

Parts of speech (POS)



| | | |
|---------------------|-----------------------------|---------------------------------|
| Noun | names | girl, dog, prestige |
| Verb | Action | swim, become |
| Pronoun | Used for noun | I, you, we, they |
| Adverb | Modifies V, Adj, Adv | happily, extremely |
| Adjective | Modifies noun | sad, clever |
| Conjunction | Joins two things | and, but, while, whereas |
| Preposition | Relation of noun | to, from, into |
| Interjection | An outcry | ouch, oh, alas |

| Tag | Description | Example | Tag | Description | Example |
|-------|----------------------|-----------------------|-----|----------------------|----------------------|
| CC | coordin. conjunction | <i>and, but, or</i> | SYM | symbol | <i>+, %, &</i> |
| CD | cardinal number | <i>one, two</i> | TO | “to” | <i>to</i> |
| DT | determiner | <i>a, the</i> | UH | interjection | <i>ah, oops</i> |
| EX | existential ‘there’ | <i>there</i> | VB | verb base form | <i>eat</i> |
| FW | foreign word | <i>mea culpa</i> | VBD | verb past tense | <i>ate</i> |
| IN | preposition/sub-conj | <i>of, in, by</i> | VBG | verb gerund | <i>eating</i> |
| JJ | adjective | <i>yellow</i> | VCN | verb past participle | <i>eaten</i> |
| JJR | adj., comparative | <i>bigger</i> | VBP | verb non-3sg pres | <i>eat</i> |
| JJS | adj., superlative | <i>wildest</i> | VBZ | verb 3sg pres | <i>eats</i> |
| LS | list item marker | <i>1, 2, One</i> | WDT | wh-determiner | <i>which, that</i> |
| MD | modal | <i>can, should</i> | WP | wh-pronoun | <i>what, who</i> |
| NN | noun, sing. or mass | <i>llama</i> | WPS | possessive wh- | <i>whose</i> |
| NNS | noun, plural | <i>llamas</i> | WRB | wh-adverb | <i>how, where</i> |
| NNP | proper noun, sing. | <i>IBM</i> | \$ | dollar sign | <i>\$</i> |
| NNPS | proper noun, plural | <i>Carolinas</i> | # | pound sign | <i>#</i> |
| PDT | predeterminer | <i>all, both</i> | “ | left quote | <i>‘ or “</i> |
| POS | possessive ending | <i>’s</i> | ” | right quote | <i>’ or ”</i> |
| PRP | personal pronoun | <i>I, you, he</i> | (| left parenthesis | <i>[, (, {, <</i> |
| PRP\$ | possessive pronoun | <i>your, one’s</i> |) | right parenthesis | <i>],), }, ></i> |
| RB | adverb | <i>quickly, never</i> | , | comma | <i>,</i> |
| RBR | adverb, comparative | <i>faster</i> | . | sentence-final punc | <i>. ! ?</i> |
| RBS | adverb, superlative | <i>fastest</i> | : | mid-sentence punc | <i>: ; ... - -</i> |
| RP | particle | <i>up, off</i> | | | |

Figure 10.1 Penn Treebank part-of-speech tags (including punctuation).

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- Verb
- Pronoun
- Adverb
- Adjective
- Conjunction
- Preposition
- Interjection

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, while, whereas
, into
, alas

NLU post 2010, meet the Muppets

- **End-to-end modeling with no explicit syntactic representation**
 - Neural networks pertained on very large text corpora where goal is to predict words given then context (i.e., surrounding words).
 - Transfer / few shot learning to fine tune on downstream tasks
 - **This course primarily focuses on neural-based approaches**

