MSIN UCHILE
MAGÍSTER EN SISTEMAS DE INFORMACIÓN E INTELIGENCIA DE NEGOCIOS
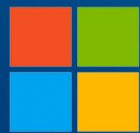
Datos Masivos y Minería de Datos

Profesor: Dr. David Díaz

Text Analytics:
Algoritmo de procesamiento de lenguaje natural

- Daniel Estay
- Juan Felipe Ly

FECHA: 16-12-2022

Microsoft Azure

Text Analytics

1. Microsoft Azure Service: Text Analytics

Language – Text Analytics and Beyond

Uncover insights such as key phrases, sentiment analysis, entities identification and more!

- **Enter Your Message**
- Sentiment & Key Phrases
- Entity Extraction
- Bing Entity Search
- Beyond

Enter Your Message

Enter a message to be analyzed by the Text Analytics service.

> Despite the fact that working and studying can be tiring, I like to know advanced analytics tools

Analyze it >

Learn to Code

Get started with artificial intelligence on Azure

Get started >

2. Algoritmo de procesamiento de lenguaje natural que es capaz de reconocer el valor emocional de un texto entre negativo, neutral y positivo

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Learn to Code

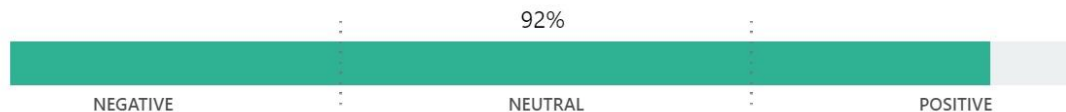Get started with artificial intelligence on Azure

Get started >

Sentiment & Key Phrases

The Text Analytics service is able to analyze your text to identify the keywords and discern the sentiment.

> Despite the fact that working and studying can be tiring, I like to know advanced analytics tools

The sentiment is positive!:

92%

NEGATIVE   NEUTRAL   POSITIVE
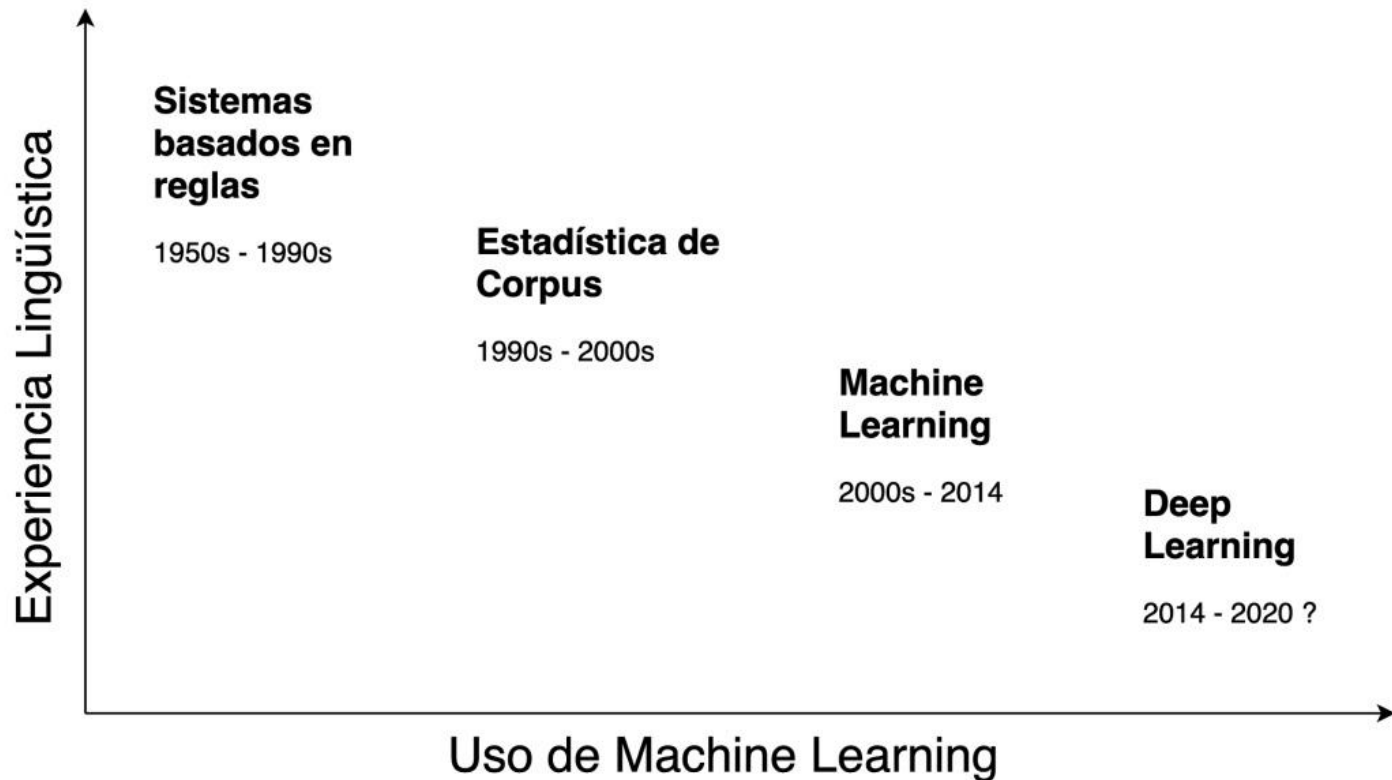
Try Entity Extraction >

2. Algoritmo de procesamiento de lenguaje natural que es capaz de reconocer el valor emocional de un texto entre negativo, neutral y positivo

El algoritmo es capaz de analizar un texto y clasificar el valor emocional de este, si es positivo, neutral o negativo, para hacer este análisis
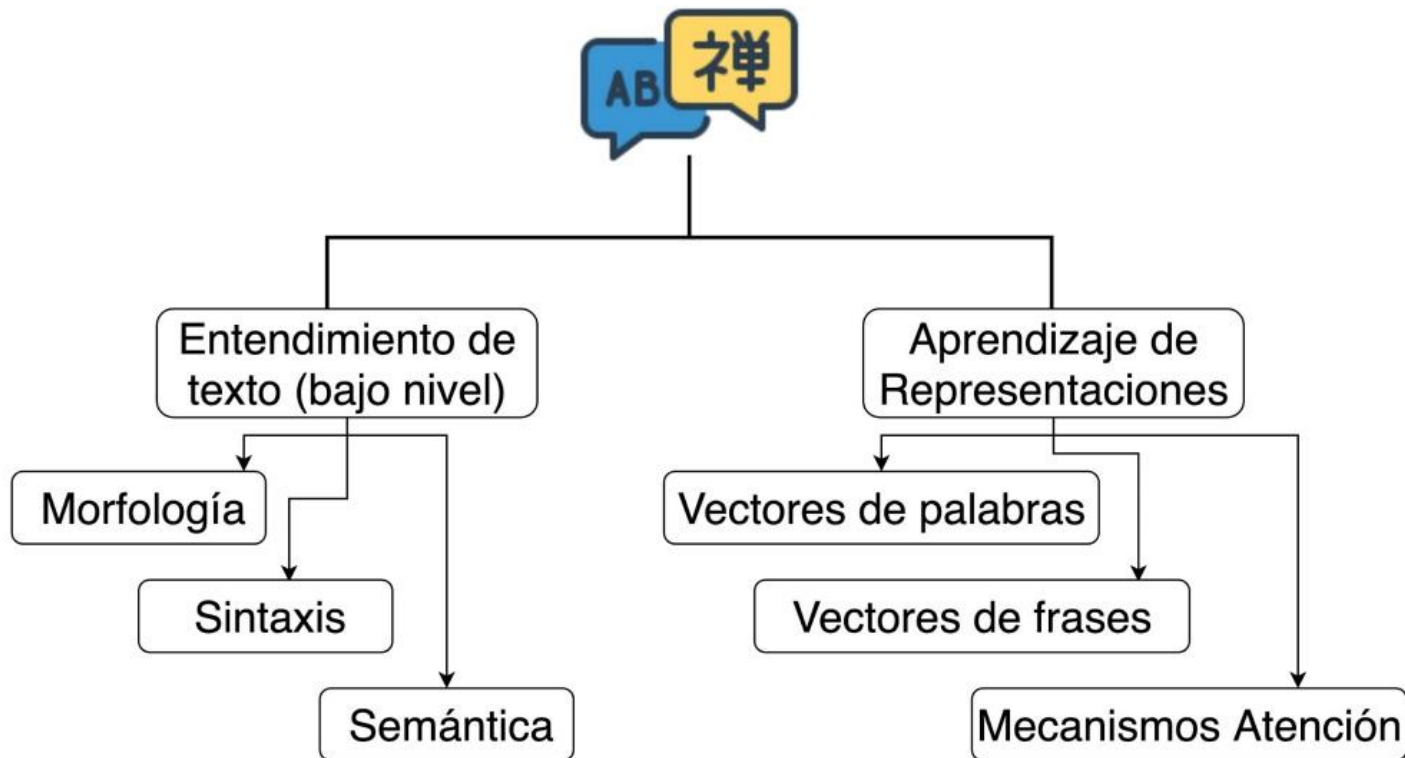
Si un humano no puede distinguir
entre una máquina y otra persona
en una conversación, entonces esa
máquina ha alcanzado un nivel de
inteligencia comparable al de un
humano …

Allan Turing

Evolución del NLP

Experiencia Lingüística (eje vertical)

Sistemas basados en reglas

1950s - 1990s

Estadística de Corpus

1990s - 2000s

Machine Learning

2000s - 2014

Deep Learning

2014 - 2020 ?

Uso de Machine Learning (eje horizontal)

Avances del NLP

Entendimiento de texto (bajo nivel)
- Morfología
- Sintaxis
- Semántica

Aprendizaje de Representaciones
- Vectores de palabras
- Vectores de frases
- Mecanismos Atención

3. Esta función determina cuáles de las palabras clave son entidades y las vincula en Wikipedia.

Uncover insights such as key phrases, sentiment analysis, entities identification and more!

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Learn to Code
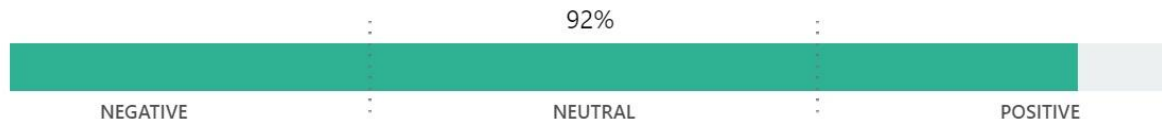
Get started with artificial intelligence on Azure

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Entity Extraction

This feature ascertains which of the key words are entities and links them in Wikipedia.

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Try Bing Entity Search >

4.Este servicio ofrece un resumen de la información relevante en forma de ficha para cada entidad.

Enter Your Message

Sentiment & Key Phrases

Entity Extraction

Bing Entity Search

Beyond

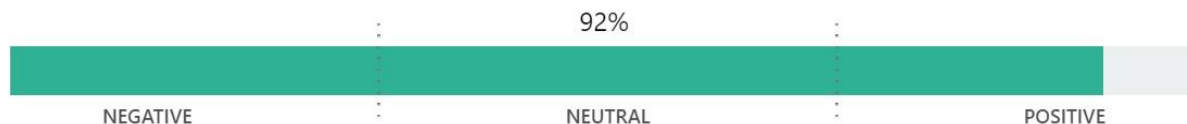Bing Entity Search

This service provides a summary of relevant information in the form of a card for each entity.

Beyond >

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The sentiment is positive!:

92%

NEGATIVE   NEUTRAL   POSITIVE

Bing search results:

No Results Found

5. Pricing

Si bien existe un mínimo de 5000 text records mensuales gratis, se cobra en base a la cantidad de palabras a procesadas:

Standard (S) - Web		
Sentiment analysis (available in containers) Key phrase extraction (available in containers) Language detection (available in containers) Named entity recognition, including PII	0.0M-0.5M - **$1** 0.5M-2.5M - **$0.75** 2.5M-10.0M - **$0.30** 10.0M+ - **$0.25**	
Conversational language understanding Orchestration workflow	**$2**	
Custom text classification Custom named entity recognition	**$5**	
Text analytics for health (available in containers)	0M-0.005M - Included 0.005M-0.5M - **$25** 0.5M-2.5M - **$15** 2.5M+[4] - **$10**	
Custom question answering Prebuilt question answering	0-2.5M - **$1.50** 2.5M+ - **$1.0001**	
Conversation summarization (Preview) Issue summary Resolution summary Chapter title summary, Narrative summary	**$2**	
Document summarization (Extractive) – Preview	**$2**	
Document summarization (Abstractive) – Preview	**$2**	
Conversation PII (Preview)	Free	

5. Pricing

Se cobra en base a la cantidad de palabras a procesadas, existiendo tiers por instancia:

Commitment Tiers

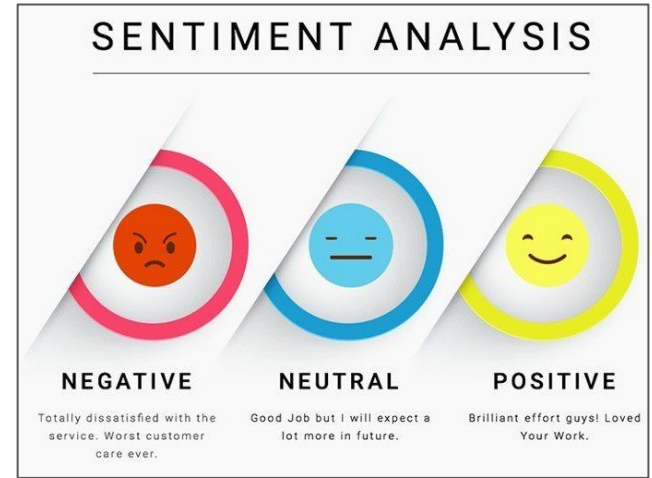| Instance	Features	Price (per month)	Overage
Azure – standard	Sentiment analysis (and opinion mining) Key phrase extraction Language detection Named entity recognition	$700 per 1M text records $1,375 per 3M text records $3,500 per 10M text records	$0.70 per 1,000 text records $0.55 per 1,000 text records $0.35 per 1,000 text records
Connected container – standard	Sentiment analysis (and opinion mining) Key phrase extraction Language detection	$560 per 1M text records $1,100 per 3M text records $2,800 per 10M text records	$0.56 per 1,000 text records $0.44 per 1,000 text records $0.28 per 1,000 text records
Disconnected container	Sentiment analysis (and opinion mining), Key phrase extraction, Language detection	Sign up to get access Learn more	

5. Posibles usos

- Análisis de sentimiento
- Extracción de frases clave
- Detección de lenguaje
- Reconocimiento de entidades

Aeva, a Mountain View, California-based lidar company started by two former
[Company]   [Location]

Apple engineers and backed by Porsche SE, is merging with special purpose
[Company]   [Company]

acquisition company InterPrivate Acquisition Corp., with a post-deal market
                    [Company]

valuation of $2.1 billion.
             [Monetary Value]

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