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1 Overview

abcdef

1.1 Programming Languages

1.2 Compiler

1.3 Programming Paradigms

1.4 Code Quality and Design

1. designe patterns
2. aspect/feature oriented programming
3. test driven development

1.5 **Operating System Concepts**

1.6 **Algorithms**

1.7 **Data Structure**

1.8 **Distributed Systems**

1.9 **Machine Learning**

2 **Compiler**

2.1 **Parsers**

2.2 **Lex**

2.3 **Front-End**

2.4 **Back-End**

2.5 **IR**

2.6 **Optimization**

3 **C++**

3.1 **Initilization**

3.2 **Value and copy semantics**

3.3 **Modules**

3.4 **Exceptions**

3.5 **Idiom**

RAII **Resource ...**

SFINAE **Resource ...**