

NLP, NLU & NLG

Making Sense of the AI Alphabet Soup

NLP Natural Language Processing: The First Artificial Intelligence

- NLP comes from Alan Turing's seminal work on AI entitled "Computing Machinery and Intelligence."
- NLP is made up of NLU and NLG. Today, there are thousands of NLU companies and only three major players in the NLG space because of the complexity of making a computer write like a human.

What is the difference between NLU and NLG?

NLU

Natural Language Understanding

Software that understands spoken or written language. NLU turns unstructured data (like text) into structured data.

Uses of NLU

Data discovery: Scan thousands of pages of written documents and capture data from it.

Smart Searches: Search not only for keywords in documents, but key concepts as well.

Voice Recognition: Understand the spoken word through software like Siri or Cortana.

NLG

Natural Language Generation

Software that can write like a human being. NLG turns structured data into written narrative.

Uses of NLG

Business Intelligence: Explain the results of data discovery or analysis in written English, French, German, etc.

Analytics: Democratize data analytics and data-driven decision making by simply explaining insights so everyone can understand.

Advice: Automatically explain what courses of action to take in response to data.



Different Objectives & Problems Solved



GOAL

Turn unstructured data into structured data, understand what is written or spoken.

GOAL

Turn structured data into written reports, summaries, explanations, and advice.

The best NLU use cases?

- Skim thousands of written documents
- Find keywords in written text or speech
- Speak directly to your computer or device
- Convert information into data a computer can understand

The best NLG use cases?

- Produce a high volume of data-driven content
- Comply to industry rules and regulations in every report
- Personalize each piece of text for the reader
- Monetize data you already have



Yseop is a leading AI software company and pioneer in Natural Language Generation (NLG), helping firms explain their data in written narratives automatically.