sparkcognition™
Deep NLP

Extracting Value From Financial Documents

NLP PROCESSING FOR THE FINANCE INDUSTRY

Financial institutions are saddled with huge amounts of documentation. Most organizations today have massive databases of information and little to no efficient way of finding and using the information they need. According to Oracle, only 20% of all generated data is structured and formatted to be easily understood by machines. The rest is locked away in emails, journals, notes, audio, video, images, analog data, and more. Additionally, the risks associated with leakage of personally identifiable information are a key finance industry concern. Natural language processing (NLP) allows machines to use and understand language in similar ways as humans, using written or spoken documents to process information. An application powered by NLP makes use of these capabilities to unlock a vast wealth of valuable information. SparkCognition™ Deep NLP technology can do all this and more.

DOCUMENT CLASSIFICATION

Deep NLP's Document Classifier can sort through document archives and stream newly created documents in real time, thus automating the manual classification process. Because Deep NLP's Document Classifier is dynamically powered by machine learning, the structure can be easily reconfigured with a drag and drop interface. The repository can then be quickly refreshed whenever changes are needed or new documents are ingested. By classifying documents in this way, Deep NLP's Document Classifier makes it easier to triage and organize documents from burgeoning repositories. Deep NLP's Document Classifier is uniquely suited to serve business customers that value the privacy and security of their data. While other natural language processing tools require manual training, customization, and data science expertise. The Deep NLP's Document Classifier's intuitive user interface allows clients to configure a custom document hierarchy. In addition, the product's proprietary self-training algorithms are able to classify the documents with limited user input. Therefore this can be done without divulging or sharing the documents with any external collaborators, including SparkCognition.

When augmenting manual efforts, SparkCognition Deep NLP's Document Classifier provides:

- Increased speed and consistency for categorizing documents
- A scalable, configurable, and lasting solution
- Reduced cost, training, and labor

ENTITY EXTRACTION

Entity extraction is a type of information extraction for locating and classifying entities such as contract partners, businesses, products, and so on in a document. Deep NLP's Entity Extractor clarifies the actors in a given text, and also clarifies their roles and relations to one another, including complex or multiple roles. These capabilities can be used to support due diligence in legal and business matters, as well as supporting blockchains, while remaining platform independent. This eliminates the need for human effort at a number of stages, streamlining operations and freeing up human resources.

FIGURE 1:

How the SparkCognition Deep NLP Product Classifies Documents

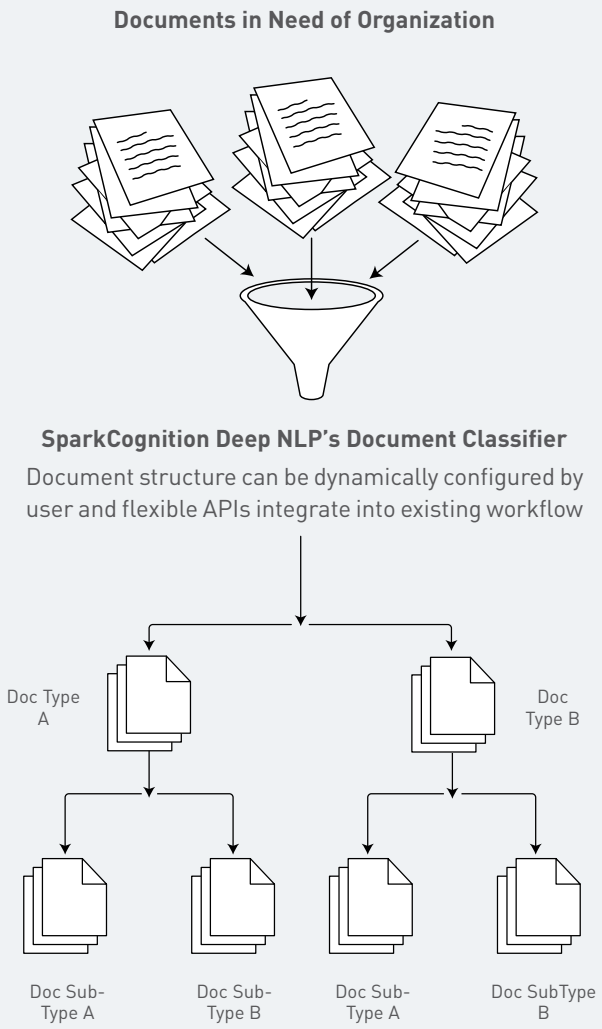
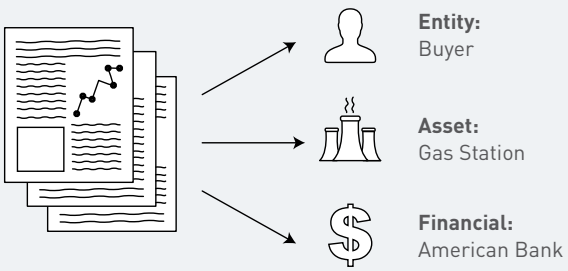


FIGURE 2:

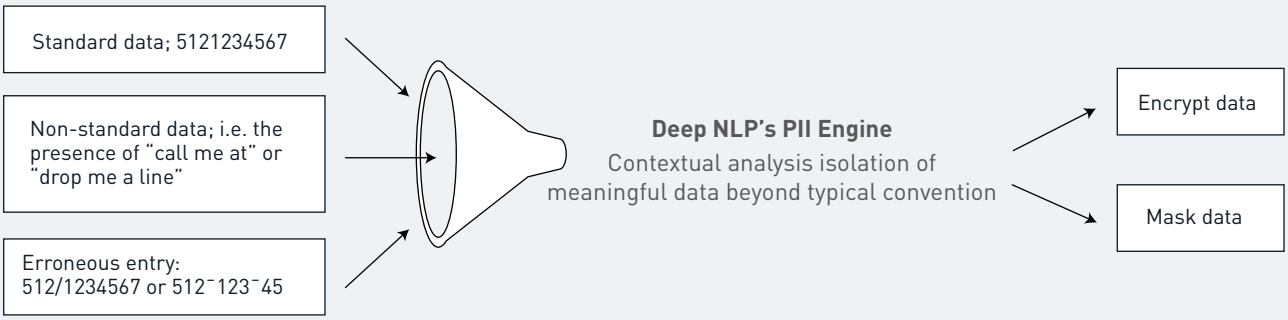
How SparkCognition Deep NLP Extracts an Entity



Contact SparkCognition today at info@sparkcognition.com

FIGURE 3:

Secure your customers' PII with the SparkCognition Deep NLP platform



PERSONALLY IDENTIFIABLE INFORMATION

Many businesses are being punished with multibillion dollar lawsuits for allowing their customers' personally identifiable information (PII) to be compromised. The need for improved detection of PII within document flows is greater than ever.

Unlike standard PII tools that use only rules and conventional searches, Deep NLP's PII Engine is unique in that it automates the flagging and removal of nearly all PII risk in unstructured data. The unique approach combines heuristics with sentiment extraction using natural language processing. This allows Deep NLP's PII Engine to identify standard data, non-standard data, and erroneously (or deceptively) entered data. Then the data can be reviewed or automatically encrypted or masked.

CASE STUDY

A major insurance company needed to classify new and historical insurance contracts, while masking the PII. They previously relied on contract administrators to manually sort and review each document. In order to support strategic growth while reducing costs and protecting confidentiality, they needed a new solution for managing their data. They considered hiring a team of data scientists to build a custom platform to automate these document processing needs, but feared the execution risk and cost of this approach.

With Deep NLP's Cognitive Q&A, the non-technical business users were able to configure their document hierarchy, ingest their documents, extract the entities, mask the PII, and classify the documents according to the dynamic hierarchy. This permanent system now allows them to save time while triaging incoming documents. As a bonus, they were also able to leverage Deep NLP's Cognitive Q&A to ask natural language questions, get relevant results, and find otherwise obscure insights in their documents.

The Deep NLP platform is the best way to efficiently handle the flood of documentation and information in the finance industry.

ABOUT SPARKCOGNITION

SparkCognition's award-winning AI solutions allow organizations to predict future outcomes, optimize processes, and prevent cyberattacks. We partner with the world's industry leaders to analyze, optimize, and learn from data, augment human intelligence, drive profitable growth, and achieve operational excellence. Our patented AI, machine learning, and natural language technologies lead the industry in innovation and accelerate digital transformation. Our solutions allow organizations to solve critical challenges—prevent unexpected downtime, maximize asset performance, optimize prices, and ensure worker safety while avoiding zero-day cyberattacks on essential IT and OT infrastructure. To learn more about how SparkCognition's AI solutions can unlock the power in your data, visit www.sparkcognition.com.