Tuning and Machine Learning Services

Lexalytics is the industry leader in transforming unstructured text into usable data and insights. Our professional services team helps our clients gain the most possible value from their text analytics solutions.

In any natural language processing (NLP) system, some words and phrases can create tricky precision or accuracy issues in the output. In these cases, the Lexalytics professional services team works with our customers to solve your problems quickly and effectively.

First, we evaluate whether or not we can fix your problems by tuning the underlying text analytics. In essence, tuning means telling the system exactly what to do. Tuning is immediate, precise and transparent.

But tuning is less flexible than machine learning. This means that sometimes it will be more efficient to solve your problem by training a machine learning model. To reduce costs, risks and training time, we build small, targeted models to solve one specific problem at a time.

The support from the team at Lexalytics was outstanding; they made a very complex project seem simple.

— Matt Zarem, Senior Director of Product

LEARN MORE about our “Tune first, then train” methodology: lexalytics.com/resources
Traditionally, the thinking in the pharma and neuroscience industries has been that the specific terminology is so arcane and the data so unstructured that machines couldn’t possibly be trained to tackle some of our most difficult problems, but early testing with Lexalytics has been very promising.

— Keith Ho, Director of Customer Focus and Medical Digital

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CUSTOM MACHINE LEARNING MODELS

Sometimes, an accuracy or precision problem is too large or unwieldy to solve with tuning alone. In these cases, we use machine learning models for a more cost-effective solution.

To reduce your cost and risk, Lexalytics trains machine learning “micromodels” to solve very specific problems, such as entity recognition of a single ambiguous company name or categorization of food products and sauces.

MICROMODELS

Require **less data**

Are easier to grasp and **debug**

Have fewer unwanted **side-effects**

We also build models to extract non-traditional data, such as stock ticker symbols, medical billing and treatment codes, age ranges and deadlines. Contact us to discuss how machine learning can help solve your data-related problems.

MACHINE LEARNING SOLUTIONS

Suggesting Answers to Medical Inquiries

Contact center operators at Biogen’s medical information department used to comb through large resource libraries to find answers to incoming inquiries. Lexalytics trained machine learning models to suggest answers instead, as part of a larger solution to accelerate their operations.

Sentiment Scoring of Context-Dependent Phrases

The phrase “wicked sick” should receive a negative sentiment score in the context of healthcare. But the same words can be neutral or even positive in the context of video-gaming or sports. We trained a machine learning model to accurately score the sentiment of this phrase based on the context in which it appears.

Entity Recognition on Ambiguous Company Names

“Apple” can represent a fruit, a company, or even an adjective (apple-bottomed jeans). For a financial services customer, we trained a series of machine learning models to improve the reliability of entity recognition on ambiguous words like this, even when they’re misspelled or abbreviated.

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