



So you wanna delve into C++

- HONEY SUKESAN

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?

Days 1 - 10
Teach yourself variables, constants, arrays, strings, expressions, statements, functions,...



Days 11 - 21
Teach yourself program flow, pointers, references, classes, objects, inheritance, polymorphism,



Days 22 - 697
Do a lot of recreational programming. Have fun hacking but remember to learn from your mistakes.



Days 698 - 3648
Interact with other programmers. Work on programming projects together. Learn from them.



Days 3649 - 7781
Teach yourself advanced theoretical physics and formulate a consistent theory of quantum gravity.



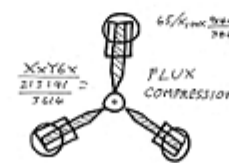
Days 7782 - 14611
Teach yourself biochemistry, molecular biology, genetics,...



Day 14611
Use knowledge of biology to make an age-reversing potion.



Day 14611
Use knowledge of physics to build flux capacitor and go back in time to day 21.



Day 21
Replace younger self.



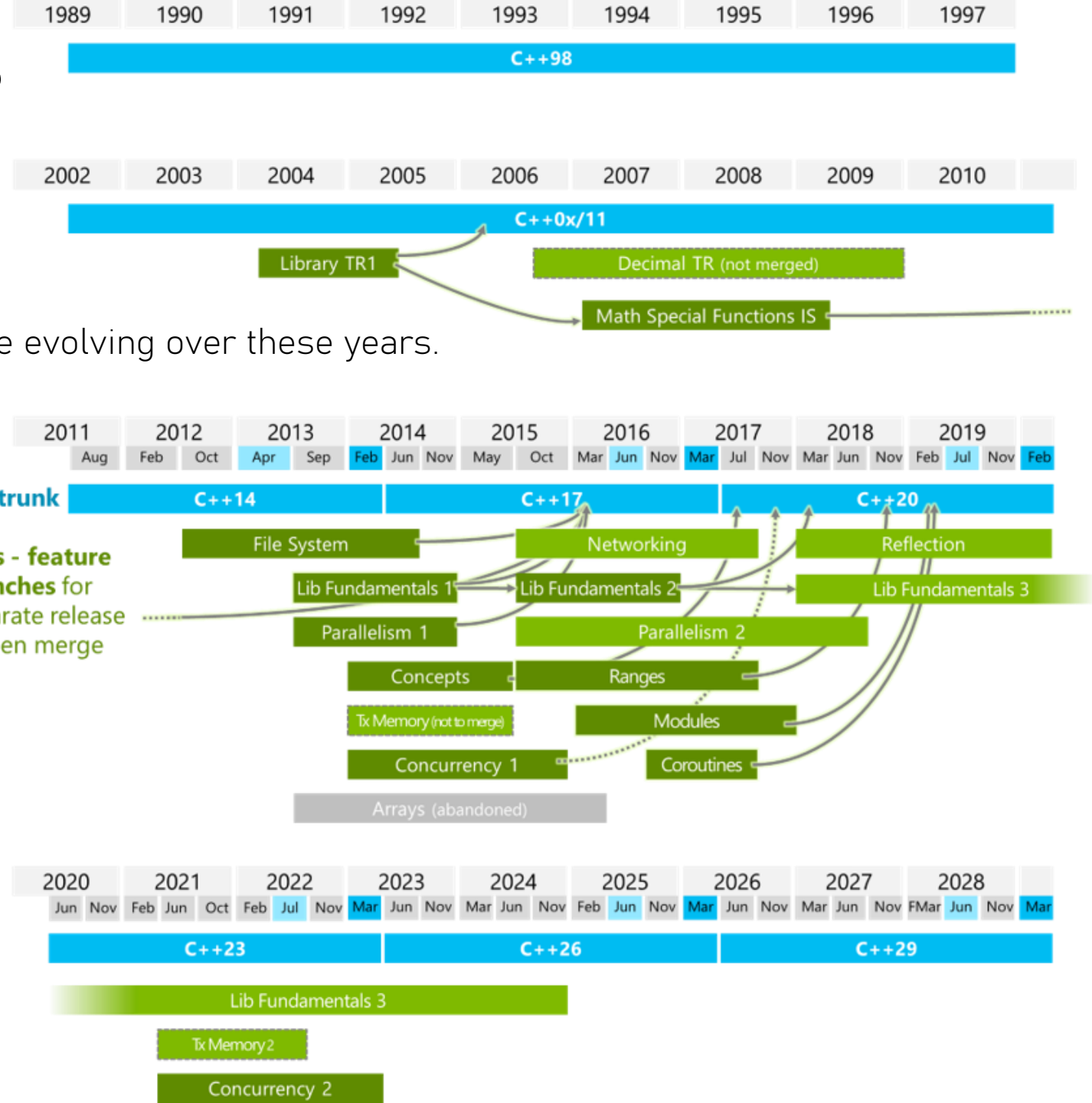
As far as I know, this
is the easiest way to
"Teach Yourself C++ in 21 Days".

Lost in the C++ wilderness?

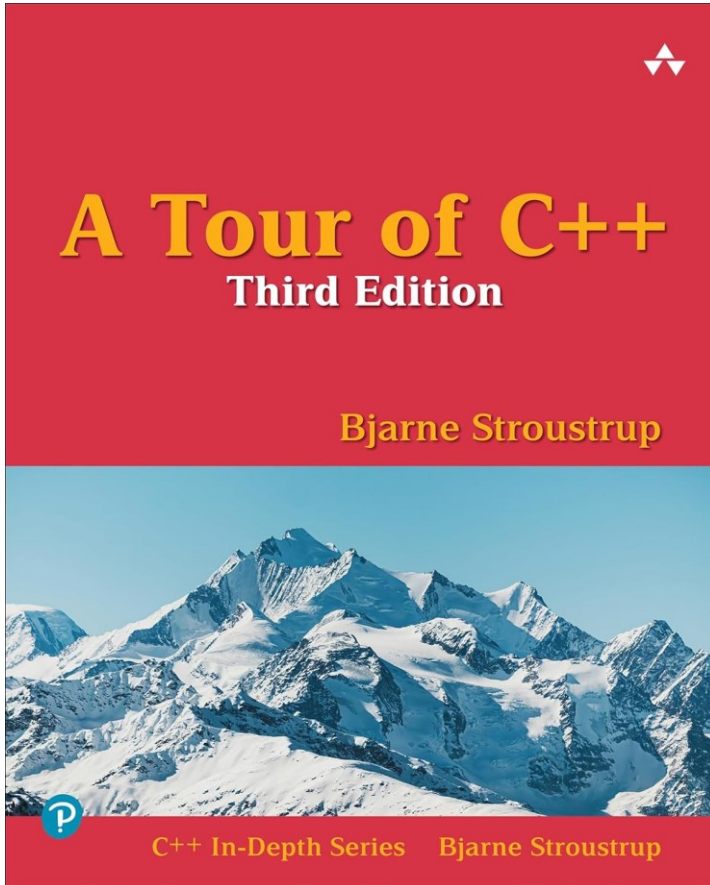
C++ language is evolving and evolving and more evolving over these years.

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

Conflicting advices can sometimes lead
to bad programming practices.



C++ beginner – Get started



Learn to Program with C++ 17

If you've never programmed before, and you think you'd like to learn C++, why not learn it first? This course covers what you need to start writing real applications in C++.



by Kate Gregory

[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
- RAI
- 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](#)

C++ Best Practices

2nd Edition

50ish Simple rules with Specific
Action Items for Better C++

Full COLOR Syntax Highlighting

Jason Turner





Thank you for your time