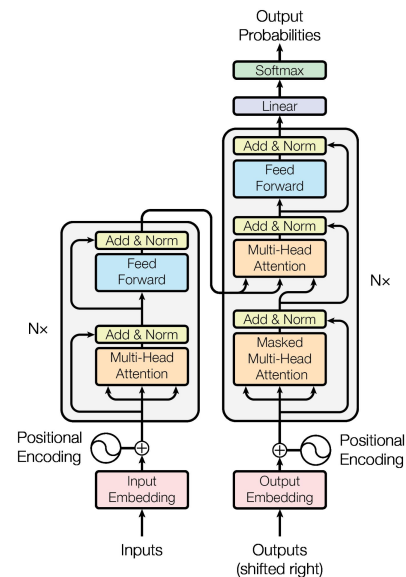


Research report

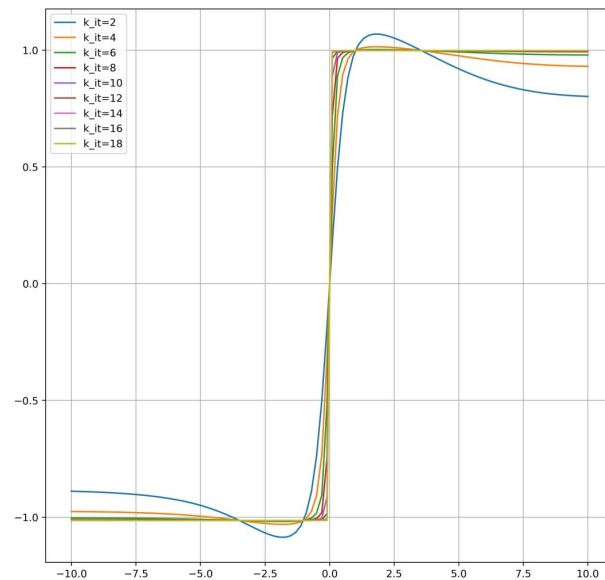
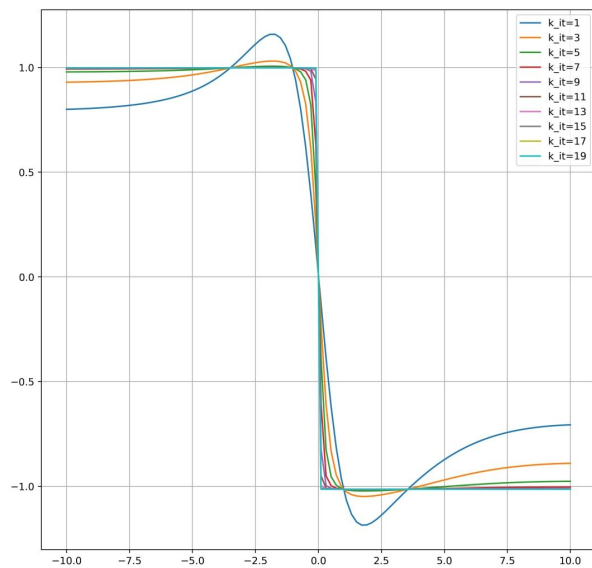
Andrei Filatov

Motivation

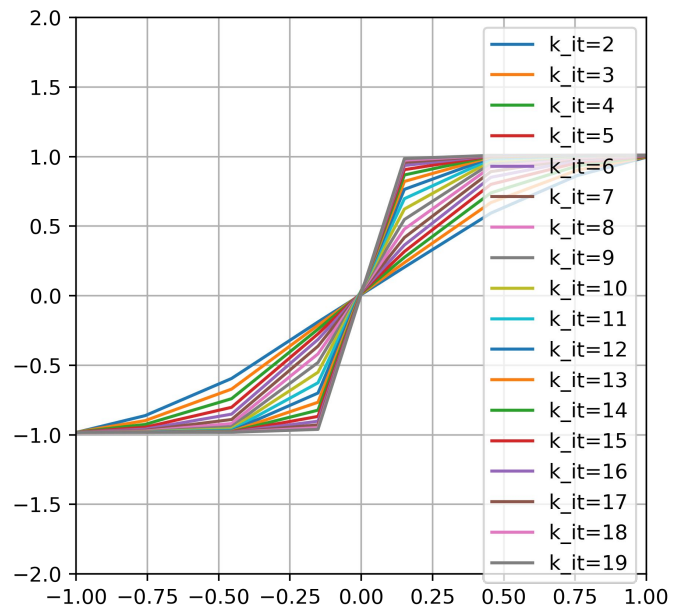
- Neural networks have an replicative structure
- What if we use only shared layer?
 - Reduce memory footprint
 -



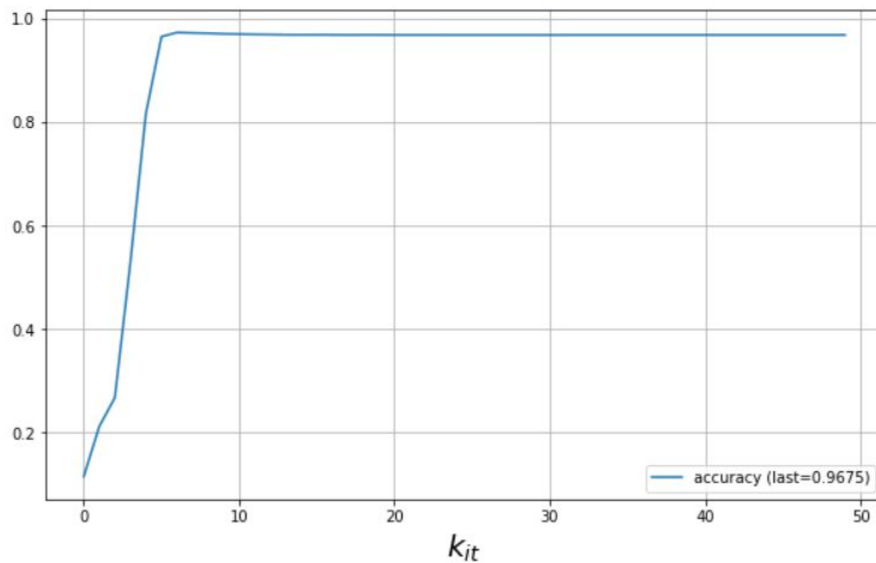
Experiment



Эксперимент с гомотопией



Эксперимент на MNIST



Done

- Implemented proposed method
- Shown method's efficacy on MNIST, Moons dataset
- Written introduction section in a draft

Next half a year

- Writing the rest part of the thesis
- Conducting experiments with Transformer model
- Adding experiments with ImageNet + big text corpora
- Submitting paper to ICML 2022