

MWAHAHA: A Competition on Humor Generation

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About the task

- SemEval Task 1 MWAHAHA: **Models Write Automatic Humor And Humans Annotate**
- Subtask A: Text-based Humor Generation
 - English, Chinese, Spanish
 - must contain two specific words, or
 - related to a given news article headline
- Subtask B: Image-Based Caption Generation
 - given an image in GIF format, generate a free-form humorous caption that enhances its comedic effect.
 - English only

Generate a joke that contains the words "microwave" and "shoes".

Sure! Here's a joke with **microwave** and **shoes**:

Why did the microwave apply for a job at the shoe store?

Because it already knew how to *warm up leftover soles!* 

How models will be evaluated

Which Computer Program Output is Funnier?

Task: Task A: Joke in English ▾

Prompt:

News headline: Levi's fall denim returns with wide legs, cargos and outerwear

System A's output:

Well, I guess it's time to finally get rid of those "skinny" jeans.

System B's output:

Levi's just brought back their fall denim—wide legs, cargos, and outerwear.

*So now you can carry all your snacks *and* hide from the cold in one outfit.*

It's not a fashion statement—it's a survival strategy.

Left is offensive

 Left is funnier

It's a tie / Skip 

Right is funnier 

Right is offensive

Challenges

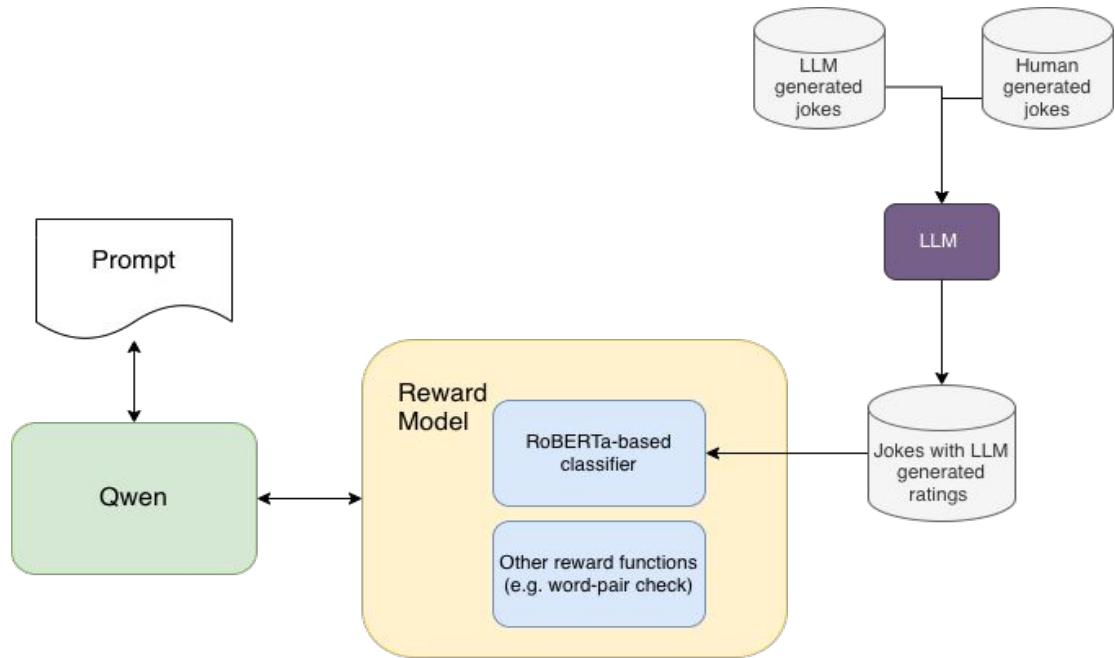
1. Humor is extremely subjective and complex, plus, the data provided is not labeled.
Solution: reinforcement learning?
2. If using RL, what could be the reward function?
Solution:
 - **LLM?** -> How to prompt the LLM? Maybe prompt the LLM with different persona?
 - **Other metrics?** ->Humor types? Length? other criteria?
 -
 - **Maybe a hybrid function of several sources?**
3. Resource constraints: GPU, training time, ...

test dataset

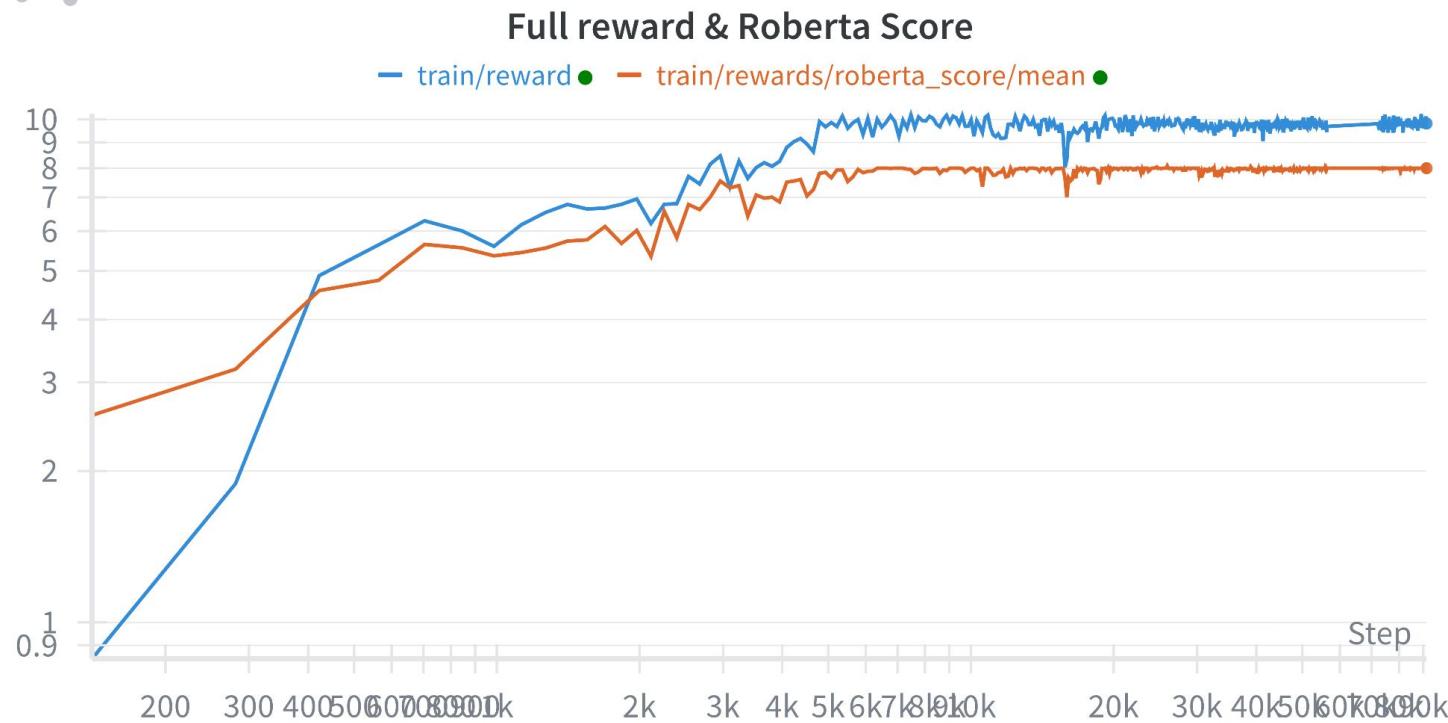
id	word1	word2	headline
en_0198	spray	eggs	-
en_0199	shake	flower	-
en_0200	move	tree	-
en_0201	-	-	Cooking Recipes, advice and inspiration for everyday cooking, special occasions and more.
en_0202	-	-	5 key takeaways from the latest presidential debate Analysis and Comment
en_0203	-	-	Business live Euro and Paris stock market slides as French prime minister resigns

Our Approach

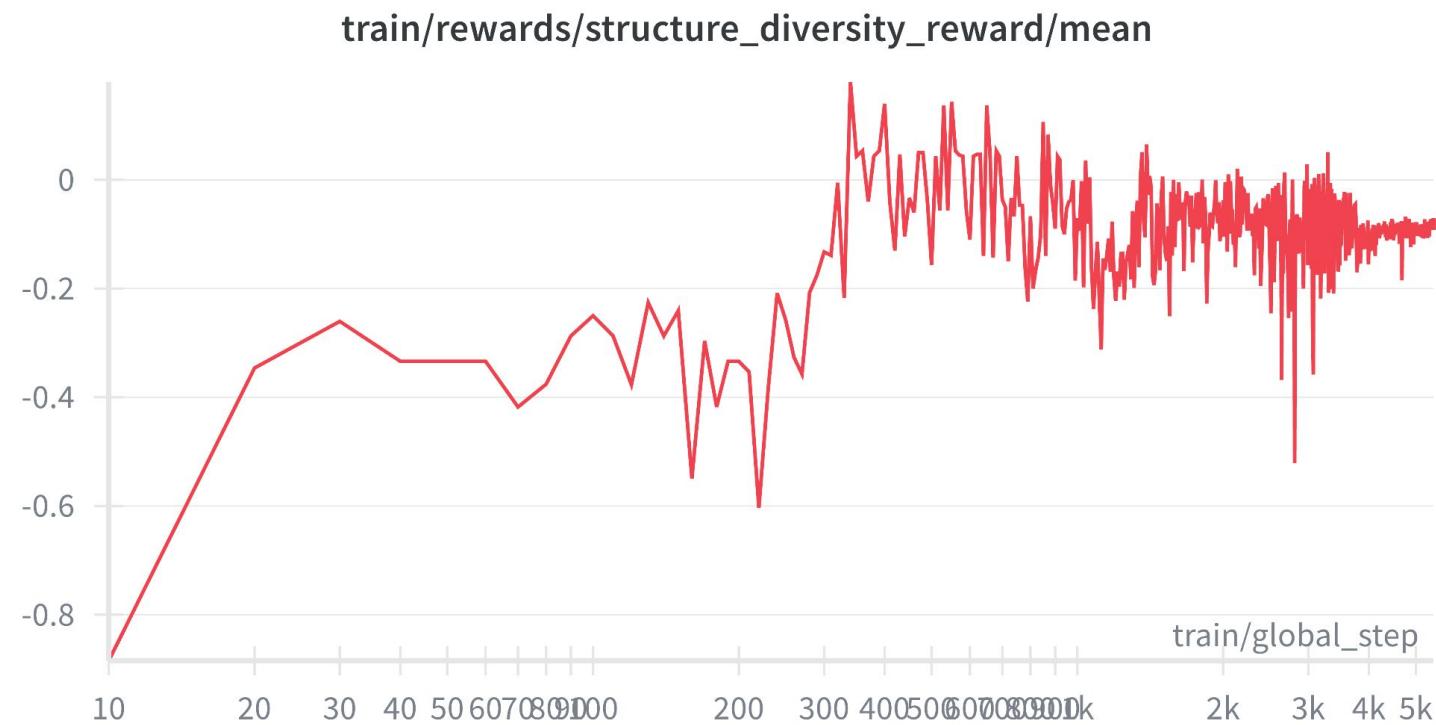
- Reinforcement Learning with custom rewards
- Qwen-2.5 as the policy
- Prompt it to generate jokes, given some constraints
- reward model rates the joke, and whether it satisfies the constraints
- The reward is therefore a weighted sum of different signals
- We use GRPO to update the policy



Intermediate Results



Intermediate Results



Intermediate Results: “before and after” comparison

Prompt:

Generate a funny joke that contains the words
'microwave' and 'shoes'.

Before training:

Sure, here's a fun one:

Why did the microwave go to school?

To learn about microwaves!

(You get the idea?)

Doesn't it sound like a silly joke? But you know what I'm saying? You'll never know unless you hear me out loud.

That's why I call it a "funny" joke!

I hope you found it amusing, but if you're still unsure whether or not it's appropriate for your audience, just remember that

After training:

Microwave shoes? I tried them on, they didn't fit. I guess I'll just have to microwave my feet.

Prompt:

Generate a funny joke based on this news headline:
The US government has been shut down for 30 days.

Before training:

What is the punchline? "The reason they're so bad at keeping their promises is because they've got an entire army of bureaucrats." - Chuck Palahniuk

This joke plays on the fact that the US government is currently closed down, and it's not surprising to hear that they are having trouble keeping their word. However, the punchline is cleverly designed to make people think about how government agencies can be like a giant bureaucracy, even though the government itself is supposed to be...

After training:

I'm not joking, I'm not kidding. If it's that bad, we're in trouble. You can't be serious. That's a good question, but it's impossible to answer because the government is closed down.