In-Context Learning for Natural Language Generation

- Supervisor: Peiqin Lin
- Examiner: Prof. Hinrich Schuetze
- BSc, MSc, Open: MSc
- General Topic Area: Large Language Model, In-Context Learning, Natural Language Generation
- Prerequisites: enthusiasm, Good programming background (preferably python), basic knowledge of Natural Language Processing, Deep Learning, and Pytorch
- Details: Large Language Models (LLM), represented by LLaMA \[1\], LLaMA 2 \[2\], and ChatGPT\(^1\) have exhibited good in-context learning results. Recent studies have investigated the pattern of in-context learning in terms of sample selection \[3, 4, 5\], sample ordering \[6\], and input-label mapping \[7, 8, 9\]. However, these studies mainly focus on classification instead of generation. In this thesis, the task is to address one or more of the following research questions.
  - Focusing on a generation task, including but not limited to Summarization, Dialog, Simplification/Compression, Question Answering, Creative Writing, Data-to-Text, and Question Generation.
  - Focusing on an investigation perspective, including but not limited to sample selection, sample ordering, and input-label mapping.

References


