

# Introduction to Transformers in AI

Transformers are a type of deep learning model introduced in the paper "Attention is All You Need" in 2017.

They have revolutionized the field of Natural Language Processing by enabling models to handle sequential data without relying on recurrent architectures.

The key innovation of transformers is the self-attention mechanism, which allows the model to weigh the importance of different words in a sequence when making predictions.

This capability makes transformers highly effective for tasks like language translation, text summarization, and question answering.

Popular transformer-based models include BERT, GPT, and T5. These models have been pre-trained on large corpora and can be fine-tuned for specific NLP tasks.

Transformers are also increasingly applied in other domains such as computer vision and speech processing, demonstrating their versatility and power in AI applications.