Dispelling 4 NLP Myths

A NEW WAY OF THINKING ABOUT NATURAL LANGUAGE PROCESSING

AlchemyAPI™

A GUIDE TO DEBUNKING COMMON NLP MISCONCEPTIONS

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Dispelling NLP Myths

A NEW WAY OF THINKING

Artificial intelligence, natural language processing and deep learning have been historically reserved for computer scientists and big-budget organizations. But over the past decade, a perfect storm converging recent algorithmic breakthroughs and massive computing power with cloud delivery have made unsupervised learning economic and universally practical.

The result is where we, at AlchemyAPI, focus 100% of our time. It is a new way to extract valuable information from unstructured data, the text and images that make up 85% of Internet traffic, and to help organizations better understand and communicate with their audiences.

As with any game-changing technology, misconceptions abound. This eBook addresses just a few of the most common myths. Use it as a conversation-starter in your organization, a way to help your team understand how NLP can enable you to find valuable, actionable signals in online conversations and digital information.

What follows are topics that we frequently cover with people when they are considering developing applications that include Alchemy's REST APIs.

"If you invent a breakthrough in artificial intelligence, so machines can learn, that is worth 10 Microsofts."

-Bill Gates

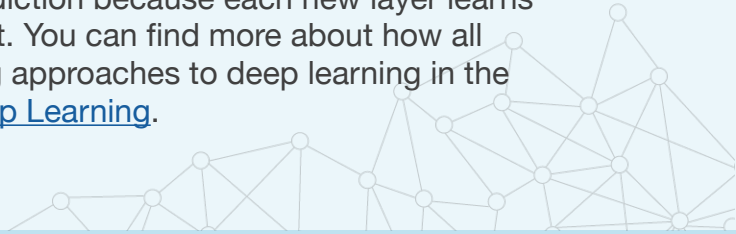# I Have To Teach and Train Complex Algorithms To Use NLP

Fact

Unsupervised learning has eliminated this ineffective and arduous task. Now, instead of training an algorithm and then implementing a system, deep learning architectures run the unsupervised systems on their own. This leads to automatic training based on models that become increasingly knowledgable as the system masters lower-level categories before acquiring higher-level categories.

Support

AlchemyAPI's approach requires zero human intervention. In deep learning, multiple neural networks are "stacked", or layered, on top of each other in order to create models that are even better at prediction because each new layer learns from the ones before it. You can find more about how all this works and varying approaches to deep learning in the GigaOM Guide to Deep Learning.

BLOG POST:
5 DEEP LEARNING RESOURCES TO BOOKMARK

Read It

I Don't Need To Test Commercial NLP Services. I Can Use Free Tools To Monitor and Feed My Business Information

Fact

Granted, free NLP tools are economical and useful in some applications. However, when it comes to processing business data on the scale of petabytes and terabytes, free systems can be limited. These boundaries can include things such as usage limits that are quickly reached and inadequate support for enterprise-level infrastructure needs.

Aside from this, free services are often built using clean datasets. They may not be customized for poorly written data, such as short-form text or social media posts and may not return the results being sought by businesses.

"Out-of-the-box tools only give us about 70% of the solution."

-Jonathan Morgan, CrisisNET

Support

Many of our customers have explored using free tools, but found them inadequate. According to Jonathan Morgan at CrisisNET, "Out-of-the-box tools only give us about 70% of the solution."

Aman Naimat, co-founder of Spiderbook, also experienced this when experimenting with various NLP systems. "The problem I ran into was that most NLP and named entity recognition algorithms were developed using pristine datasets, hand-curated for test suites. Those algorithms cannot accurately analyze the content you find on the Web, which is not perfectly written articles, blog posts, or tweets."

Learn more about the three things you must consider when building deep-learning based tools.

On-Demand Webinar

NLP Systems Are Too Expensive To Customize For My Specific Industry And Use Case

Fact

Deep learning with unsupervised algorithms enables applications to "get smarter" on their own, so once you have built the specific app you need, it can steadily return more ROI by autonomously enhancing its data analysis capability.

However, it's important to keep in mind that you do need the huge processing capability and IT structure already in place to make it economical.

Support

The economics of feature engineering are based on weighing functionality against resource limitations. Traditional, targeted app development shows that it actually is more expensive to update and add features using personnel to make those changes.

AlchemyAPI offers 9 SDKs, making it easy to combine our services with other data or technologies to create valuable, domain-specific solutions.

By calling AlchemyAPI's services, you are able to take advantage of the infrastructure we have established, one that uses 1,000 CPUs to crawl the Web and process billions of web pages and 2+ petabytes of data.

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I Can Teach NLP Algorithms By Simply Aiming Them at the Web

Fact

Unfortunately, it's not that simple. The sheer volume of un-structured data that you need to process makes it impractical.

Also, web pages include a great deal of data that's considered noise, called "chrome." Stripping that data from the page, the extract>transform>load process, requires expertise that you probably don't have in-house.

Support

AlchemyAPI uses cloud computing resources to handle the scale of data that exists and grows on the web every moment. We not only have built the infrastructure we need to handle web-sized unstructured data, we pass on the economies of working at scale to you.

We have developed APIs specifically for stripping chrome and microformats from web pages and HTML. When you call these REST APIs, you get back clean data that's ready for next steps in image and text analysis.

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ADTHEORENT®

Increasing Click-Through Rates by Matching Web Page Content to Reader Interest

Mobile ad network, AdTheorent, uses keyword extraction and sentiment analysis to power their predictive modeling engine and improve advertising click-through rates by 200% compared to industry average.

Read AdTheorent's Success Story HERE

"AlchemyAPI's system is extremely robust and reliable. It gives us depth and accuracy in keyword extraction and sentiment."

-Anthony Iacovone, CEO

Your Next Step

It's Your Call

AlchemyAPI is democratizing breakthroughs in deep learning to power your unstructured data applications, giving you access to world-changing technology so you can use what you need and scale as you grow. Plus, we stay on top of the technology as it changes giving you access to the latest advancements when you make the "call."

As experts in the field, we can help you get a clear picture of what's possible with NLP, its advantages, how to best implement it and why it makes sense to partner with a leader.

What's your next step? Contact us and we'll discuss how our passion for data analysis could support your vision for success.

GET YOUR FREE API KEY

It's fast and free to get started.

1,000 transactions per day.

No strings attached.

SIGN UP

Powering the New AI Economy

We Make Sense of the World's Unstructured Data

At AlchemyAPI, we are convinced that the recent advancements in artificial intelligence (AI) must be made widely available, affordable and easy-to-use. That is why we are building the largest cloud platform and community where developers can quickly build applications that achieve new insights and capabilities by applying advanced text analysis, computer vision and data storage services to huge volumes of unstructured data.

Our high-performance REST APIs let anyone with a little programming skill create applications that route corporate communications based on their content, trend niche topics across millions of news sites and blogs, extract customer needs from social media posts or make real-time recommendations matching your user's intent.

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