

# Exploring User Prompting Behavior in LLM Interactions

Maximilian Slapnik  
Maximilian.Slapnik@campus.lmu.de  
LMU Munich  
Munich, Germany

## ABSTRACT

Artificial Intelligence (AI) plays an increasingly important role in the daily lives of millions of people. Large Language Models (LLMs) are the most prominent implementation of AI that is used not only by experts, but equally by ordinary users as well. LLMs can respond to any textual input (prompts) with human-like answers, leveraging the training data that was used to implement the model. Even though prompting LLMs seems very straightforward, the question arises if it is possible to streamline the interactions with said models in order to optimize outputs. We explore the behavior of a randomized trial of 100 interactions of users with LLMs that are publicly available on ShareGPT. The goal of this investigation is the discovery of recurring patterns in behavior and the evaluation of human tendencies as well as biases of users when interacting with AI models in order to understand current behaviors and propose optimization opportunities.

## 1 INTRODUCTION

## 2 BACKGROUND AND RELATED WORK

### 2.1 Large Language Models (LLMs)

### 2.2 User Interaction with LLMs

## 3 STUDY ON USAGE PATTERNS OF LLM USERS

### 3.1 Intro and Research Objective

### 3.2 Research Method: ShareGPT

### 3.3 Study Results

#### 3.3.1 Findings.

#### 3.3.2 Observable Trends.

## 4 DISCUSSION

### 4.1 Observed Behaviour (Synthesis)

#### 4.1.1 Why do people interact with LLMs the way they do?

#### 4.1.2 Prompt Improvement Possibilities.

### 4.2 Outlook and Future Developments

#### 4.2.1 Auto-GPT.

#### 4.2.2 Prompt Engineering.

## 5 CONCLUSION

---

This paper is published under the Creative Commons Attribution 4.0 International (CC-BY 4.0) license. Authors reserve their rights to disseminate the work on their personal and corporate Web sites with the appropriate attribution.  
© 2023 IW3C2 (International World Wide Web Conference Committee), published under Creative Commons CC-BY 4.0 License.