

# Streamline Operations with NLP

### **BRINGING STRUCTURE & INTELLGENCE TO DOCUMENTS**

Natural language processing (NLP), a field of artificial intelligence that enables computers and humans to interact using natural language, can be used to intelligently extract, classify, and recall information from documents.

SparkCognition's DeepNLP™ retrieves information with minimal user training; adds structure to documents by extracting key entities; and automates business processes by classifying documents in a configurable way.

### **DOCUMENT CLASSIFICATION**

- Automates decision-making within a workflow by classifying documents
- Organizes and maintains hierarchical categories and labels
- Enables business users to build, maintain, and deploy document classifiers
- Preserves confidentiality of data

### **COGNITIVE INFORMATION RETRIEVAL**

- Retrieves complex information from free text in databases and manuals
- Learns client and industry-specific jargon and relationships from ingested documents
- Understands tabular data and figures
- Discovers unknown correlations between events

### **ENTITY EXTRACTION**

- Integrates with DeepNLP Document Classification to extract entities and relationships specific to the type of document
- Supports due diligence, smart contracts, and blockchain
- Enhances entity extraction with real-world knowledge of domain experts

# **Apergy**

"Cognitive learning is going to be the key for the future. The technology is a differentiator we're providing our customers."

#### ALI RAZA

Senior VP & Chief Digital Officer, Apergy

# Honeywell

"We worked with SparkCognition to develop a solution that met mechanics where they were, letting them just enter symptoms, then showing them a list of suggested actions. That list of suggested actions adjusts and re-prioritizes top recommendations as our mechanics add more symptoms."

### **CHAD KARTCHNER**

Director of Services Engineering, Honeywell Aerospace

## Applying DeepNLP™ to Aircraft Maintenance

Airline schedules—and satisfied customers—depend on maintenance performed within a tight schedule. In order to streamline the process, DeepNLP was developed for the aerospace division of a Fortune 100 company to provide faster, more precise service suggestions.



Responded to queries in natural language, including associated images



Incorporated data from hangar content (logbooks and troubleshooting manuals) to retain expertise and provide practical knowledge



Presented documents in a logical hierarchy



Captured user feedback to better rank responses

SparkCognition builds leading artificial intelligence systems to advance the most important interests of society. We help customers analyze complex data, empower decision making, and transform human and industrial productivity with award-winning machine learning technology and expert teams focused on defense, IIoT, and finance.