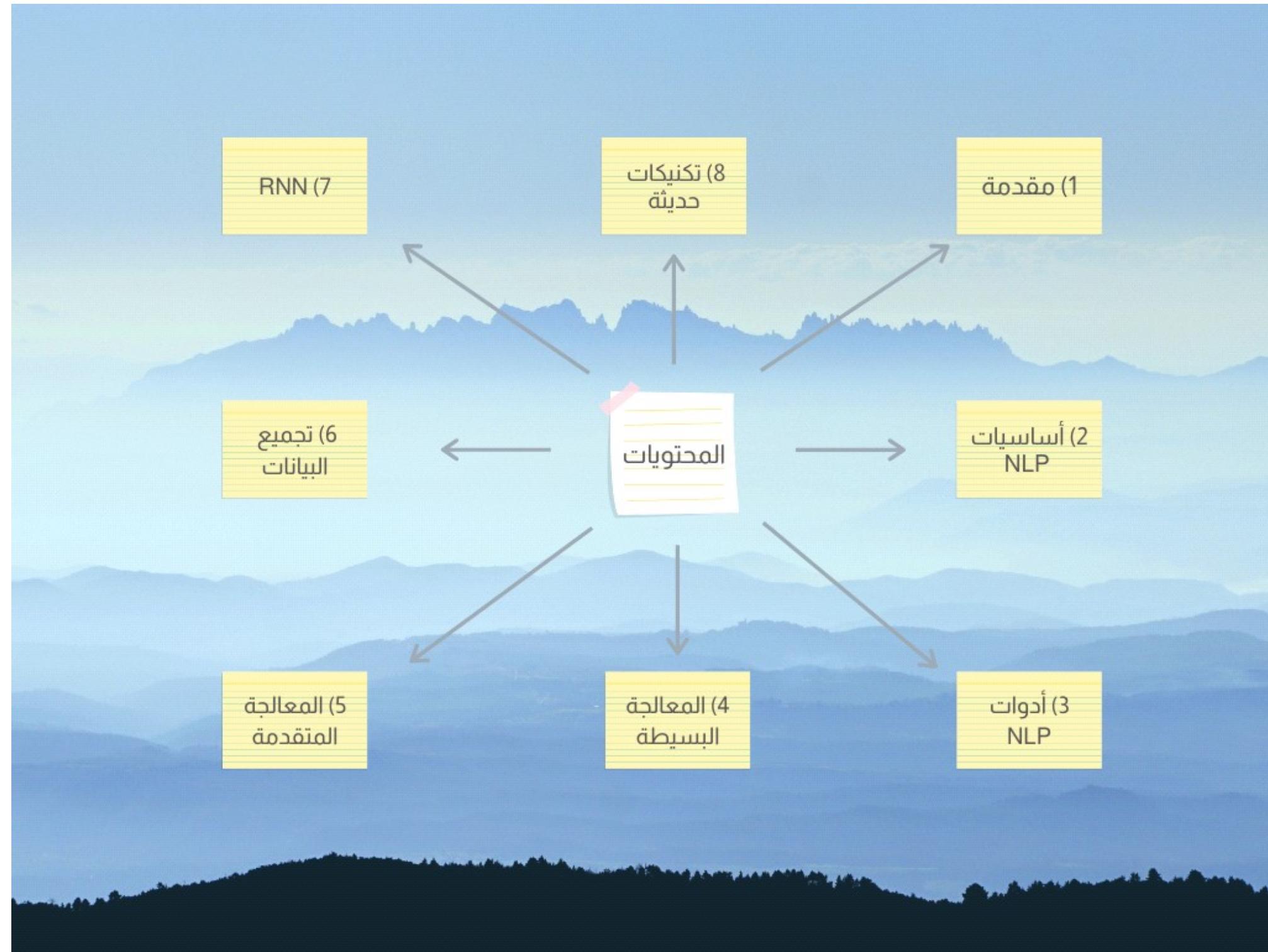


NATURAL LANGUAGE PROCESSING

المعالجة اللغوية الطبيعية



المحتويات

				التطبيقات	العقبات و التحديات	NLP تاريخ	ما هو NLP	المحتويات	1) مقدمة
				البحث في النصوص	ملفات pdf	ملفات النصية		المكتبات	2) أساسيات NLP
T.Visualization	Syntactic Struc.	Matchers	Stopwords	NER	Stem & Lemm	POS	Sent. Segm.	Tokenization	3) أدوات NLP
	Dist. Similarity	Text Similarity	TF-IDF	BOW	Word2Vec	T. Vectors	Word embed	Word Meaning	4) المعالجة البسيطة
T. Generation	NGrams	Lexicons	GloVe	L. Modeling	NMF	LDA	T. Clustering	T. Classification	5) المعالجة المتقدمة
	Summarization & Snippets		Ans. Questions		Auto Correct	Vader	Naïve Bayes	Sent. Analysis	
Search Engine	Relative Extraction		Information Retrieval		Information Extraction		Data Scraping	Tweet Collecting	6) تجميع البيانات
					Rec NN\TNN	GRU	LSTM	Seq to Seq	7) RNN (
Chat Bot	Gensim	FastText	Bert	Transformer	Attention Model	T. Forcing	CNN	Word Cloud	8) تكنيات حديثة

القسم الأول : مقدمة

الجزء الأول : تطبيقات NLP

هناك العديد من التطبيقات ، مثل استtraction معلومات من ايميل مرافق feature extraction

Hi Dan, we've now scheduled the curriculum meeting.

It will be in Gates 159 tomorrow from 10:00-11:30.

-Chris

Create new Calendar entry



Attributes:
zoom
affordability
size and weight
flash
ease of use

Size and weight

- ✓ • nice and compact to carry!
- ✓ • since the camera is small and light, I can travel around those heavy, bulky professional cameras
- ✗ • the camera feels flimsy, is plastic and very light in weight you have to be very delicate in the handling of this camera

4

This is a digital point-and-shoot 3MP camera from Kodak. It's very light and easy to hold and use. The digital paper format is great, I like using this camera with the digital cards to transfer the images to my PC and always back them up. It has a great wide-angle lens and great night shooting.

positive Date: 10/11/2014
I bought this camera. It is high quality, good lighting options when it comes to zoom and I have totally forgot it is 3MP camera so my wife, who is a student, a bit too稚气, takes lots of photos. She likes it, says it is a good camera. I suggest it to people who are looking for a good camera. I think it is a good camera for its price.

positive Date: 10/11/2014
A really great looking digital camera which is a delight to use. If you need something to take your kids outside for fun, about nearly nothing can be better than this camera. It's a great camera for a beginner, especially if you don't want to pay a lot. It's the Canon IXUS 100. I would recommend this camera to anyone who wants to buy a camera.

positive Date: 10/11/2014
This camera looks more decent. It looks good, looks good, and looks good. I have used some cameras before. But it was difficult to hold them, they were large because I have a long hand so it makes it hard to hold them. This camera is much smaller and it's much more comfortable. I recommend this when I had to use it a lot. And the Canon IXUS 100 is a great camera.

negative Date: 10/11/2014
I was a skeptic buying this because it's light and looks horrible. I was skeptical because of how it looks like my dad's growing camera. I need to see the real differences and benefits of this camera. As you can see, the camera is not pleasant and looks like a piece of trash. I quickly decided on this. Hold me on, I'm not a fan of this camera.

negative Date: 10/11/2014
Everyone said this camera is good on their, this is what I have to say about it. Keeping in mind that I've only used it for a few days. This camera is very small. It's not as small as the Sony DSC HX20V, but still enough. Holding handle, the ring, the button of your hand may hurt when you hold it. I... I think it's not a good camera.

و هناك عدد من تصنیفات تطبيقات NLP مثل :

Information Retrieval

Doc A



Doc 1

Doc 2

Doc 3

Sentiment Analysis



Information Extraction



Machine Translation



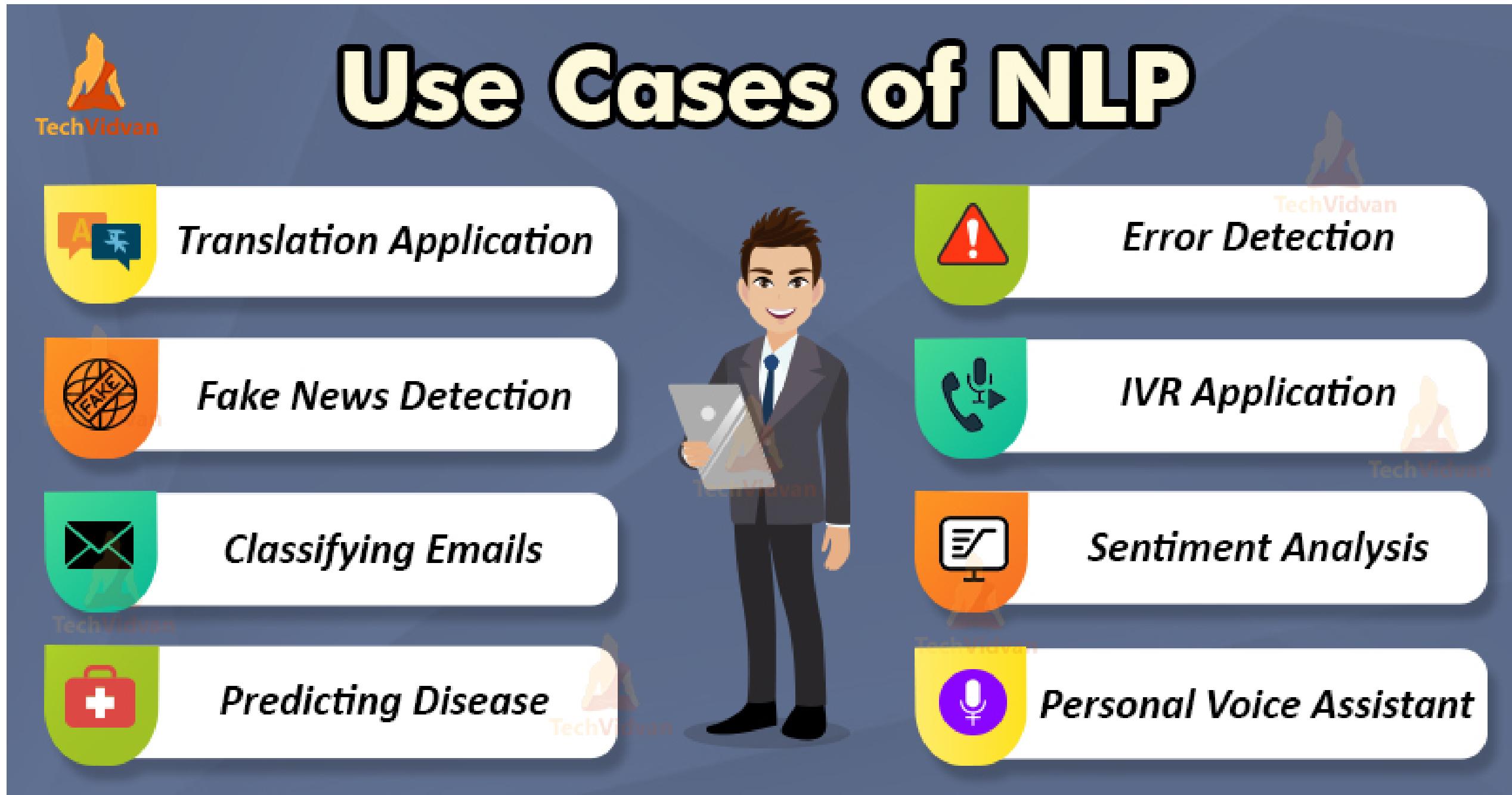
Natural Language Processing

Question Answering



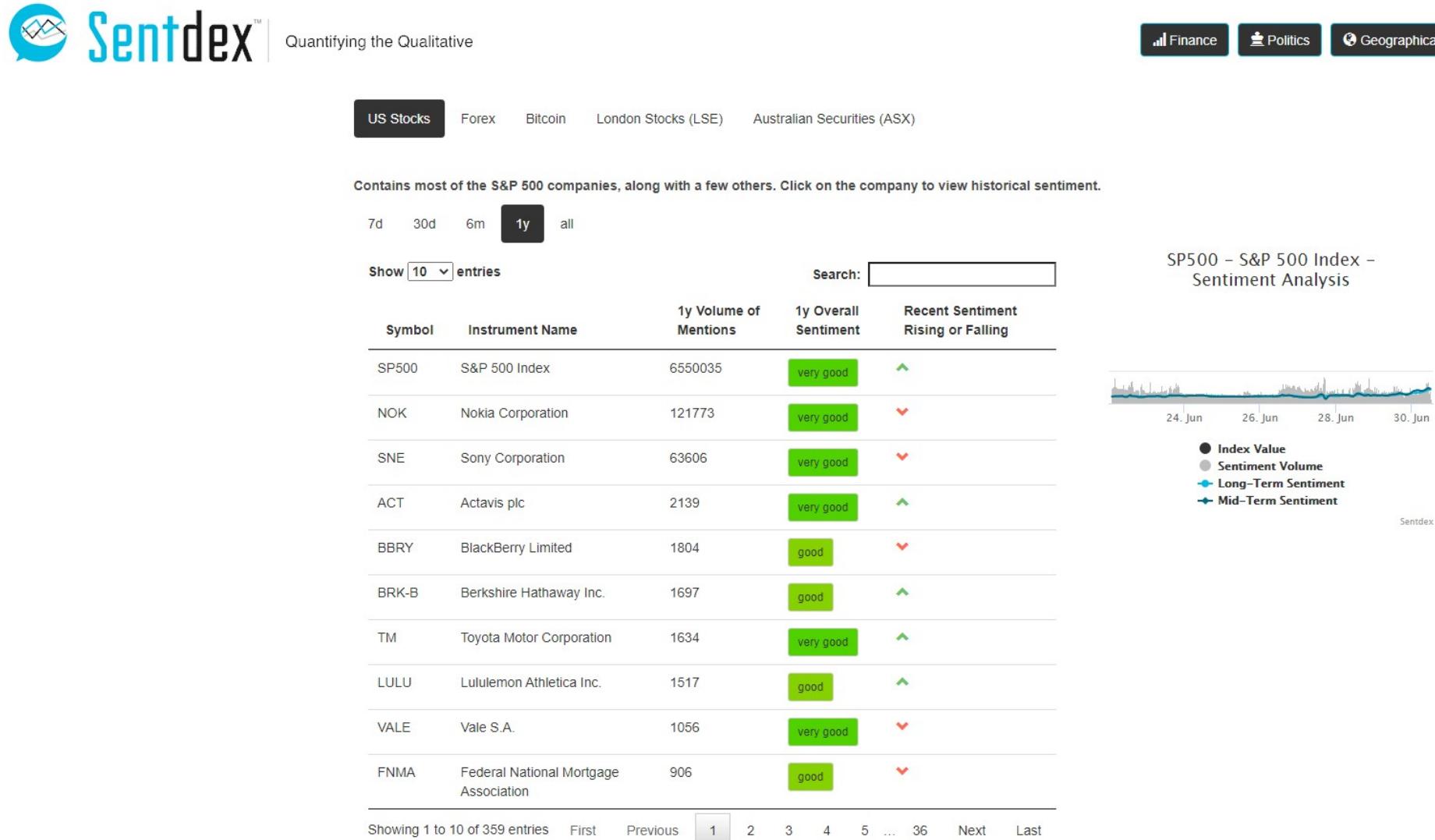
Human: When was Apollo sent to space?

Machine: First flight - AS-201, February 26, 1966



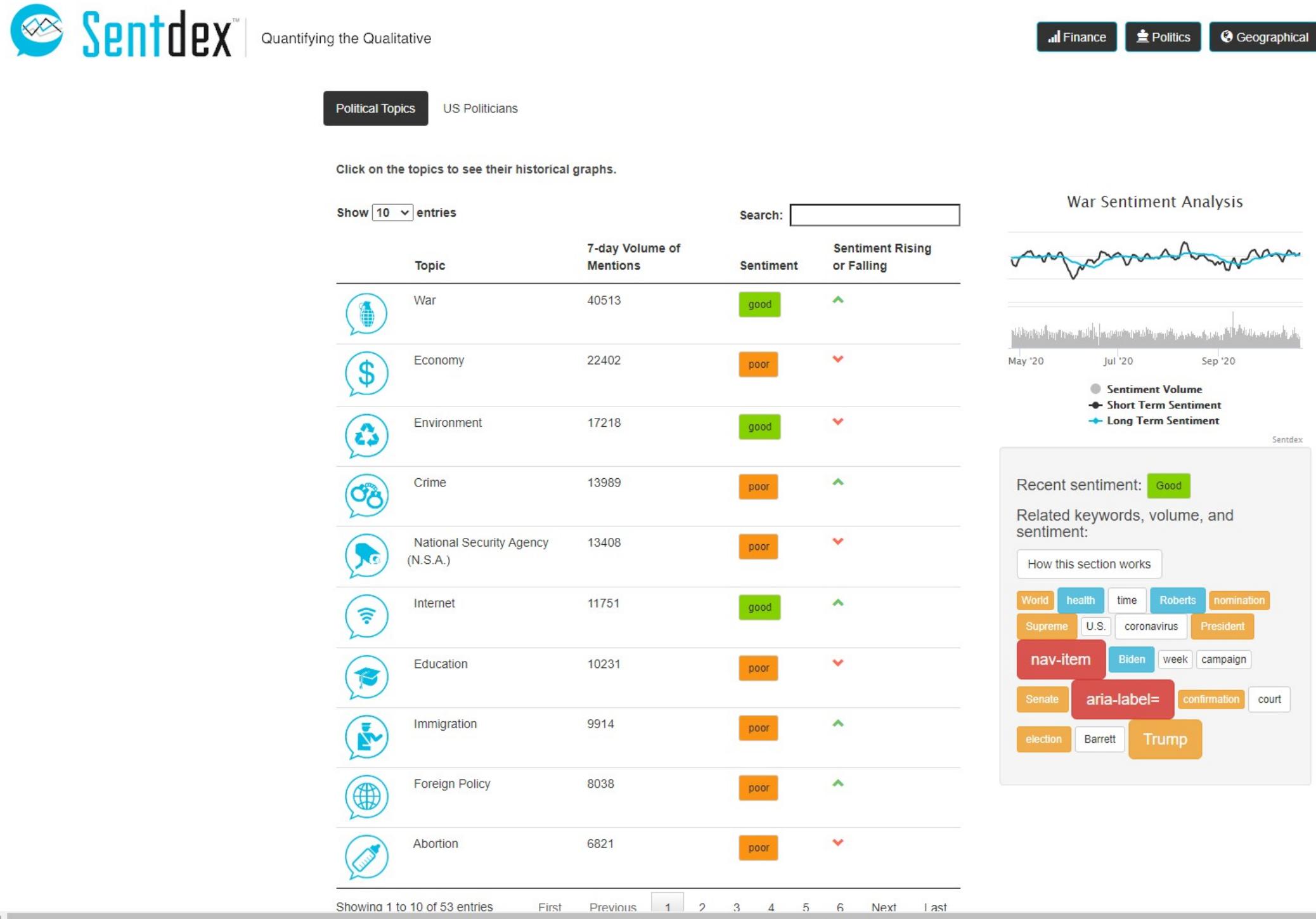
و تقوم بعض البرامج بجمع الكلمات و العبارات المستخدمة بشكل تلقائي من مواقع معينة (اقتصادية و سياسية و غيرها) ، و تحليلها و اظهار مدى تناولها و تكرارها و هكذا

<http://sentdex.com/financial-analysis/>



أو لمعرفة الانطباعات السياسية هنا :

<http://sentdex.com/political-analysis/>



و عبر تحليل التغريدات عبر العالم هكذا :

<http://sentdex.com/geographical-analysis/>



و يمكن تقسيم تطبيقات NLP الى ثلاثة انواع ، اعتمادا على مدى صعوبة كل منها :



mostly solved

Spam detection

Let's go to Agra!
Buy V1AGRA ...



Part-of-speech (POS) tagging

ADJ ADJ NOUN VERB ADV
Colorless green ideas sleep furiously.

Named entity recognition (NER)

PERSON ORG LOC
Einstein met with UN officials in Princeton

making good progress

Sentiment analysis

Best roast chicken in San Francisco!
The waiter ignored us for 20 minutes.



Coreference resolution

Carter told Mubarak he shouldn't run again.

Word sense disambiguation (WSD)

I need new batteries for my **mouse**.



Parsing



I can see Alcatraz from the window!

Machine translation (MT)

第13届上海国际电影节开幕...
The 13th Shanghai International Film Festival...



Information extraction (IE)

You're invited to our dinner
party, Friday May 27 at 8:30



Party
May 27
add

still really hard

Question answering (QA)

Q. How effective is ibuprofen in reducing
fever in patients with acute febrile illness?

Paraphrase

XYZ acquired ABC yesterday
ABC has been taken over by XYZ

Summarization

The Dow Jones is up
The S&P500 jumped
Housing prices rose

Economy is
good

Dialog

Where is Citizen Kane playing in SF?
Castro Theatre at 7:30. Do
you want a ticket?

و من أهم التطبيقات المنتظر تحقيقها في السنوات القادمة هو chatbot ، سواء كتابة او صوت

