# C++ Club UK

Gleb Dolgich 2019-09-19

#### **Open Sourcing MSVC's STL**

https://devblogs.microsoft.com/cppblog/open-sourcing-msvcs-stl/

https://www.reddit.com/r/cpp/comments/d58pmg/open\_sourcing\_m svcs stl/

https://github.com/microsoft/STL

### How long does it take to really master C++?

#### Reddit

If someone says they have mastered C++ they are lying. You don't master C++. Instead C++ masters you.

## The Surprising Limitations of C++ Ranges Beyond Trivial Cases

#### Article

• Reddit

### **Elements C++ GUI library**

https://www.cycfi.com/2019/07/photon-micro-gui/

• Reddit

#### C++ libraries for data visualization

- VTK https://vtk.org/
- ROOT https://root.cern.ch/
- matplotlib-cpp https://github.com/lava/matplotlib-cpp
  - matplotlib (Python) https://matplotlib.org/
- QCustomPlot (QT, GPL/commercial) https://www.qcustomplot.com/

### CppCast - CMake and VTK with Robert Maynard

http://cppcast.com/2019/07/robert-maynard/

• Reddit

#### CMake line by line - creating a header-only library

http://dominikberner.ch/cmake-interface-lib/

Reddit

https://github.com/bernedom/SI

Professional CMake: A Practical Guide, 4th ed., CMake 3.15

https://crascit.com/professional-cmake/ \$30

#### What happens with header-only libraries?

https://www.reddit.com/r/cpp/comments/d4uu46/what\_happens\_with\_headeronly\_libraries/

Assuming a reasonably-sized project where certain libraries will be required multiple times in different source files... What happens with all the in-lines and templates that get compiled in? Are there just multiple copies of each? Do modern compilers/linkers trim out the duplicates? Do they leave them in?

https://gcc.gnu.org/onlinedocs/gcc-9.1.0/gcc/Template-Instantiation.html

https://github.com/yrnkrn/zapcc

#### Agner Vector Class Library V2

This is a C++17 class library for using the Single Instruction Multiple Data (SIMD) instructions in modern microprocessors.

https://www.agner.org/optimize/blog/read.php?i=1013

https://github.com/vectorclass/version2 (Apache 2.0)

Manual

https://github.com/vectorclass/manual/blob/master/vcl\_manual.pdf

# Clang Build Analyzer

https://github.com/aras-p/ClangBuildAnalyzer

#### Twitter: Generic cup



**John McFarlane** @JSAMcFarlane Accidentally accurate: apparently this mug is "generic".



Generic Cup<T> Two-Tone Coffe...

9h • 12/08/2019 • 14:56

#### **Twitter: Electronics**



# Remy Goldschmidt @taktoa1

Electronics is like programming, except if you call a function with arguments of the wrong type, the function is deleted.

1d • 19/08/2019 • 01:38 •