Hey everyone, my name Cyrus, and today I’m going to talk about a problem every one has that will hit close to home.

Every day millions of people have the same problem, should I cook or eat out?

And individuals, like myself, always have that glazed, head scratching look as this guy does here.

Well, what if we could make a decision based off of ingredients in our fridge?

So I built a food recommender that gives you the option to cook or eat out based on the ingredients in your fridge. I used Spoonacular’s API to get the recipe and ingredient data, and Yelp to get the restaurant data. Yelp’s data was stored in an S3 bucket, while I worked in AWS, and I created a flask app to show my findings of what you could cook and where you could eat out at based on the ingredients you input in the model. I used over 800 recipes from Spoonacular which ranged from sushi to tacos and burgers to poke. For Yelp, I used Toronto as the target city, as Yelp provides a truncated data set, and Toronto was the city with the 3rd highest amount of restaurants, with Las Vegas and Phoenix taking spots 1 and 2.

I used a recommender system, most specifically, content filtering as my approach as I mapped into a feature space. The feature space being ingredients to cuisines from the recipe API, then I mapped those ingredients and associated cuisines along to cuisines from the Yelp API and picked the most similar restaurants with the highest stars. Luckily, the items were similar to each other which made it easier to create a recommender system, as it is harder to create cross-recommendations as it requires comparing elements from different feature spaces.

Before I get to the Flask app, I think seeing a visual of the greatest number of categories will help get a better understanding of which cuisines are more prevalent in Toronto according to Yelp.

This next slide is a demo of the application. It shows if you type in the list of ingredients in your fridge, then you will be sent a next page, and let’s say we want to cook more today than usual, then we go to the recipe page and see what each recipe gives us. Or if we want to see the restaurant, then we can click one and see the details behind it.

Thank you, any questions?