Before we get started, feel free to drop in the chat:

Who are you? (Introduce yourself, feel free to drop your LinkedIn)

2 Where are you based and current role

1 burning question you have about AI, NLP, or LLMs (to be addressed during Q&A)

NLP from scratch

From Zero to NLP in 60

Monthly Webinar

www.nlpfromscratch.com

Housekeeping



Camera on if comfortable doing so



Stay muted unless speaking



Be professional



Materials will be shared after the meeting

Who am !?

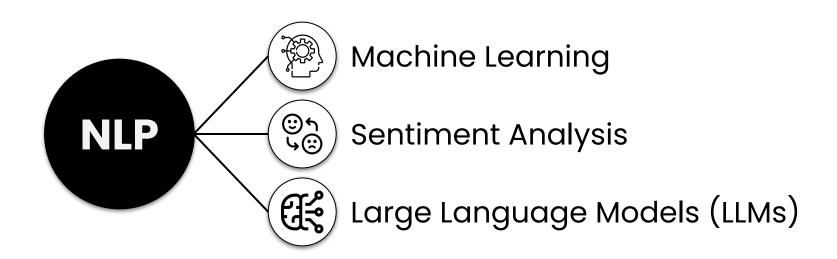
- Data Scientist
- Career consultant (SapientNitro, PwC, Accenture)
- Trainer
- Human



COMPUTATIONAL MACHINE LINGUISTICS LEARNING COMPUTER SCIENCE NLP ARTIFICIAL LINGUISTICS INTELLIGENCE

What is Natural Language Processing?

Today's Coverage

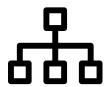


Working with Text in Python





Text Preprocessing Steps



Tokenization

Break free-form text documents down into tokens: constituent units of language (usually words)



Normalization

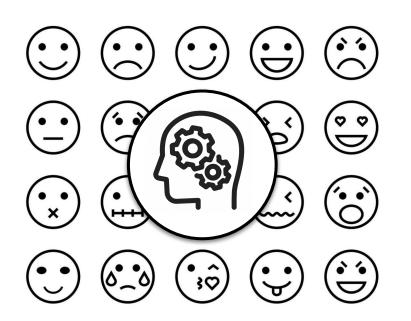
Apply techniques to reduce the noise and variance in the language data and standardize

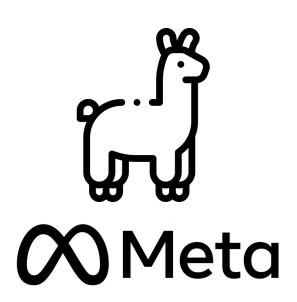


Vectorization

Convert text data to numeric features: structured data suitable for machine learning or analytics

Sentiment Analysis - Traditional ML vs. GenAl







https://github.com/nlpfromscratch/nlp4free

A Free Natural Language Processing (NLP) microcourse, from basics to deep learning

```
# Remove punctuation with regex
import re
import re
my_review = re.sub('[^A-Za-Z0-9\]+', '', my_review)

# Stem
my_review = ' '.join([ps.stem(token) for token in my_review.splea
my_review = ' '.join([ps.stem(token) for token in my_review.splea
```



LLM and Generative AI Workshops



Generative Text Models & Fine-tuning LLMs

- Intro to Hugging Face
- LLMs for generative text
- Fine-tuning models
- PEFT (LoRA) and quantization



Building GenAl Apps with OpenAl and GPT

- Intro to APIs and OpenAI
- Working with the OpenAl API
- Setting up a dev environment
- Build a streaming chat app
- Open source alternatives to GPT



Intro to Python & Natural Language Processing

- Intro to NLP
- Intro to Python
- Working with text in Python
- Manipulating text in Pandas



GenAl for Work (1 hr)

- Introduction to GenAl
- Generative Al landscape
- Everyday use cases for GenAl tools
- Prompting and prompt engineering
- Productivity with GenAl

What the LLM? - F

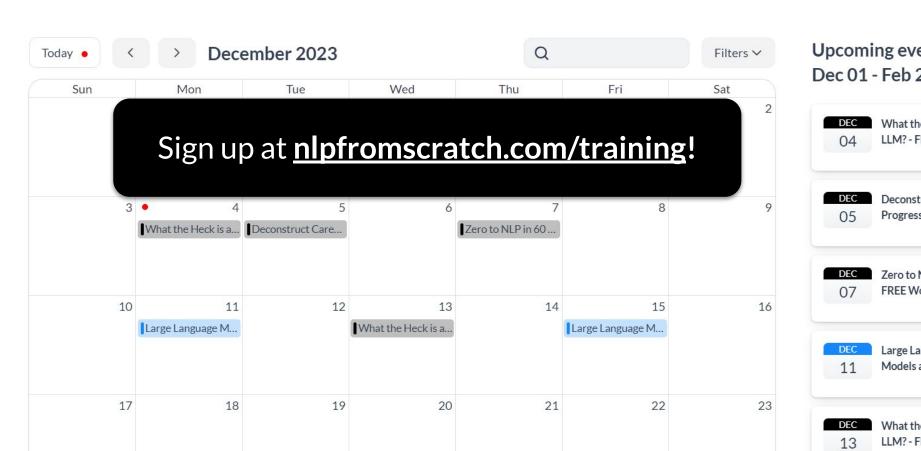
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Progress

Zero to N FREE Wo

Large La Models a

What the LLM? - F



Manifesto



Knowledge is only valuable if it is useful.



The best way to learn is by doing.



Learning is a non-linear process.



Learning is exploration, not a journey.



Teaching and learning are complementary.

I would value your feedback.



NLP from scratch

Learn natural language processing. From A to Z. From zero to hero. Fast.

www.nlpfromscratch.com