# Transcript: " *AI linguistics.”*

*[Text reads: “AI linguistics.”]*

**Voiceover:** Have you ever wondered how your mobile phone understands what you’re saying?

A woman holds a phone. Text bubbles emerge from it. One shows a photo of a human ear.

*[Messages read: “I forgot all about that! Can't... ...Remember ...Wait. ...Believe.”]*

**Voiceover:** Or how can it suggest words while you’re typing a message?

Gears appear around a laptop. The acronyms NLP, LLM and NLG appear.

**Voiceover:** That’s all thanks to some clever technology behind some interesting acronyms.

*[Text reads: “NLP, Natural language processing. Natural language processing is an application of AI which enables machines to both process and comprehend human language in the way it is written.”]*

**Voiceover:** Natural Language Processing, or NLP, is a large branch of AI that empowers computers to understand and react to human language.

Disorganized books on a shelf become uniform.

**Voiceover:** It’s like sorting through a huge library of books — categorizing them, summarizing their content, and knowing exactly where to find the information you need.

*[The letters “NLG” appear.]*

**Voiceover:** NLP involves several tasks such as translation, sentiment analysis, speech recognition, and topic segmentation.

A Latin and Asian alphabet character, a woman talking on a phone, a mood chart and a piece of green paper full of scribbles appear around the acronym NLP.

A laptop displaying the word "tree" appears in front of a tree.

**Voiceover:** A subfield of NLP is Natural Language Generation, or NLG. This specialized branch of AI gives computers the ability to craft text that’s not only understandable but also contextually relevant.

Leaves grow on a tree.

**Voiceover:** It’s the driving force behind the creation of various text content. To illustrate, imagine a journalist who writes articles on many topics.

Books labeled local news, weather and sports appear.

**Voiceover:** They collect information, organize their thoughts, and then write a story. NLG operates in a similar fashion, but it’s a system that processes data and weaves it into a narrative, be it a financial summary, a weather forecast, or a product description.

*[Text appears reading: “Large language models, AI.”]*

**Voiceover:** Advancing further, we encounter Large Language Models, or LLMs, which represent a more sophisticated application of AI in language.

*[Text reads: “Large language models, LLM, are AI tools that can summarize, read, or generate text in the form of sentences like how a human talks and writes.”]*

A magnifying glass inspects the text.

**Voiceover:** Trained in text collections, LLMs can perform complex tasks requiring contextual understanding, such as holding conversations or providing answers to inquiries.

Three people sit around a campfire. Different types of characters appear in speech bubbles above them.

**Voiceover:** For instance, imagine a well-travelled individual who can recount tales and converse in various languages.

*[A blimp is labelled “LLM.”]*

Pictures of a music note, a free-weight, an airplane and a camera hang from it.

**Voiceover:** An LLM also has an extensive array of texts and can discuss a multitude of topics, giving the impression of conversing with a seasoned traveller.

*[The phrase “NLG” appears above the blimp.]*

**Voiceover:** While NLG focuses on generating new text from structured data, LLMs are designed to produce text that is meaningful and contextually fitting.

A picture of a tree and a mountain, as well as the words tree and mountain hang from the blimp.

**Voiceover:** This distinction highlights the impressive abilities of large language models, which go beyond the typical functions of natural language generation.

*[Later, the words “car” and “bicycle” appear.]*

A question mark appears above a man. Then, the acronyms LLM and NLG appear next to the Microsoft Copilot logo.

**Voiceover:** Now you might be wondering how these technologies are applied in the real world today. Microsoft Copilot for instance, harnesses both NLG and LLM technologies to offer users a range of assistance, from summarizing information to providing coding support.

Two people use computers. The logo for GitHub Copilot appears between them.

**Voiceover:** Similarly, GitHub Copilot is an AI-powered tool that enhances developers’ productivity by suggesting relevant code snippets for the task at hand.

A person uses a laptop between the Microsoft Copilot logo and the GitHub Copilot logo.

**Voiceover:** However, it’s crucial to remember that these are tools designed to assist us. And as with any tool, they must be used responsibly.

The Microsoft logo appears.