

Veri Bilimi Bootcamp'i

6. Hafta



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NLP Nedir?

NLP nedir?
Nerelerde kullanılır?

01

RNN, LSTM Nedir?

Bu algoritmalar nelerdir?
Nasıl kullanılır?

02

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NLP Uygulaması

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Soru & Cevap

Soru & Cevap



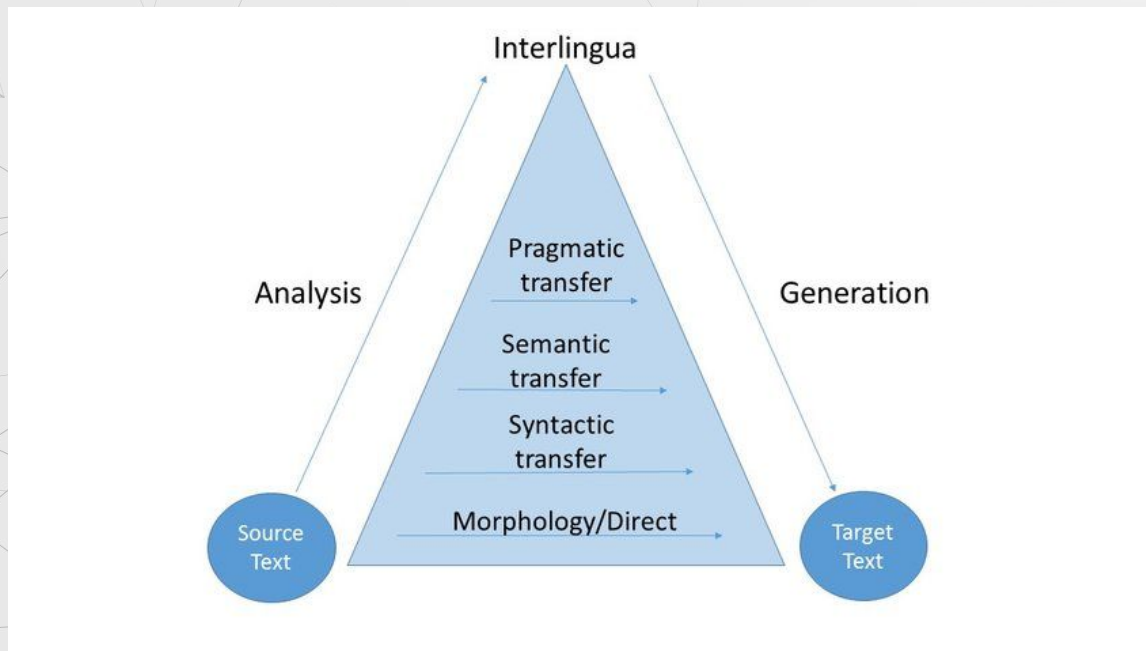
01

NLP nedir?

NLP Nedir?

- NLP – Natural Language Processing – Doğal Dil İşleme nedir?

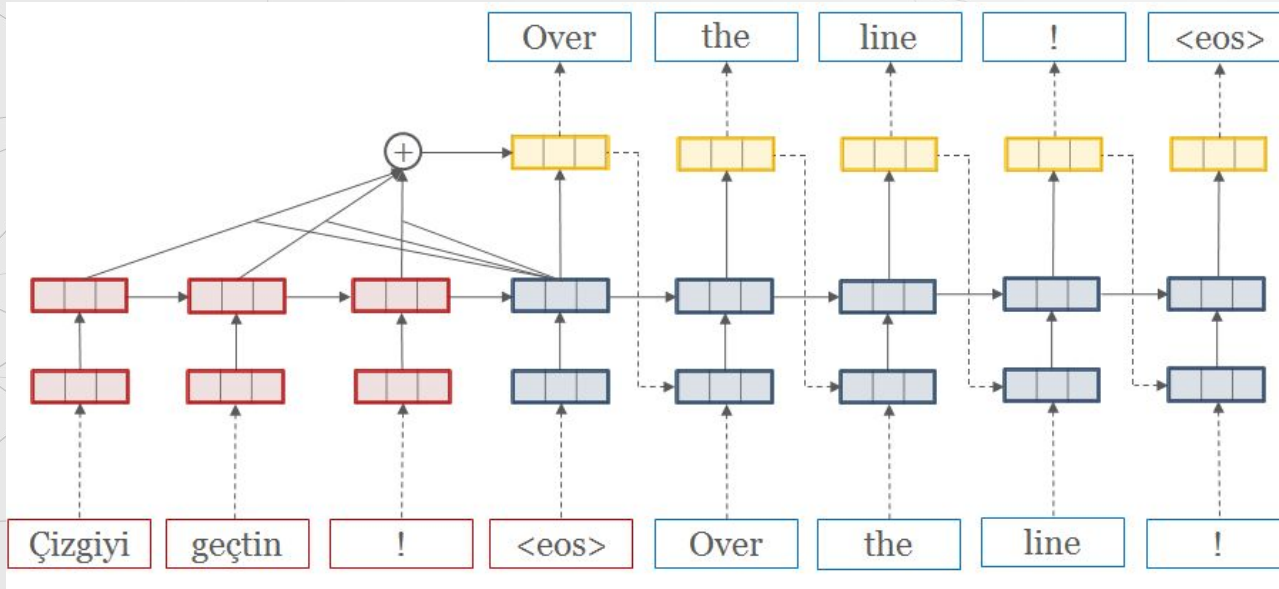
NLP Nedir?



NLP Nedir?

- Machine Translation

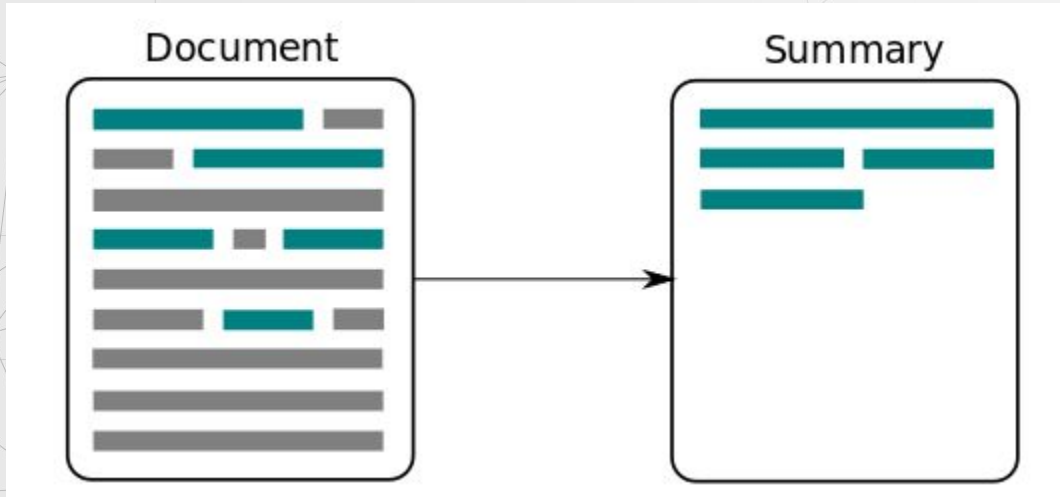
<https://huggingface.co/Helsinki-NLP/opus-mt-tr-en>



NLP Nedir?

- Summarization

<https://huggingface.co/ozcangundes/mt5-small-turkish-summarization>



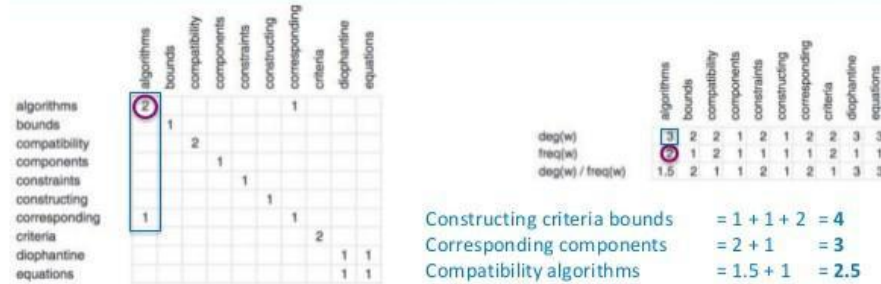
NLP Nedir?

- Keyword Extraction

RAKE algorithm in one slide

"For search managers, developers & data scientists finding ways to innovate"

For ~~search managers, developers & data scientists~~ finding ~~ways to~~ innovate



NLP Nedir?

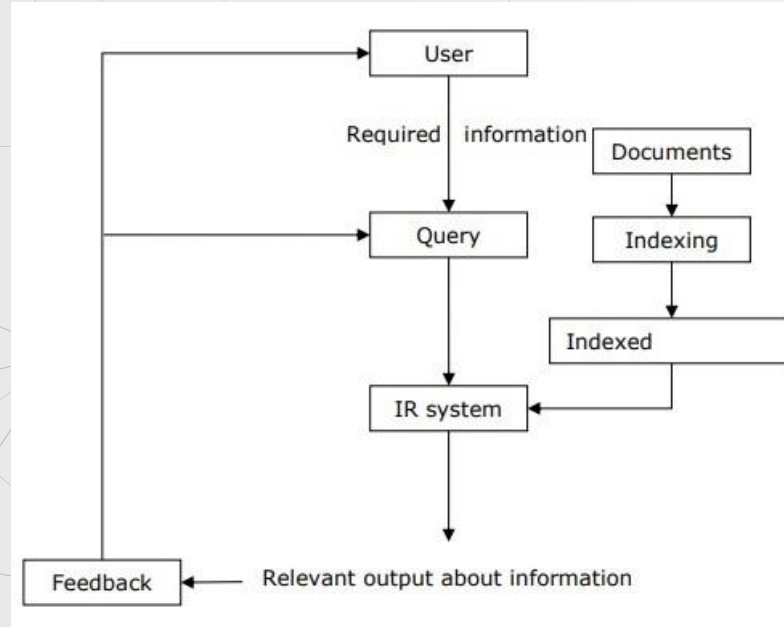
- Part of Speech Tagging

<https://textanalysisonline.com/spacy-pos-tagging>



NLP Nedir?

- Information Retrieval

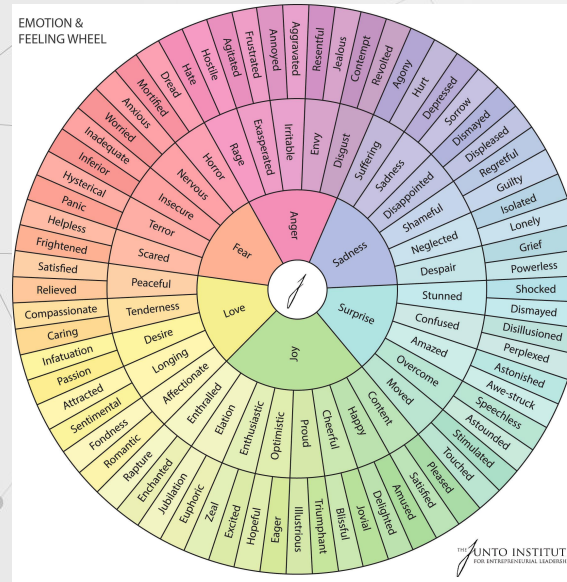


NLP Nedir?

- Sentiment Analysis

<https://demo.allennlp.org/sentiment-analysis/glove-sentiment-analysis>

<https://huggingface.co/savasy/bert-base-turkish-sentiment-cased>



NLP Nedir?

- Question Answering

<https://huggingface.co/ozcangundes/mt5-small-turkish-summarization>

Passage Sentence

In meteorology, precipitation is any product of the condensation of atmospheric water vapor that falls under gravity.

Question

What causes precipitation to fall?

Answer Candidate

gravity

NLP Nedir?

- Named Entity Recognition

<https://huggingface.co/savasy/bert-base-turkish-ner-cased>

<https://demo.allennlp.org/named-entity-recognition/named-entity-recognition>

In fact, the **Chinese** **NORP** market has the **three** **CARDINAL** most influential names of the retail and tech space – **Alibaba** **GPE**, **Baidu** **ORG**, and **Tencent** **PERSON** (collectively touted as **BAT** **ORG**), and is betting big in the global **AI** **GPE** in retail industry space. The **three** **CARDINAL** giants which are claimed to have a cut-throat competition with the **U.S.** **GPE** (in terms of resources and capital) are positioning themselves to become the 'future **AI** **PERSON** platforms'. The trio is also expanding in other **Asian** **NORP** countries and investing heavily in the **U.S.** **GPE** based **AI** **GPE** startups to leverage the power of **AI** **GPE**. Backed by such powerful initiatives and presence of these conglomerates, the market in APAC AI is forecast to be the fastest-growing **one** **CARDINAL**, with an anticipated **CAGR** **PERSON** of **45%** **PERCENT** over **2018 - 2024** **DATE**.

To further elaborate on the geographical trends, **North America** **LOC** has procured **more than 50%** **PERCENT** of the global share in **2017** **DATE** and has been leading the regional landscape of **AI** **GPE** in the retail market. The **U.S.** **GPE** has a significant credit in the regional trends with **over 65%** **PERCENT** of investments (including M&As, private equity, and venture capital) in artificial intelligence technology. Additionally, the region is a huge hub for startups in tandem with the presence of tech titans, such as **Google** **ORG**, **IBM** **ORG**, and **Microsoft** **ORG**.

NLP Nedir?

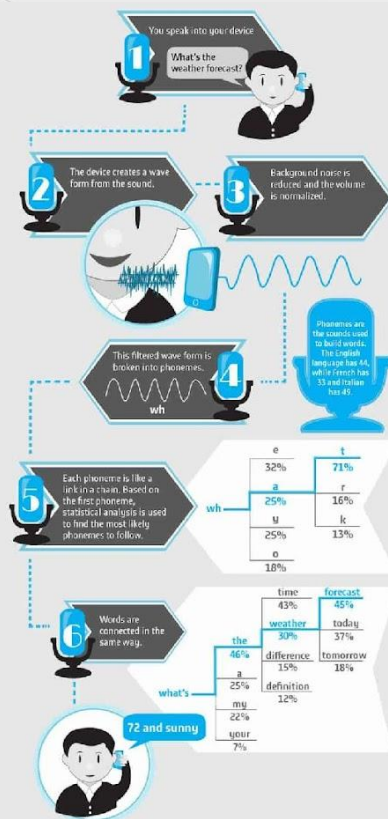
- Named Entity Recognition

Words	IO Label	BIO Label	BIOES Label
Jane	I-PER	B-PER	B-PER
Villanueva	I-PER	I-PER	E-PER
of	O	O	O
United	I-ORG	B-ORG	B-ORG
Airlines	I-ORG	I-ORG	I-ORG
Holding	I-ORG	I-ORG	E-ORG
discussed	O	O	O
the	O	O	O
Chicago	I-LOC	B-LOC	S-LOC
route	O	O	O
.	O	O	O

Figure 8.7 NER as a sequence model, showing IO, BIO, and BIOES taggings.

NLP Nedir?

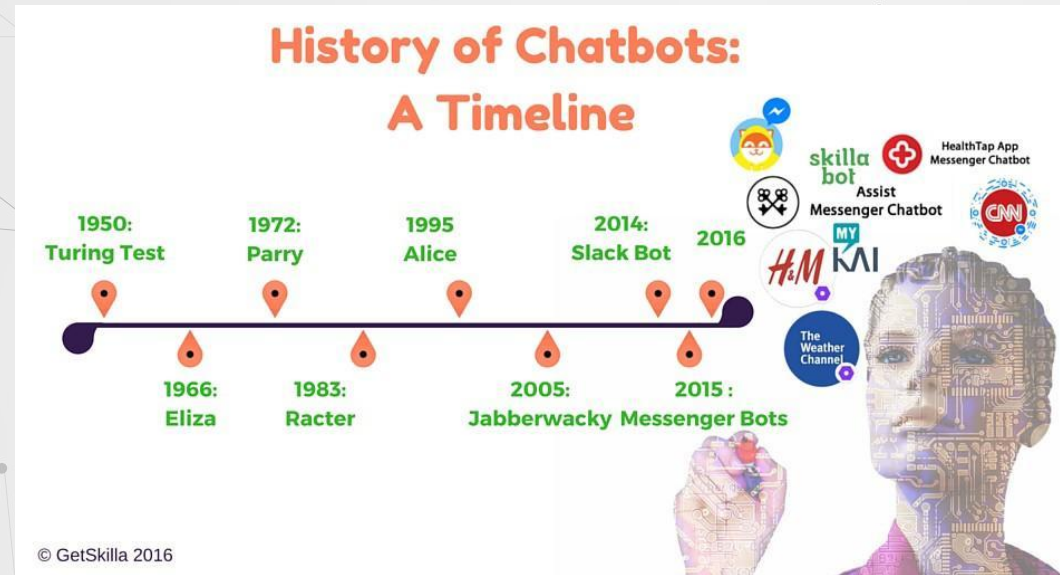
STT-TTS-ASR

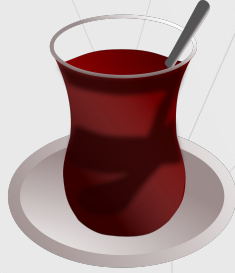


NLP Nedir?

- Chatbot
- ELIZA

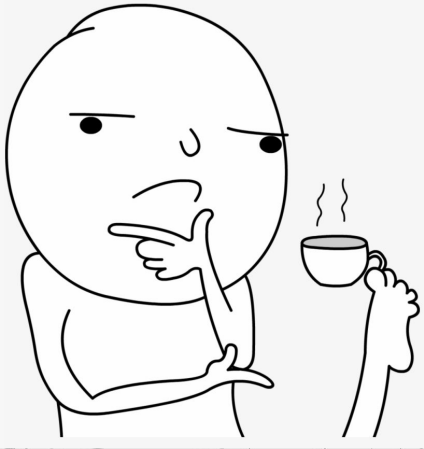
<https://web.njit.edu/~ronkowitz/eliza.html>





Çay/Kahve Molası

15 Dakika



The background features a complex network of thin grey lines and dots, forming a web-like structure. Scattered throughout are various triangles of different sizes and orientations, some filled with a light grey color and others as outlines. The overall aesthetic is modern and technical.

02

RNN, LSTM Nedir?

Öğle Arası

45 Dakika

Yarın görüşmek üzere

Kendinize iyi bakın 😊

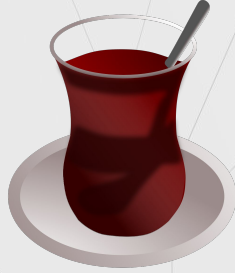
The background features a complex network of thin grey lines connecting various points, forming a web-like structure. Scattered throughout are numerous triangles of different sizes and orientations, some filled with a light grey color and others as outlines. The overall aesthetic is modern and technical.

03

NLP Uygulaması

Birlikte #Kodluyoruz





Çay/Kahve Molası

15 Dakika

Birlikte #Kodluyoruz



Öğle Arası

45 Dakika

Birlikte #Kodluyoruz





04

Soru & Cevap

The background is a light gray with a complex geometric pattern. It features a network of thin gray lines connecting various points, some of which are marked with small dark gray dots. Scattered throughout the background are numerous triangles of different sizes and orientations, some outlined in gray and others in a lighter shade. The overall aesthetic is modern and technical.

Soru & Cevap

The background features a complex network of thin grey lines and dots, forming a web-like structure. Scattered throughout are various triangles of different sizes and orientations, some with solid grey dots at their vertices. The overall aesthetic is modern and technical.

THANKS

Does anyone have any questions?

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