

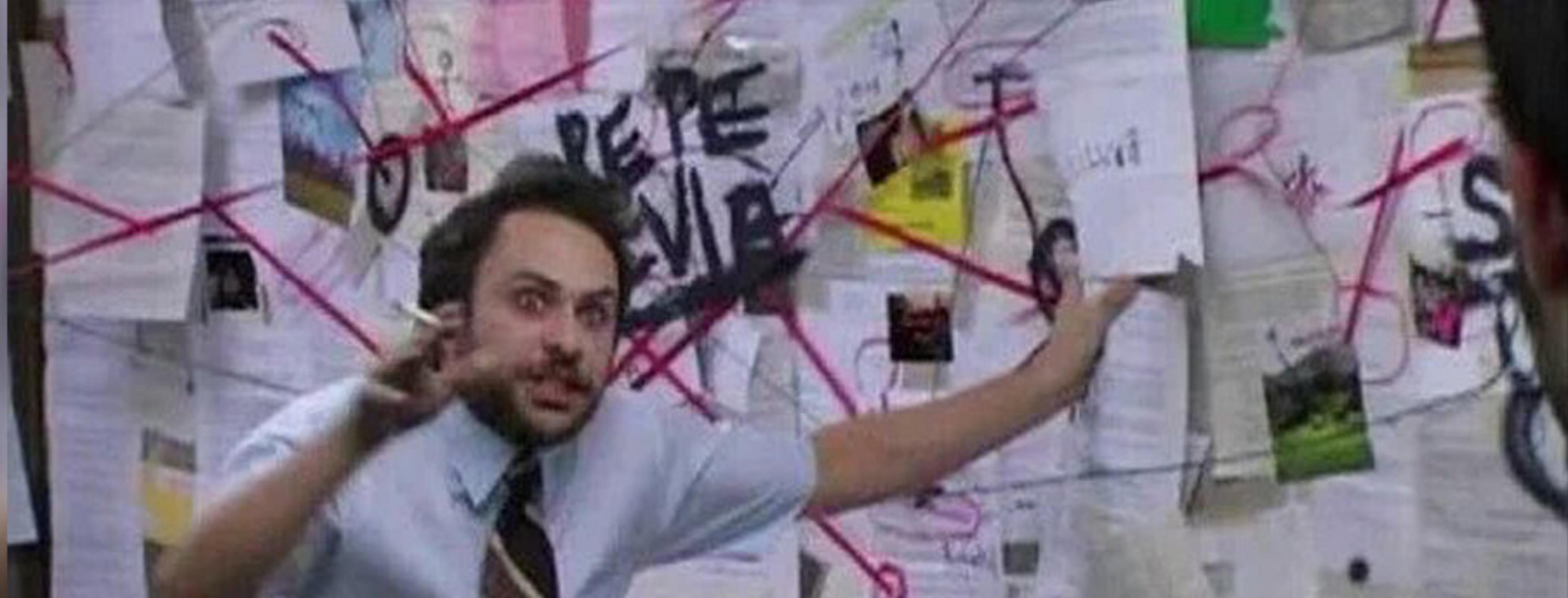
# We don't Know how to Assess LLM Contributions in VIS/HCI

*Position paper*

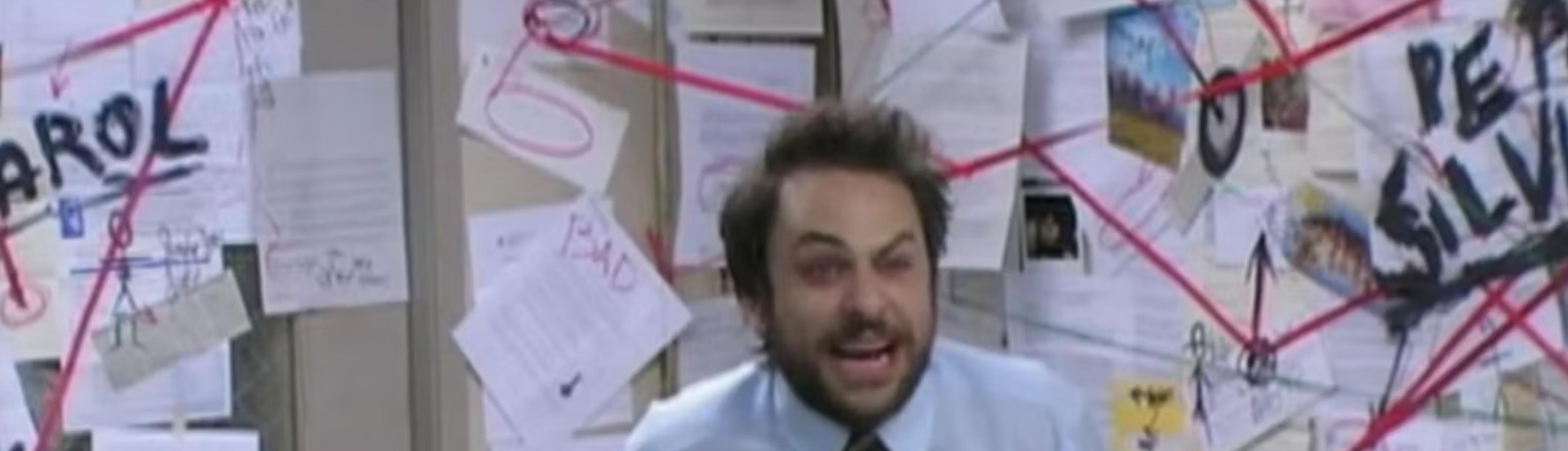
**Anamaria Crisan**

University of Waterloo

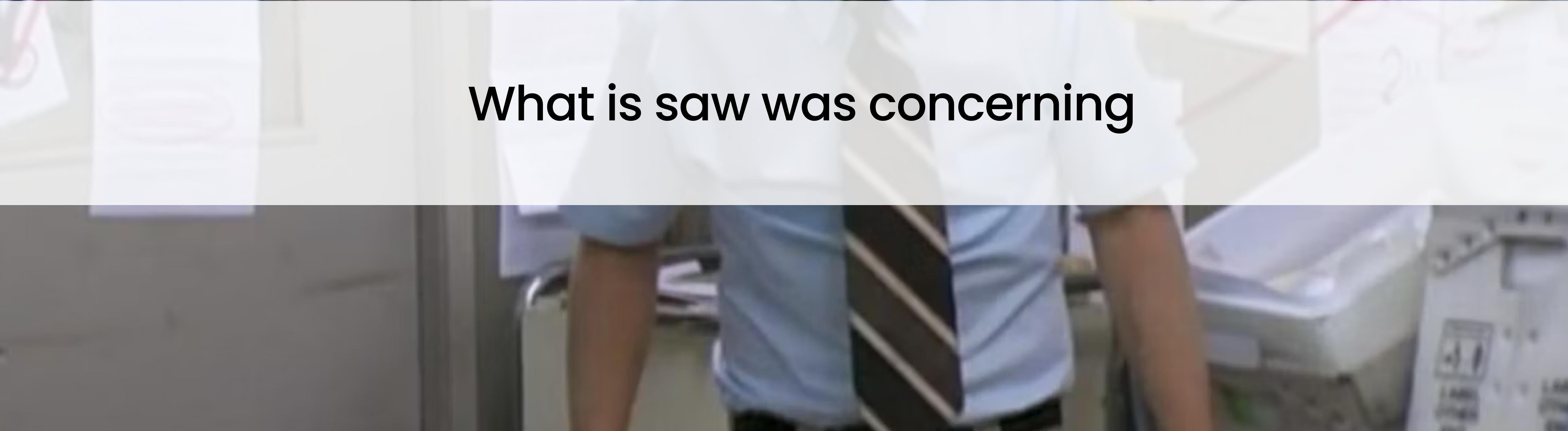
[ana.crisan@uwaterloo.ca](mailto:ana.crisan@uwaterloo.ca)

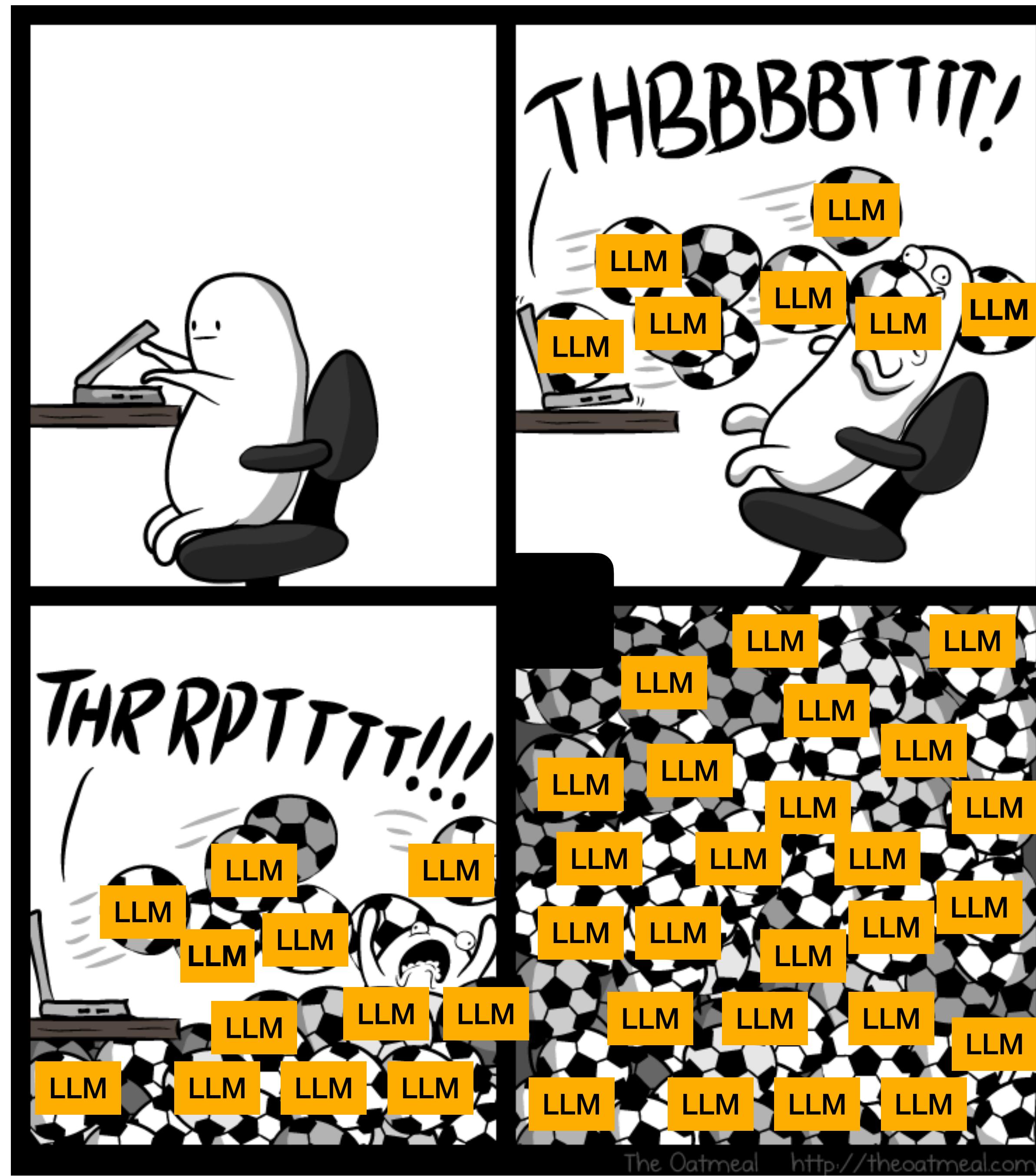


**I volunteered to serve on 4 program committees**  
**CHI'24/ FAccT'24/ CSCW '24/ VIS'24**



What is saw was concerning





**here were some common  
reviewer critiques**

# 1. LLMS have non-deterministic behaviour

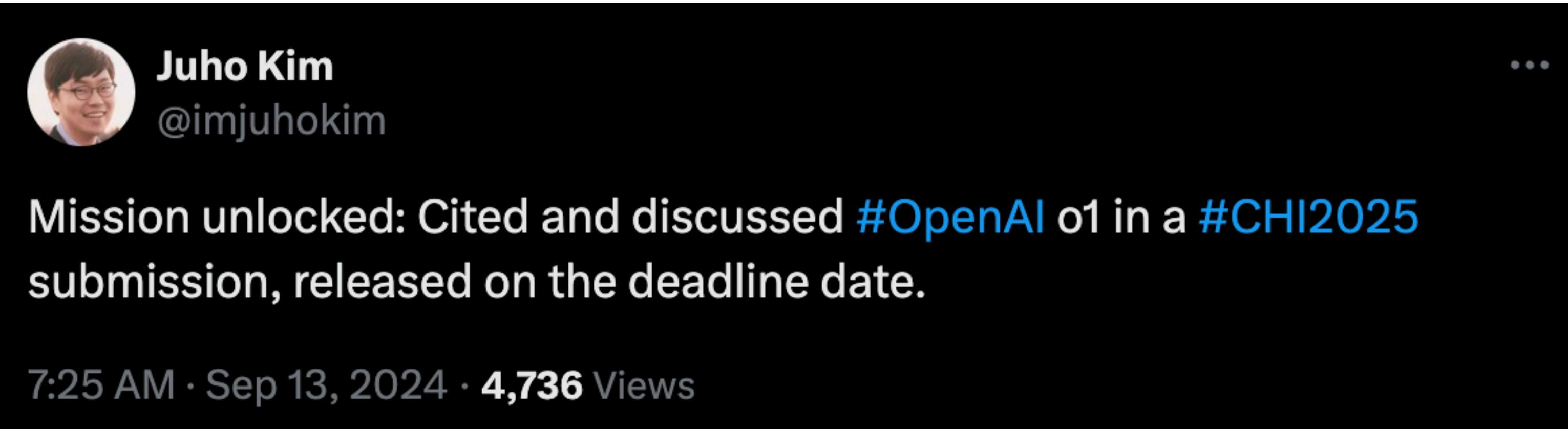
The **same** LLM provides a **different** response to exactly the **same** prompt

## **2. You didn't evaluate against enough LLMs**

**Different** LLMs provide a **different** response to exactly the **same** prompt

### **3. You didn't evaluate against the latest LLM**

**New LLMs** are constantly emerging with **substantive** performance gains



A screenshot of a Twitter post from Juho Kim (@imjuhokim). The post features a black background with white text. It includes a profile picture of Juho Kim, his name, and handle (@imjuhokim). The main text of the tweet reads: "Mission unlocked: Cited and discussed #OpenAI o1 in a #CHI2025 submission, released on the deadline date." At the bottom, it shows the timestamp "7:25 AM · Sep 13, 2024" and the view count "4,736 Views". There is also a three-dot ellipsis icon on the right side.

Juho Kim  
@imjuhokim

Mission unlocked: Cited and discussed #OpenAI o1 in a #CHI2025 submission, released on the deadline date.

7:25 AM · Sep 13, 2024 · 4,736 Views

1. LLMS have non-deterministic behaviour
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**You got lucky and didn't assess the full range of performance**

# You got lucky and didn't assess the full range of performance

- It's expensive to run multiple LLMs multiple times
  - There is unequal access to LLMs
  - Privileges specific labs/groups

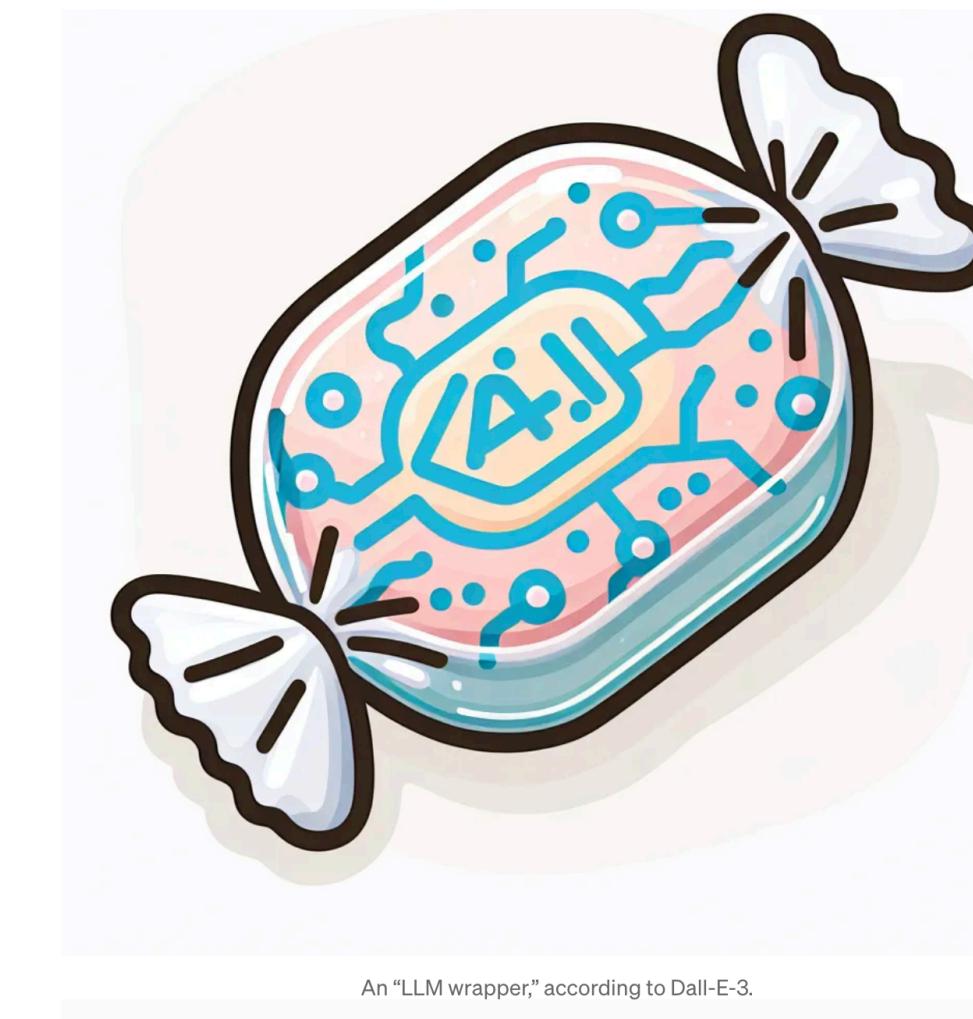
**4. You didn't discuss the latest LLM paper**  
.... and it obviates your results

## **5. You didn't cite ANY relevant research.**

No VIS/CHI/cscw/FAcct etc. papers were referenced

## 6.The LLM Wrapper Paper

Your novel research is just low-hanging fruit of LLM capabilities



An "LLM wrapper," according to Dall-E-3.

4. You didn't discuss the latest LLM paper

5. You didn't cite ANY relevant research.

6. The LLM Wrapper Paper

**Your novel research is just low-hanging fruit of LLM capabilities and timing**

# Your novel research is just low-hanging fruit of LLM capabilities and timing

- There is too much flag planting on arXiv
- LLM (“AI for X”) applications are worth exploring
- Research communities as a counterpoint to industry claims

**7.I don't like LLMs / I am so over them**

....yup, it happens



**what should we do about it?**

1. LLMS have non-deterministic behaviour
2. You didn't evaluate against enough LLMs
3. You didn't evaluate against the latest LLM

1. Make a reasonable attempt to understand the variability of LLM outputs
2. Consider requiring a budget and access statement
3. Make a reasonable attempt to justify the use of an LLM

# Example of a Budget Statement

## Shows people how expensive it is to reproduce the results

Published as a conference paper at COLM 2024

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### Elephants Never Forget: Memorization and Learning of Tabular Data in Large Language Models

**Sebastian Bordt**

University of Tübingen, Tübingen AI Center  
sebastian.bordt@uni-tuebingen.de

**Harsha Nori & Vanessa Rodrigues & Besmira Nushi & Rich Caruana**

Microsoft Research

{hnori, vanessa.rodrigues, besmira.nushi, rcaruana}@microsoft.com

We conducted initial experiments with different versions of GPT-3.5 and GPT-4 and found that the results are fairly robust towards the precise model version. This holds true for both the results of the memorization tests in Table 2 and for the few-shot learning results in Table 4. An exception is the model gpt-3.5-turbo-1106 that performs worse on the few-shot learning tasks than other versions of GPT-3.5. The models that we used to run the final experiments are detailed in Supplement B. The cost of replicating all the results in this paper with the Open AI API is approximately 1000 USD. By far, the most expensive experiments are the few-shot learning experiments with GPT-4 (they require approximately 1000 queries per data point, sometimes with relatively long context). In contrast, the memorization tests require relatively few queries.

**4. You didn't discuss the latest LLM paper**

**5. You didn't cite ANY relevant research.**

**6. The LLM Wrapper Paper**

**4. Limit citation requirements for new research**

**5. Make Better Use of the Desk Reject**

**6. Actively Engage in the Discussion Period**

# Example of Limiting Required Work To Cite

## How to review for ACL Rolling Review

*Anna Rogers, Isabelle Augenstein*

Version 0.1, 02.11.2021

### ACL Rolling Review

April 12, 2021 | BY priscilla

Event Notification Type: Call for Papers

Website: <https://aclrollingreview.org/cfp>

ACL Rolling Review

Papers (whether refereed or not) appearing less than 3 months before the submission deadline are considered contemporaneous to a submission, and authors are therefore not obliged to make detailed comparisons that require additional experimentation and/or in-depth analysis.

1. Make a reasonable attempt to understand the variability of LLM outputs
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