# Parser

# **Tools**

Stanford: <a href="http://nlp.stanford.edu/software/stanford-dependencies.shtml">http://nlp.stanford.edu/software/stanford-dependencies.shtml</a>

CMU: <a href="http://demo.ark.cs.cmu.edu/parse">http://demo.ark.cs.cmu.edu/parse</a>

XLE: <a href="http://www2.parc.com/isl/groups/nltt/xle/">http://www2.parc.com/isl/groups/nltt/xle/</a>

# **Stanford**

CMU is a global research university known for its world-class, interdisciplinary programs: arts, business, computing, engineering, humanities, policy and science.

#### **Parse**

```
(S

(NP (NNP CMU))

(VP (VBZ is)

(NP

(NP (DT a) (JJ global) (NN research) (NN university))

(VP (VBN known)

(PP (IN for)

(NP (PPP$ its) (JJ world-class) (, ,) (JJ interdisciplinary) (NNS programs)))

(::)

(NP (NNS arts) (, ,) (NN business) (, ,) (NN computing) (, ,) (NN engineering) (, ,) (NNS humanities) (, ,) (NN policy)

(CC and)

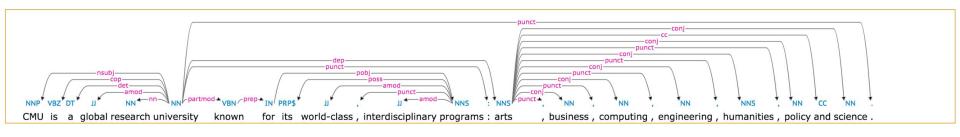
(NN science)))))

(··)))
```

### **CMU**

http://demo.ark.cs.cmu.edu/parse

Using the syntactic parse as input, <u>SEMAFOR</u> produces a <u>FrameNet</u>-style analysis of semantic predicate-argument structures.



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# XLE

XLE consists of cutting-edge algorithms for parsing and generating Lexical Functional Grammars (LFGs) along with a rich graphical user interface for writing and debugging such grammars. It is the basis for the <u>Parallel Grammar Project</u>, which is developing industrial-strength grammars for English, French, German, Norwegian, Japanese, and Urdu. XLE is written in C and uses Tcl/Tk for the user interface. It currently runs on Solaris Unix, Linux, and Mac OS X.

Documentation: <a href="http://www2.parc.com/isl/groups/nltt/xle/doc/xle">http://www2.parc.com/isl/groups/nltt/xle/doc/xle</a>

- 1. You need to write your own grammar
- 2. Used in 11-721 Grammar and Lexicons