

LLMs for recipes

Maciej Chrabąszcz
Aleksander Kozłowski



Goal

How well do LLM work on recipes?



Models and data which we will use

We will focus on OpenAI GPT-3 models because of their ease of use.

We will use same data that we used for 1st project from Food.com.



Ingredients extraction

The following is a list of ingredients used in recipe and product names extracted from list as json:

1 medium **onion**, chopped coarse. 1 medium **red bell pepper**, chopped coarse. 5 medium **garlic cloves**, chopped coarse. 1 lb **extra large shrimp**, shelled and deveined. **salt**. **hot pepper sauce**. 1 tablespoon **vegetable oil**. 3/4 lb **andouille sausage**, halved lengthwise and then cut into 1/4 inch slices. 1 1/2 cups **long grain rice**. 4 **bay leaves**. 1 (14 ounce) can **diced tomatoes**, briefly drained. 2 (8 ounce) bottles **clam juice**. 1/4 cup **fresh parsley**, chopped

Response:

Ingredients:

- Onion
- Red bell pepper
- Garlic cloves
- Shrimp
- Salt
- Hot pepper sauce
- Vegetable oil
- Andouille sausage
- Long grain rice
- Bay leaves
- Diced tomatoes
- Clam juice
- Fresh parsley

Dietary tags classification

The following is a list of ingredients used in recipe and its dietary tags

onion, red bell pepper, garlic cloves, large shrimp, salt, hot pepper sauce, vegetable oil, andouille sausage, long grain rice, bay leaves, diced tomatoes, clam juice, fresh parsley

Dietary tags:

Response:

Gluten-Free, Dairy-Free, Low-Carb, Low-Sodium

Testing models

For our project we are interested in testing LLMs capabilities in recipes domain. Because of that will test different prompts followed by ingredients to see how well those models understand this domain.

Evaluating models

Ingredients Extraction

- Comparing to ground truth product names.

Dietary tags

- Evaluating model on ~100 responses by hand.
- Evaluating model on selected tags.



**Time for your
questions!**

