



Thesis proposal

Topic:	Evaluating Poetic Meter Recognition in Large Language Models
Supervisor:	Amir Hossein Kargaran
Examiner:	Prof. Dr. Hinrich Schütze
Level:	BSc
Summary:	<p>This project explores the capability of Large Language Models (LLMs), such as Llama 3 or GPT-4, to analyze and identify poetic meter across multiple languages, including English, and another language such as German, Chinese, Persian, Arabic, etc (The languages should have a rich traditions in structured poetry and diverse rhythmic patterns.)</p> <p>The core objective is to create a multilingual database of annotated poems with their metrical templates and scansion patterns. This resource will be used to evaluate LLMs' performance in identifying and matching metrical structures. The project involves designing prompts, running systematic tests, and analyzing error patterns, providing insights into the strengths and limitations of LLMs in this domain.</p> <p>This project combines computational linguistics, cross-linguistic analysis, and AI evaluation, offering a valuable contribution to understanding how well current models can handle complex, language-specific poetic features.</p>

Requirements:

- Interest in exploring poetic meter across multiple languages.
- Proficiency in Python for scripting and data analysis.
- Basic understanding of transformers (optional).
- Aim to publish results as a conference paper or workshop submission showcasing LLMs' performance on poetic meter recognition.

References and Related Context:

- [https://en.wikipedia.org/wiki/Metre_\(poetry\)](https://en.wikipedia.org/wiki/Metre_(poetry))
- <https://evan-soohoo.medium.com/chatgpt-and-poetry-a4ee5294df58>
- <https://maialeechin.com/chatgpt-meter/>
- <https://news.ycombinator.com/item?id=35199496>
- <https://aclanthology.org/2024.lrec-main.1252.pdf>
- <https://arxiv.org/abs/2410.15299>