

Improve The Robustness of Language Model To Prompts

Supervisor: Yongkang Liu

Examiner: Prof. Schütze

BSc, MSc, Open: MSc/BSc

Summary:

Fine-tuning language models based on prompts has become a new fine-tuning paradigm. Compared with traditional fine-tuning, prompt-based fine-tuning can fully exploit the potential of language models. However, prompt-based fine-tuning has an obvious disadvantage: it is too sensitive to prompts. Changing even one punctuation mark in the prompt may cause a sharp decline in the performance of the model. The widespread use of large language models has made this problem more prominent, because prompt sensitivity issues will cause many results to be difficult to reproduce. In this project, we mainly explore reducing the sensitivity of the language model to prompts and improving the robustness of the language model to prompts. (Of course you can have your own idea.)

Prerequisites: enthusiasm, good programming background; master pytorch and transformers library