C++ front end <https://pytorch.org/cppdocs/>
- TensorFlow for C++
https://www.tensorflow.org/api_docs/cc
- Shogun <https://www.shogun.ml/>

The sad history of Unicode printf-style format specifiers in Visual C++

<https://devblogs.microsoft.com/oldnewthing/20190830-00/?p=102823>

- [Reddit](#)

Introducing Magnum Python Bindings

<https://blog.magnum.graphics/announcements/introducing-python-bindings/>

<https://github.com/pybind/pybind11>

AnyDuck : A Value Type Erased Type

Steve Downey: <https://www.sdowney.org/2019/07/anyduck-a-value-type-erased-type/>

Template meta-programming: Some testing and debugging tricks

<https://cukic.co/2019/02/19/tmp-testing-and-debugging-templates/>

<https://www.nextptr.com/tutorial/ta1193988140/how-cplusplus-using-or-aliasdeclaration-is-better-than-typedef>

<https://github.com/berkeley-container-library/bcl>

https://www.reddit.com/r/cpp/comments/d9xncc/c_interview_questions/

Eliminating the Static Overhead of Ranges

Colby Pike, Reddit

Without ranges

```
1 vector<string> child_names;
2 for (auto& person : all_people) {
3     if (person.age < 14) {
4         child_names.push_back(person.name);
5     }
6 }
```

With ranges

```
1 auto children_names =
2     all_people
3     | filter([](const auto& person) { return person.age < 14; })
4     | transform([](const auto& person) { return person.name; })
5     | to_vector;
```