What is NLP?

Explore NLP

What is NLP good at?
What isn't it good at?
Why?

Learning goals for Unit 1

You will be able to:

- Recognize when natural language processing is in use.
- Explain what is meant by a computer “reading” a text.
- List examples of NLP programs and their impacts.

ACTIVITY SLIDE

- Choose a link, and explore what it does. Answer the following questions:
  - Describe the tools you played with:
    - What did they do?
    - Where are they making mistakes, or acting in a way that's surprising?
  - What do these things have in common?
- Leave time to explore at least 2. You'll have 15 minutes.

ACTIVITY SLIDE

- https://research.google.com/semantris/
  - A game where you try to find words that are connected to each other
- https://experiments.withgoogle.com/talk-to-books
  - Ask questions; the program finds books with sentences that make sense answers.
- https://botnik.org/apps/writer/?source=940aee28df1a09a0684969f6d97c4e20
  - Guesses what the next word will be in a sentence based on authors, TV, etc. Click on “Source” to choose what the predictions are based on; works like your phone’s guesses for what you will type.
- https://www.google.com/intl/en/chrome/demos/speech.html
  - Listens to what you say and writes down what it hears
- https://translate.google.com/
  - Type something in one language, read what it means in a different language
- https://resoomer.com/en/
  - Summarize text

DISCUSSION

- What did the tools you played with do?
- Where are they making mistakes, or acting in a way that’s surprising?

Things these programs have in common

- Based around models that learned on lots of text.
- Use probability to figure out what words are most often seen together.