C++ Club UK

Gleb Dolgich

2019-05-16

- Kate Gregory

AddressSanitizer (ASan) for the Linux Workload in Visual Studio 2019

▶ https://devblogs.microsoft.com/cppblog/addresssanitizer-asan-for-the-linux-workload-in-visual-studio-2019/
▶ https://www.reddit.com/r/cpp/comments/bme3rg/addresssanitizer_asan_for_the_linux_workload_in/

GCC 9.1 Released

- ▶ Announcement https://lwn.net/Articles/787385/
  - ▶ C++17 fully implemented
  - ▶ OpenMP 5.0 partially supported
- ▶ Reddit https://www.reddit.com/r/cpp/comments/bk7uha/gcc_91_released/
- ▶ GCC 9: Link-time and inter-procedural optimization improvements http://hubicka.blogspot.com/2019/05/gcc-9-link-time-and-inter-procedural.html
- ▶ Usability improvements in GCC 9 https://developers.redhat.com/blog/2019/03/08/usability-improvements-in-gcc-9/

flat.hpp

A library of flat vector-like based associative containers.

- ▶ https://blackmatov.github.io/flat.hpp/
- ▶ https://github.com/BlackMATov/flat.hpp C++14, MIT
- ▶ https://www.reddit.com/r/cpp/comments/bkq9qn/new_c_minilibrary_library_of_flat_vectorlike/

https://blueoakcouncil.org/license/1.0.0

> *Blue Oak Council's model license demonstrates all the techniques that licenses can use to make software free and simple for everyone to use and build on, in everyday language that everyone can understand.*

https://writing.kemitchell.com/2019/03/09/Deprecation-Notice.html

> *MIT and BSD open source licenses are well known, popular, and legally deprecated. They served long and well, but they're older than many open source software developers, and haven't been maintained.*

2019 Annual C++ Developer Survey Results

https://isocpp.org/files/papers/CppDevSurvey-2019-04-summary.pdf

C++17 parser-combinator library, CppCmb

Cpp»=Cmb

- ▶ https://github.com/LPeter1997/CppCmb
- ▶ https://www.reddit.com/r/cpp/comments/bemqaq/my_c17_
  parsercombinator_library_cppcmb_got_a_huge/

On resolving the type vs member conflict in C++: The Color Color problem

In C++, there are ambiguities when a member function has the same name as a type.

▶ https://devblogs.microsoft.com/oldnewthing/20190419-00/?p=102431
▶ https://www.reddit.com/r/cpp/comments/bfb1z4/on_resolving_the_type_vs_member_conflict_in_c_the/
▶ https://en.cppreference.com/w/cpp/language/unqualified_lookup#Member_function_definition

Microsoft BlingFire – A lightning fast Finite State machine and REgular expression manipulation library

- https://github.com/Microsoft/BlingFire (MIT)
- https://www.reddit.com/r/programming/comments/bf6ks4/microsoft_bing_fire_tokenizer_10x_faster_than_nltk/
- https://news.ycombinator.com/item?id=19687549

Awesome Parallel Computing Resources

https://github.com/cpp-taskflow/cpp-taskflow/blob/master/awesome-parallel-computing.md

https://www.reddit.com/r/cpp/comments/aqidl6/boostoutcome_ready_for_boost_170_release/

Quote

Nicoll Hunt:

The first step of any project is to grossly underestimate its complexity and difficulty.