



---

# SIGNLL Intro Meeting

Discord: <https://discord.gg/68VpV6>

# About Us: Nishant

- Computer Science
- From Lancaster, Pennsylvania
- Interests: Graphic design, exercising, music, traveling



[balepur2@illinois.edu](mailto:balepur2@illinois.edu)

# About Us: Jack

- ▷ La Grange Park, IL
- ▷ Interests:
  - Sports
  - Soccer
  - Computer Science
  - Music?



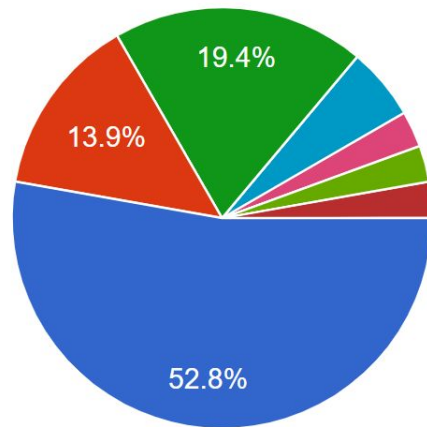
# Plans for Fall 2020

- ▷ Week 0 (Today): Intro to NLP, Workspace Setup, Intro to Python and Numpy
- ▷ Week 1: Intro to ML, Linear and Logistic Regression
- ▷ Week 2: Word vectorization, Tweet analysis
- ▷ This is all tentative! Please fill out this survey:  
[https://docs.google.com/forms/d/e/1FAIpQLSduok0pgn3tWfUQU-XIrfDEalAvq2feWtayar3nenPS6ealFw/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSduok0pgn3tWfUQU-XIrfDEalAvq2feWtayar3nenPS6ealFw/viewform?usp=sf_link)

# Some interesting data

How was your day today?

36 responses



- :)
- :|
- :<
- :O
- >:(
- :>
- Jack sucks!
- Finished the 233 lab and I feel really good, but my partner really sucks :>
- ;)

# All About NLP!

Introduction to Natural Language Processing



# What is NLP?

Type one word/phrase that comes to mind when you hear “NLP” in the chat!

# What is NLP?



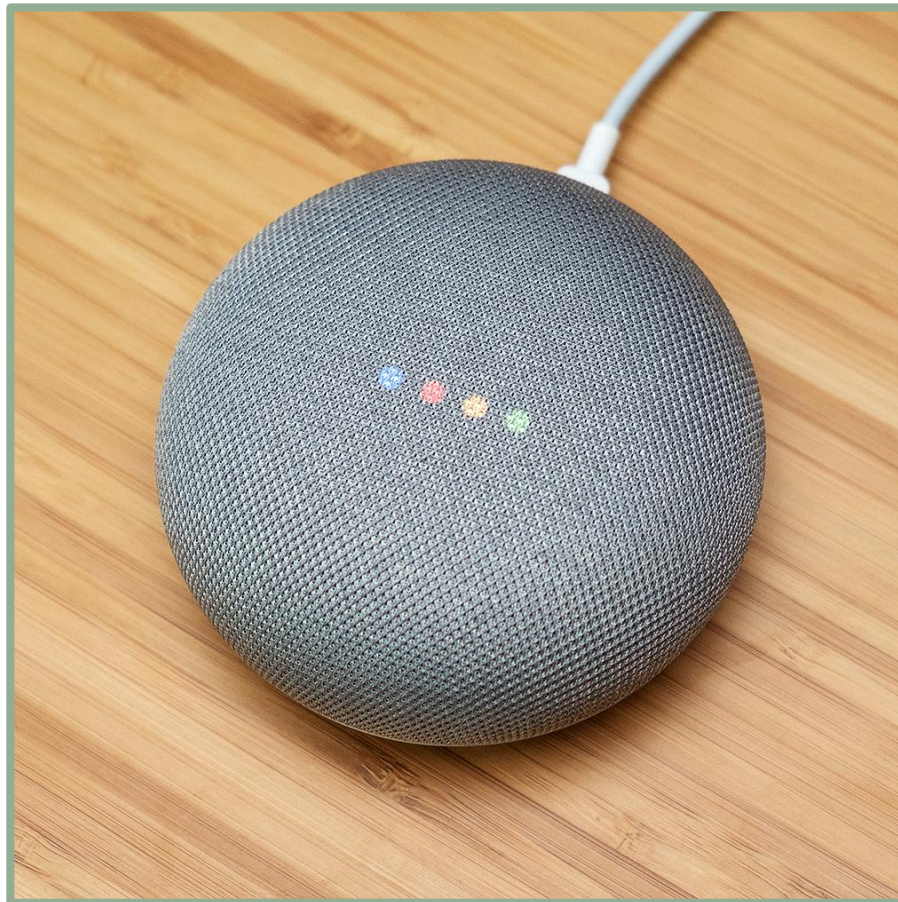
*“Natural Language Processing (NLP, not to be confused with the other NLP) is mainly about filling the gap between how humans communicate (with natural languages such as English) and what computers understand (machine language)”*

*- Vered Schwartz (some blog online)*



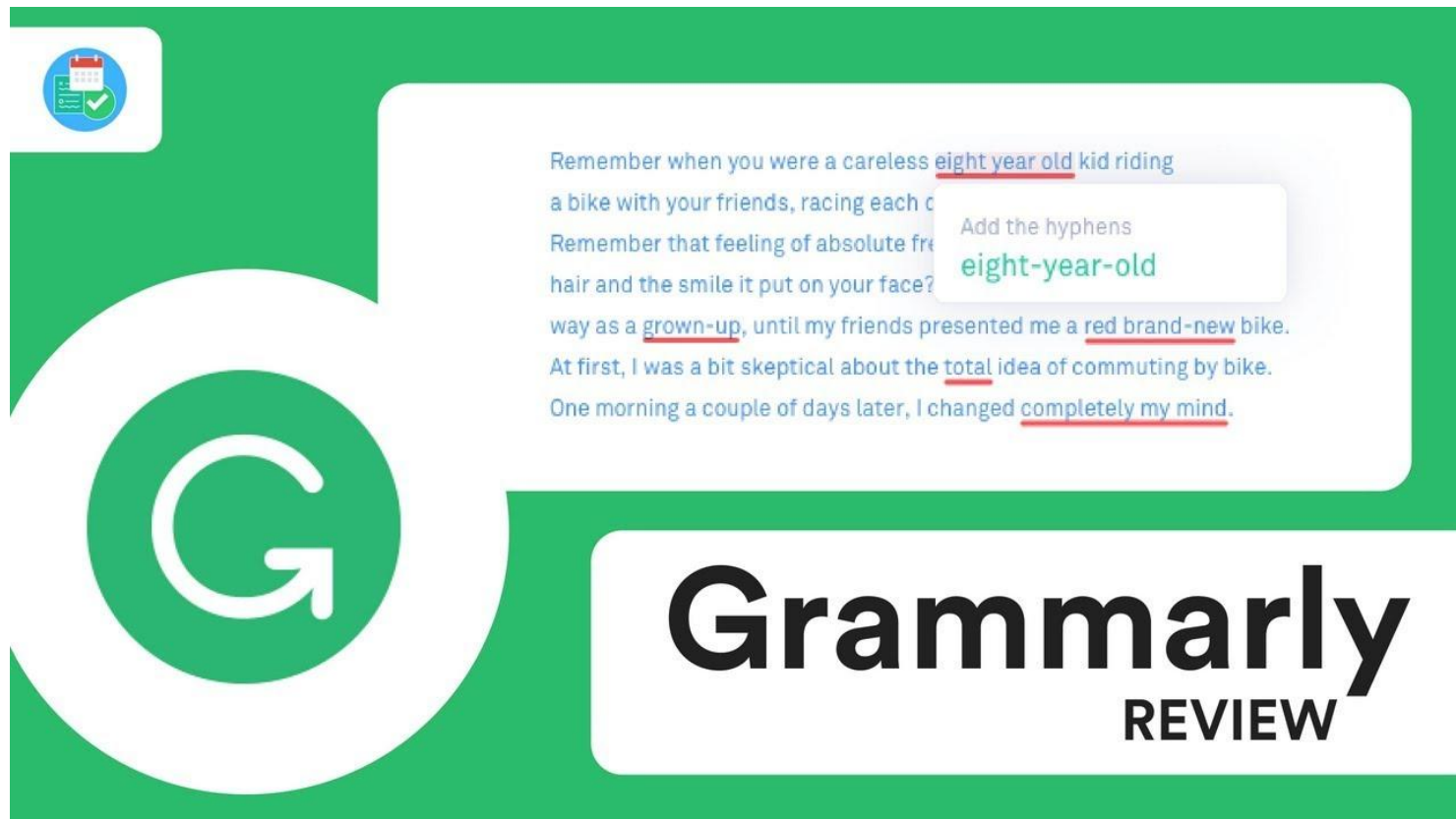
# Where is NLP used?

Smart Devices (Voice Recognition)



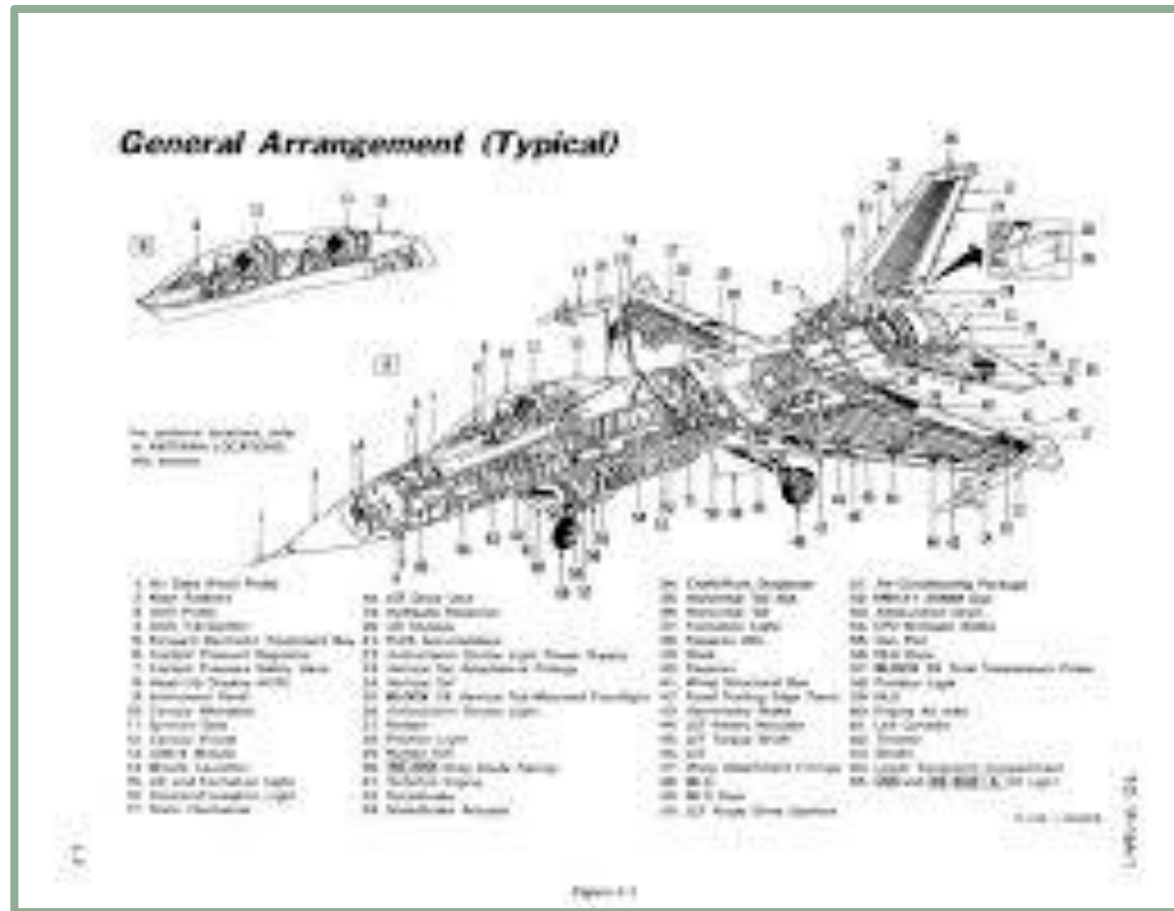
# Where is NLP used?

## Autocorrect / Spell Check



# Where is NLP used?

## Digesting Large Pieces of Information



# Why NLP?

- Demand for smart devices is increasing
- Faster and less tedious to automate these tasks
- Imagine if Google translate was all done by hand!



# Advancements in NLP

- ▷ Applies NLP and AI to phone calls
- ▷ Provides marketing information that would otherwise be impossible to extract
- ▷ Combination of computer science and analytics

# Workspace Setup

Instructions on how to set up your workspace for SIGNLL



# Jupyter Notebook

- Powerful tool for Python, R, and many other languages
- Lessons/projects will be organized into “notebooks”



# Set Up Instructions

- Download and install Anaconda  
<https://docs.anaconda.com/anaconda/install/>
- Once you open the application, a console should appear
- Type “jupyter notebook” into the console. If your default browser opens, you’re all set up!



# Set Up Instructions (cont)

```
Anaconda Prompt (Anaconda3) - jupyter notebook

(base) C:\Users\nishu>jupyter notebook
[I 12:01:28.757 NotebookApp] JupyterLab extension loaded from C:\Users\nishu\Anaconda3\lib\site-packages\jupyterlab
[I 12:01:28.757 NotebookApp] JupyterLab application directory is C:\Users\nishu\Anaconda3\share\jupyter\lab
[I 12:01:28.762 NotebookApp] Serving notebooks from local directory: C:\Users\nishu
[I 12:01:28.762 NotebookApp] The Jupyter Notebook is running at:
[I 12:01:28.763 NotebookApp] http://localhost:8888/?token=02ab7f7cbc175f794d317834e4919f0d3db165819ef72818
[I 12:01:28.763 NotebookApp] or http://127.0.0.1:8888/?token=02ab7f7cbc175f794d317834e4919f0d3db165819ef72818
[I 12:01:28.763 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 12:01:28.833 NotebookApp]

To access the notebook, open this file in a browser:
    file:///C:/Users/nishu/AppData/Roaming/jupyter/runtime/nbserver-27840-open.html
Or copy and paste one of these URLs:
    http://localhost:8888/?token=02ab7f7cbc175f794d317834e4919f0d3db165819ef72818
    or http://127.0.0.1:8888/?token=02ab7f7cbc175f794d317834e4919f0d3db165819ef72818
[E 12:01:31.240 NotebookApp] Could not open static file ''
[W 12:01:31.348 NotebookApp] 404 GET /static/components/react/react-dom.production.min.js (::1) 8.56ms referer=http://lo
calhost:8888/tree?token=02ab7f7cbc175f794d317834e4919f0d3db165819ef72818
[W 12:01:31.383 NotebookApp] 404 GET /static/components/react/react-dom.production.min.js (::1) 1.99ms referer=http://lo
calhost:8888/tree?token=02ab7f7cbc175f794d317834e4919f0d3db165819ef72818
```

 jupyter

QuitLogout

FilesRunningClusters

Select items to perform actions on them.

UploadNew↺

☐ 0 ▾  /

	Name ▾	Last Modified	File size
<input type="checkbox"/>	3D Objects	16 days ago	
<input type="checkbox"/>	AddClasses	a year ago	
<input type="checkbox"/>	Anaconda3	a year ago	
<input type="checkbox"/>	ansel	a month ago	

# Python/NumPy Tutorial

Note: It is pronounced num-pie, NOT num-pee

# Tasks to Complete



1) Fill out survey so we know what you want to learn and work on and when you are free!

[https://docs.google.com/forms/d/e/1FAIpQLSduok0pgn3tWfUQU-XlrfDEalAvq2feWtayar3nenPS6ealFw/viewform?usp=sf link](https://docs.google.com/forms/d/e/1FAIpQLSduok0pgn3tWfUQU-XlrfDEalAvq2feWtayar3nenPS6ealFw/viewform?usp=sf_link)

2) Set up Python/Jupyter Notebook environment

3) Complete Python notebook activity

<https://drive.google.com/drive/folders/1Nzjs-SWoFlrHrhJIARvWzyj-NTURoFX?usp=sharing>

SIG

NLL

