Fast, Precise and
Intuitive Natural Language Processing

Cortical.io's brain-like technology helps to understand
the meaning hidden in Big Text Data.

What we offer

Fast, Precise and Intuitive NLP

Cortical.io has developed an easy-to-use, powerful Natural Language Processing engine for text filtering, classification, clustering and searching that operates on the semantic rather than keyword level. The Retina Engine works with any kind of text, independently of language and length. It can be customized via unsupervised learning for any business or scientific domain.

High Performance Language Intelligence

The Retina converts text from contracts, blogs, social media posts, product description, or any other source into a Semantic Fingerprint that contains all associated contexts. Instead of keywords, the Retina uses the semantic space to search the meaning contained in entire sentences, paragraphs and documents and delivers high quality results based on fine-grained deep semantics.

Big Data Semantics

You can use Cortical.io's Retina engine via:

- the Retina API, which allows to perform complex NLP operations with single calls to the API

- the Retina Spark, which has been designed for high performance semantic text processing in an Apache Spark environment.

Intelligence & Security · Website Search · Enterprise Search · Profile Matching · Product Search · Information Discovery · Alerting Systems · Content Classification · Keyword Generation · Opinion Mining · Office Automation · Forensic Text Analytics

With Cortical.io, you can locate documents, find web content, match people, identify products, monitor your competition, track customer satisfaction, discover new knowledge, and much more.

Cortical.io's Retina engine enables a new range of applications to improve social media analytics, compliance monitoring, enterprise search, information discovery, etc.

With the Retina Engine, you can now develop intelligent applications that analyze text in real time, in any language.

What our customers are saying

"The results delivered by the Retina API are so fast and efficient that we could not have built our Content Optimizer without Cortical.io."

Scott Johnson, Founder & CEO, Zoomrank

Learn more

Visit us at **www.cortical.io**
to try our demos and learn more about our technology.
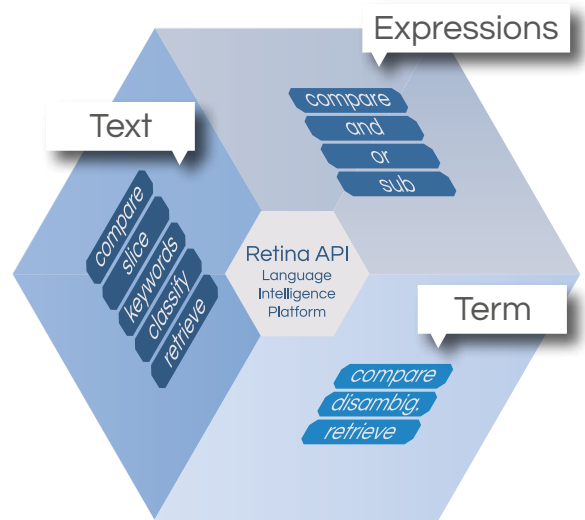
cortical.io

Retina API:

Compare the semantic content of two texts with a single call to the API

Highlights

- Extract keywords, get context terms, disambiguate words and sentences, create a category filter **with just one click**

- Uses **semantic space** instead of keywords and **enables Text context-based search**

- **Very simple to use** without any prior experience in NLP or linguistics

- **Works across languages**, e.g. compares directly an English text with a Spanish one

- **Highly computationally efficient**: enables real-time NLP

- **No configuration or parameter tweaking**

- **Customizable** via unsupervised learning **for any language and domain**

Expressions

compare
and
or
sub

Text

compare
slice
keywords
classify
retrieve

Retina API
Language
Intelligence
Platform

Term

compare
disambig.
retrieve

Because of their small size, Cortical.io fingerprints require only 10 % of the memory usually required to perform complex NLP operations. Execution on modern superscalar CPUs can be orders of magnitudes faster, terabytes of data can be processed efficiently.

Retina API Features:

Perform complex NLP operations with single calls to the API:

- Get **similar terms**

- Extract **keywords**

- **Slice a text** into sub-sections corresponding to semantic changes

- **Tokenization**

- Use **Boolean operators** to refine queries

- Measure the **semantic similarity** between two terms, texts or expressions

- Get a **visual representation** of the **semantic overlap** of two terms, texts or expressions

- Create a **category filter**

- Send **bulk requests**

Access:

- Free public API available at www.cortical.io (fair usage)

- Available as private API instance on major cloud platforms like Amazon Web Services and Microsoft Azure

- Easy switch from free trial API to production system

- REST API

- Java, JavaScript and Python client libraries

If you are interested in high performance semantic text processing, please consult the product fact sheet for the Retina Spark.

About Cortical.io:

Cortical.io develops and commercializes Natural Language Processing (NLP) solutions based on its proprietary Semantic Folding technology, which offers a fundamentally new approach to handling Big Text Data. Inspired by the latest findings on the way the human neocortex processes information, Cortical.io represents language with highly efficient semantic fingerprints. The Cortical.io Retina is the first semantic engine that can process terabytes of unstructured text in real time, for any language and business domain – thus enabling global businesses to leverage the value Big Text Data has to offer. The company was founded in 2011 and holds a broad general license for Numenta's HTM technology. Cortical.io has offices in in Vienna, Austria, and the San Francisco Bay Area.

For additional information, please visit **www.cortical.io**

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