

HIGHLIGHTS OF CPPPCON 2015

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C++ CORE GUIDELINES

<https://github.com/isocpp/CppCoreGuidelines>

<https://github.com/Microsoft/GSL>

- Bjarne Stroustrup: Writing Good C++14
- Herb Sutter: Writing Good C++14... By Default

*"Within C++ is a smaller, simpler,
safer language struggling to get
out." -- Bjarne Stroustrup*

- P: Philosophy
- I: Interfaces
- F: Functions
- C: Classes and class hierarchies
- Enum: Enumerations
- ES: Expressions and statements
- E: Error handling
- R: Resource management
- T: Templates and generic programming
- CP: Concurrency
- SL: The Standard library
- SF: Source files

- CPL: C-style programming
- PRO: Profiles
- GSL: Guideline support library
- NL: Naming and layout
- PER: Performance
- N: Non-Rules and myths
- RF: References
- Appendix A: Libraries
- Appendix B: Modernizing code
- Appendix C: Discussion
- To-do: Unclassified proto-rules
- FAQ: Answers to frequently asked questions

MEMORY SAFETY

```
owner<T>  
not_null<T>  
maybe_null<T>  
  
array_view<T, N...>  
string_view<N...>
```

Guideline Support Library
+ Static Code Analysis
= world domination

- Gabriel Dos Reis:
 - Large Scale C++ With Modules
 - Contracts for Dependable C++
- Neil MacIntosh
 - More than lint: modern static analysis for C++
 - A few good types: Evolving `array_view` and `string_view` for safe C++ code

OTHER HIGHLIGHTS

- Sean Parent: Better Code: Data Structures
- Eric Niebler: Ranges for the Standard Library
- Chandler Carruth: Tuning C++: Benchmarks, and CPUs, and Compilers! Oh My!
- Bryce Adelstein-Lelbach: Benchmarking C++ Code
- Andrei Alexandrescu: Declarative Control Flow
- Andrei Alexandrescu: `std::allocator` Is to Allocation what `std::vector` Is to Vexation

CPPCON 2016



More Presence Needed!

QUESTIONS?

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