

INTRODUCTION

-> Definition ->

Natural language processing (NLP) brings together two disciplines as seemingly distant as linguistics and artificial intelligence. Currently, this field of computer science, which consists of transforming natural language into a formal language (such as programming) that computers can process, continues to evolve and its applications are increasing.

According to IBM's definition, natural language processing is the field of computing (more specifically, artificial intelligence) that has the function of providing computers with the ability to understand spoken and written language in the same way as human beings. Currently, this technology has reached a high level thanks to the application of technologies such as machine learning, big data, and the internet of things (IoT) or neural networks.

-> Timeline ->

Natural language processing has its origins in the 1950s, when Alan Turing published an article (*Computational Machines and Intelligence*) proposing what we currently know as the Turing Test. The test examined a machine's ability to express intelligent behavior similar to that of a human being. From that moment on, the evolution of algorithms associated with this technology made it possible to reach the current progress.

The first natural language analysis models were symbolic and based on manually coding the rules of the language. For example, it allowed us to distinguish the tenses and conjugations of verbs and extract the meaning from the root. In the 80s and 90s the statistical revolution occurred. Instead of writing sets of rules (and exceptions), NLP systems began using statistical inference algorithms to analyze other texts and perform comparisons in search of patterns.

Next, we will see a little more about these models, with their appropriate applications.