Study Participation Invitation:

Evaluating Language Model Inferences on Clinical Trial Data

Overview: We are seeking medical students to participate in an innovative study focused on evaluating the performance of language models in understanding and analyzing clinical trial data. Your role will be crucial in enhancing the accuracy and reliability of these models, which could significantly impact the future of medical research and patient care.

Study Background Knowledge: SemEval 2024 Task 2: Safe Biomedical Natural Language Inference for Clinical Trials

Study Format:

- The study will last 120-180 minutes in total.
- To maintain optimal concentration and performance, the study will be divided into two phases, each lasting approximately one hour.
- Some students may need to attend two separate sessions to complete the study.

Study Benefits:

- **Learning Opportunity:** Gain insights into how advanced language models and AI can be applied in medical research.
- **Contribution:** Play a vital role in advancing medical informatics and improving AI tools that could benefit future clinical studies and patient care.
- **Human-AI Collaboration:** Participate in groundbreaking research exploring the best ways humans and AI can work together effectively.

Who Can Participate:

- **Eligibility:** Medical students at any level of study.
- **Requirements:** No prior knowledge of language models, informatics, or machine learning is necessary. Comprehensive instructions and support will be provided.

Participation Details:

- **Duration:** The study will take 120-180 minutes in total, divided into two phases from August to September 2024.
- **Commitment:** Participants will need to commit approximately one hour per phase.
- **Compensation:** Participants will receive **30 Euro** to complete the study.
- **Place:** TGO DFKI (Marie-Curie-Straße 1, 26129 Oldenburg)
- **How to Apply:** If you are interested in participating, please send an email to **siting.liang@dfki.de** (with [study participation] in the subject line).

We look forward to your participation!

Study Purpose:

The study aims to: Assess how well large language models can predict the logical relationships between clinical trial statements and actual trial data. Explore and understand the dynamics of human-AI collaboration in the field of medical research.

Specifically, we are interested in whether the models can determine if a statement is supported (entailment) or contradicted (contradiction) by the given data and how human feedback and editing can enhance these predictions.

Your Role: As a participant, you will work in one of two groups:

Group 1: Text Editors

Task: Review and edit the texts generated by the language model.

Process: For each statement and clinical trial data pair, the language model will provide an analysis, reasoning, and conclusion on whether the statement can be inferred from the data. You will:

Evaluate the generated texts for accuracy and coherence.

Edit any errors you identify to improve the quality of the analysis.

Regenerate the logical relation prediction after making your edits.

Group 2: Feedback Providers

Task: Provide detailed feedback on the generated texts.

Process: For each statement and clinical trial data pair, you will:

Evaluate the generated texts for accuracy and coherence.

Provide constructive feedback on any errors or inconsistencies.

Contact Information: For any questions or further information, please refer to https://sites.google.com/view/nli4ct/semeval-2024

Or contact **siting.liang@dfki.de**