

# Chapter 1

## Objective of the project

The goal of this project is to understand how training(fine-tuning) a large language model such as GPT2-XL to predict tails from a head and a relation [1] can affect its performance in other language modelling tasks when compared to its ‘untrained’ version. This will help identify if this kind of training leads to a loss or a gain in capability for a language model. This is done by comparing the performance of the COMET-GPT2-XL[2] model against the ‘naive’ GPT2-XL on a variety of common modelling tasks and metrics. This project is also a study in how to fit large language models when dealing with limited compute resources as often encountered in open-source projects.