

A natural language processor (NLP) is a branch of computer science, or more specifically, a branch of artificial intelligence (AI), whose purpose is to enable computers to understand spoken and written language in the same way as a human being. It combines computational linguistics with statistical, machine learning, and deep learning models to model human language. As a result of these technologies, computers can process human language - text or voice - and comprehend its full meaning, including the speaker's intent and sentiment. Computer programs that use NLP translate text between languages, respond to spoken commands, and summarize large volumes of text rapidly-even in real time. Several consumer conveniences use NLP, including voice-operated GPS systems, digital assistants, speech-to-text dictation software, and customer service chatbots. But NLP also plays a growing role in enterprise solutions that help streamline business operations, increase employee productivity, and simplify mission-critical business processes. Speech recognition, Part of speech tagging, Word sense disambiguation, Named entity recognition, Co-reference resolution, Sentiment analysis, Natural language generation.

Source: <https://www.ibm.com/topics/natural-language-processing>