

Title: Attention Is All You Need

The "Attention Is All You Need" by Vaswani et al. (2017) introduces the Transformer model, a model which is solely based on attention mechanisms. The introduction of transformer model has substituted traditional recurrent and convolutional neural networks ,thereby transforming the field.This has brought a significant advancement in the field of NLP(Natural Language Processing)

Complexities and Difficulties

Time and Computational complexity:The mechanism used in the transformer model uses high computational complexity causing memory and time constraints.Despite being effective, this model requires large amounts of resources,making it difficult deploy it in resource constrained and large scale environments.

Difficulty in Handling Long Sequences:Transformers struggle with processing long sentences due to the time complexity of self-attention mechanism.Several techniques have been introduced to address this issue,but they add another comp-lexity layer to the existing layers.

Limitation

Struggle with sequences:Transformers struggle with handling sequential information,unlike RNNs. The model might encounter difficulties with tasks that depend heavily on temporal dependencies.

Mistakes

Scalability Challenges:While the model is known for its parallelization,the paper could have focused on scalability challenges faced while working on large datasets.