

Twitter Thread by [ilyaeck](#)

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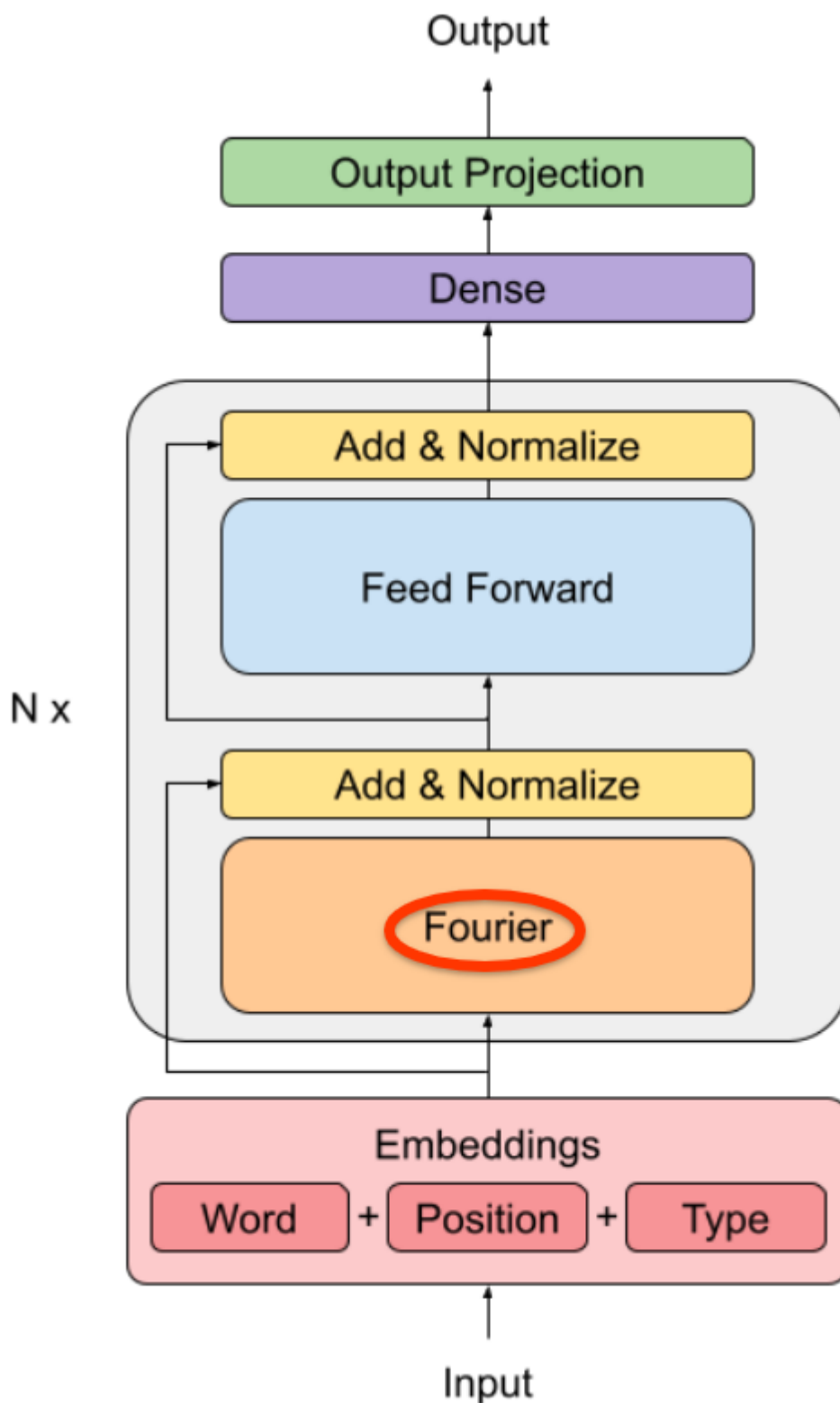
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**Attention may be all you *want*, but what you *need* is effective token mixing!
In which we replace Transformers' self-attention with FFT and it works nearly as well but faster/cheaper.**

<https://t.co/GiUvHkB3SK>

By James Lee-Thorpe, Joshua Ainslie, [@santiontanon](#) and myself, sorta



Attention clearly works - but why? What's essential in it and what's secondary? What needs to be adaptive/learned and what can be precomputed?

The paper asks these questions, with some surprising insights.

These questions and insights echo other very recent findings like [@ytay017's](#) Pretrained CNNs for NLP <https://t.co/k0jOuYMxzz> and MLP-Mixer for Vision from [@neilhoulby](#) and co. (Like them, we also found combos of MLP to be promising).