

The evolution of natural language processing and its algorithms

1949



IBM sponsors the **Index Thomisticus**, a compilation of the works of St. Thomas Aquinas created by the Italian Jesuit Roberto Busa (inventor of computer linguistics).

1950



Alan Turing publishes the article *Computational machines and intelligence*, where he proposes the **Turing Test** to determine whether a machine can think or not.

1954



The **Georgetown-IBM** experiment achieves the automatic translation of more than sixty sentences from Russian into English, giving a boost to computational linguistics.

1956



John McCarthy, Marvin Minsky and Claude Shannon coin the term "**artificial intelligence**" at the Dartmouth Conference.

1960s



Pattern recognition and "nearest neighbour" algorithms are introduced.

1980s



Machine learning algorithms are introduced and natural language generation takes off.

1990s



Advanced speech recognition and topic modelling technologies are introduced.

2000s



More advanced statistical and topic models, such as LDA, are introduced. The term "**deep learning**" also emerged.

2010s



Translation with **neural machines**, i.e. without human intervention, is implemented and conversational artificial intelligence takes a leap forward.

2020s



More and more business sectors will apply this technology and, together with **machine vision**, it will enable the new challenges of Industry 4.0 to be met.

Source: Deloitte.