What is Natural Language

* Language used for everyday communication by humans
  + English, Chinese, espanol, russian
  + Informal language used on twitter also counts
* As opposed to the artificial computer language(python, C, java)

What is Natural Language Processing

* Any computation, manipulation of natural language
* Natural languages evolve
  + New words got added(‘selfie’)
  + Old words lose popularity(‘thou’)
  + Meanings of words change
  + Language rules themselves may change

NLP Tasks: A Broad Spectrum

* Counting words, counting frequency of words
* Finding sentence boundaries
* Part of speech tagging
* Parsing the sentence structure
* Identifying semantic roles

Introduction to NLTK

* NLTK: Natural Language Toolkit
* Open source library in python
* Has support for most NLP tasks
* Also provide access to numerous text corpora

NLP Tasks

* Counting words, counting frequency of words
* Finding sentence boundaries
* Part of speech tagging
* Parsing the sentence structure
* Identifying semantic role labeling
* Named Entity Recognition
* Co-reference and pronoun resolution





