So you wanna delve into C++

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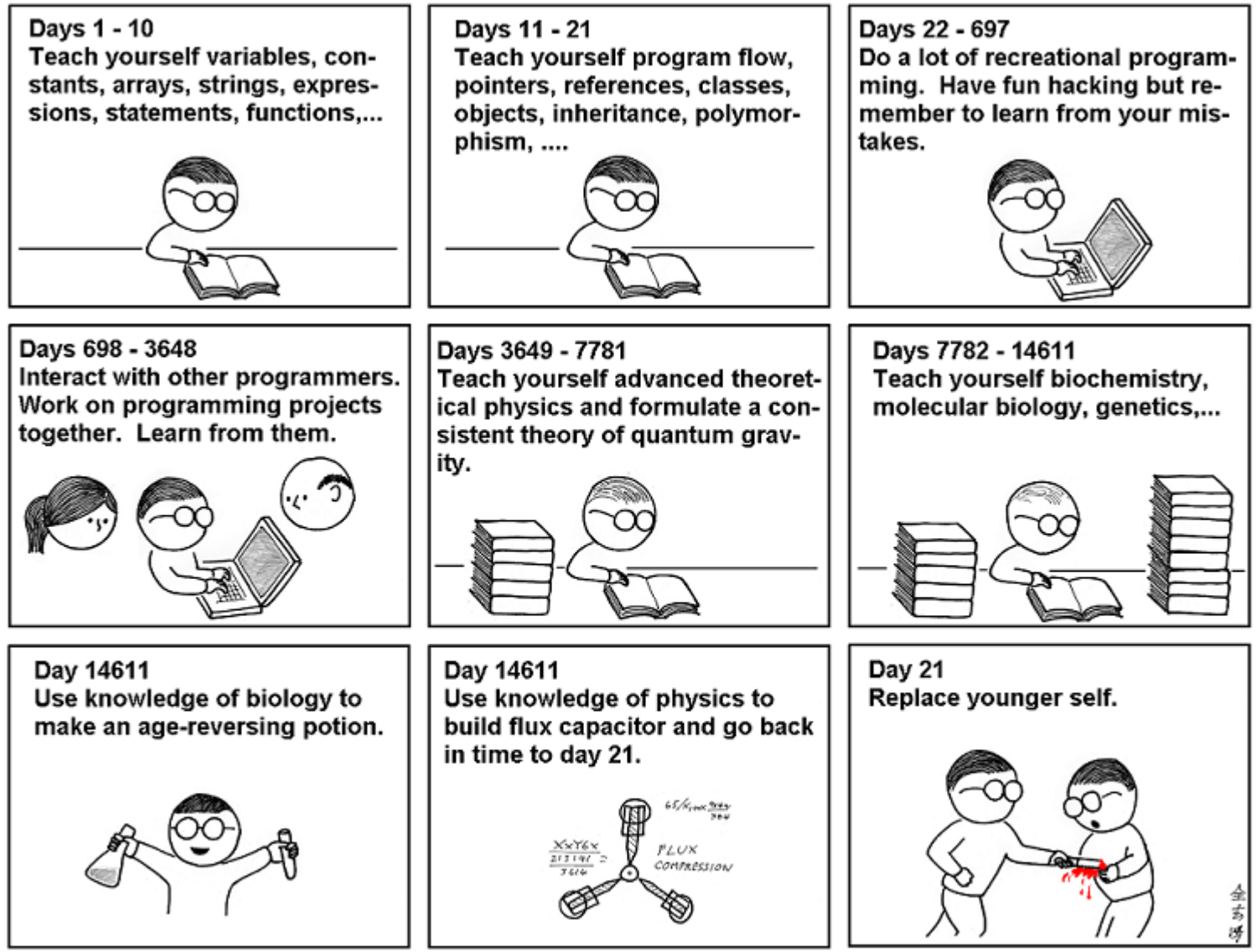
C++ ONLINE 2025 LIGHTNING TALKS

Disclaimer

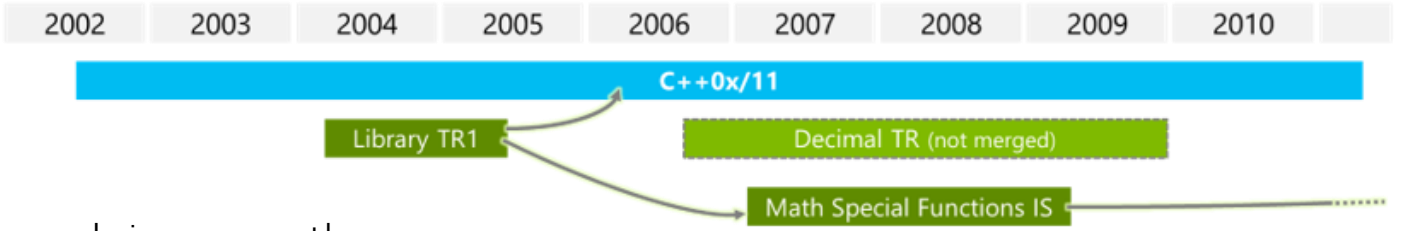
I am not a C++ expert, I am just another software engineer loving C++.

All the opinions, thoughts mentioned in this talk are solely my own and do not reflect my employer.

But Honey,
I am already a C++ expert. What else do I need to learn?



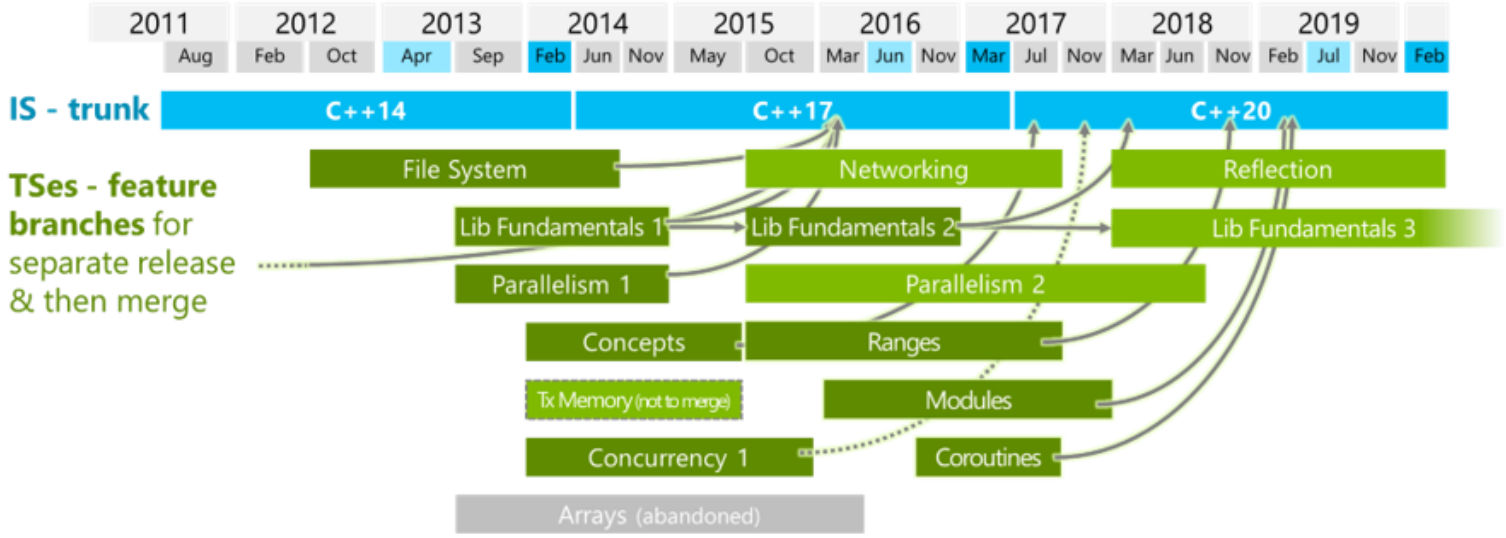
Lost in the C++ wilderness?

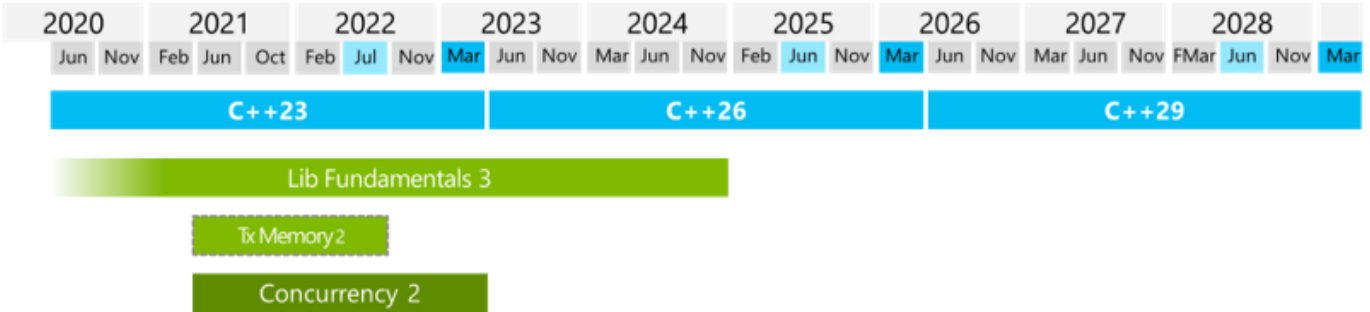


C++ language is evolving and evolving and more evolving over these years.

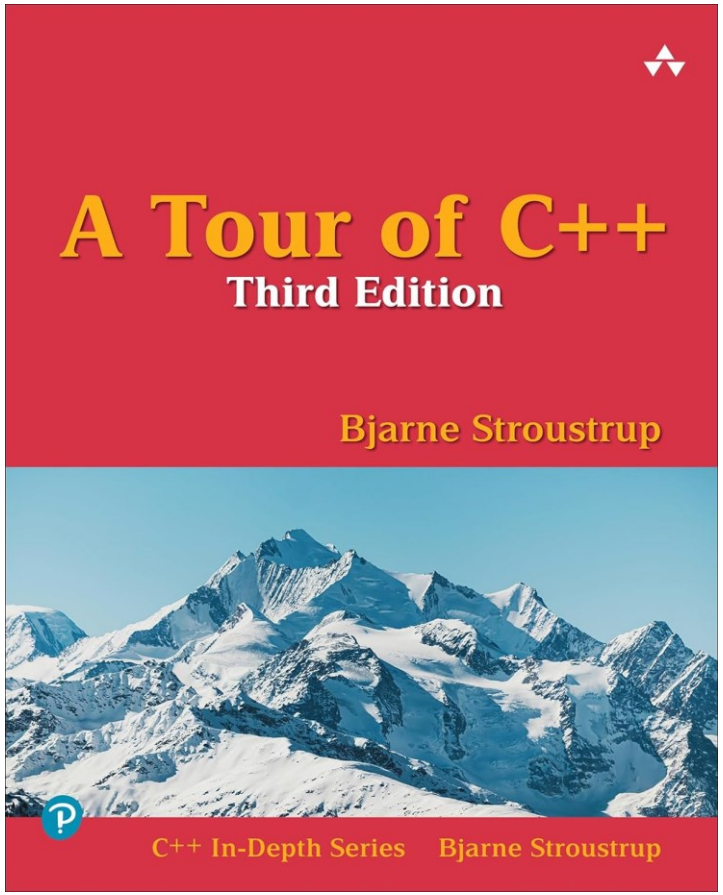
There is an abundance of resources, but so little time.

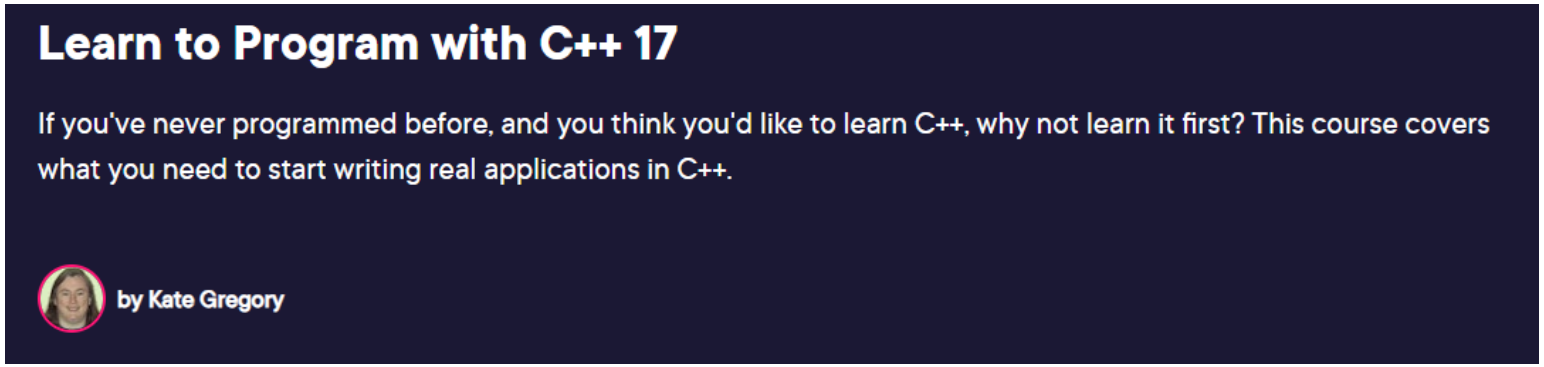
Conflicting advices can sometimes lead to bad programming practices.





C++ beginner – Get started





A cheatsheet of modern C++ features

learncpp.com

C++ reference

Building a strong foundation

Choose your compiler based on your operating system.

Online compilers are a blessing – Try the most popular godbolt.org or wandbox.org

Choose an IDE – VS Code, Clion, Eclipse CDT are a few options

C++ Intermediate - Moving beyond the basics

Check if you have a decent grasp in fundamental C++ constructs not only limited to

- Templates
- auto
- lambda expressions
- RAII
- References
- Destructor
- Move semantics
- smart pointers
- constexpr , consteval
- Operator overloading
- <algorithm> header

If above C++20
- Concepts
- Coroutines
- Spaceship operator
- Ranges

Mastering the craft

Familiarize yourself with debugging and debugging tools.

Understand about the broader C++ ecosystem.

- Leverage popular libraries into your codebase
- Build system generators such as cmake or Bazel or Ninja
- Package managers such as conan or vcpkg

Get familiar with clang tools such as clang-tidy, clang-format

Familiarize yourself with C++ Core Guidelines

Read and apply best practices and coding styles such as Google C++ style guide,

And finally practice, practice, more practice...

C++ meetups and conferences

Worldwide C++ usergroups – Sweden C++ user group has a nice curated list of C++ user-groups round the globe and their meeting links.

C++ conferences worldwide in isocpp.org

You are not alone – C++ community

#include<C++>

C++ slack

Podcasts and blogs

CppCast

cpp.chat

ADSP: The Podcast

Modernescpp by Rainer Grimm

C++ news by Meeting CPP

Sutter's Mill

Fluent C++

Sandor Dargo's blog

More resources

CppCon Back to basics playlist – visit CppCon playlists

C++ learning playlist by Jason Turner

Thank you for your time