

CMSC330

Context Free Grammars

Where we are

- Programming languages
 - Ruby
 - OCaml
- Implementing programming languages
 - Scanner (or lexer)
 - Uses regular expressions
 - Finite automata
 - Parser
 - Uses context free grammars
 - Pushdown automata

This lecture

- Program **syntax**
 - Regular expressions & grammars
- **Context free grammars (CFGs)**
 - Definition
 - Derivations (leftmost)
 - Parse tree
 - Ambiguity
 - Associativity & precedence