

A photograph of a turtle eating a large, green lettuce leaf. The turtle is positioned in the center-left of the frame, facing right. Its head is lowered into the lettuce, and its front legs are visible. The turtle's shell is a mix of brown and tan colors with distinct scutes. The background is blurred, showing what appears to be a checkered floor. The image is overlaid with a semi-transparent green geometric design on the right side.

What To Cook?

- Recipe time estimation

Galvanize - Cohort 11

Qin Wen

Motivation

- ▶ Constraints:
 - ▶ Time:
 - ▶ Ingredients:
- ▶ Current situation:
 - ▶ Not many recipes are associated with cooking time
 - ▶ Not many applications allow searching by cooking time

Feature Extraction

INGREDIENTS

Salt

2 tablespoons olive oil

12 ounces ground beef

6 ounces Parmesan, or about 1 1/2 cups

1 bunch fresh parsley

1/4 cup bread crumbs

1 egg

Black pepper

PREPARATION

Step 1

Bring a stockpot of water to a boil and salt it. Put the olive oil in a large skillet over medium heat.

Step 2

Put the ground beef in a medium bowl. Grate the cheese, put 1 cup over the meat and reserve the rest, about 1/2 cup. Chop 1/2 cup of parsley and add all but 2 tablespoons to the meat mixture; save the rest of the parsley for another use. Add the bread crumbs, crack in the egg, and sprinkle with salt and pepper. Gently mix until everything is just combined.

Feature Extraction

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6 ounces **Parmesan**, or about 1 1/2 cups
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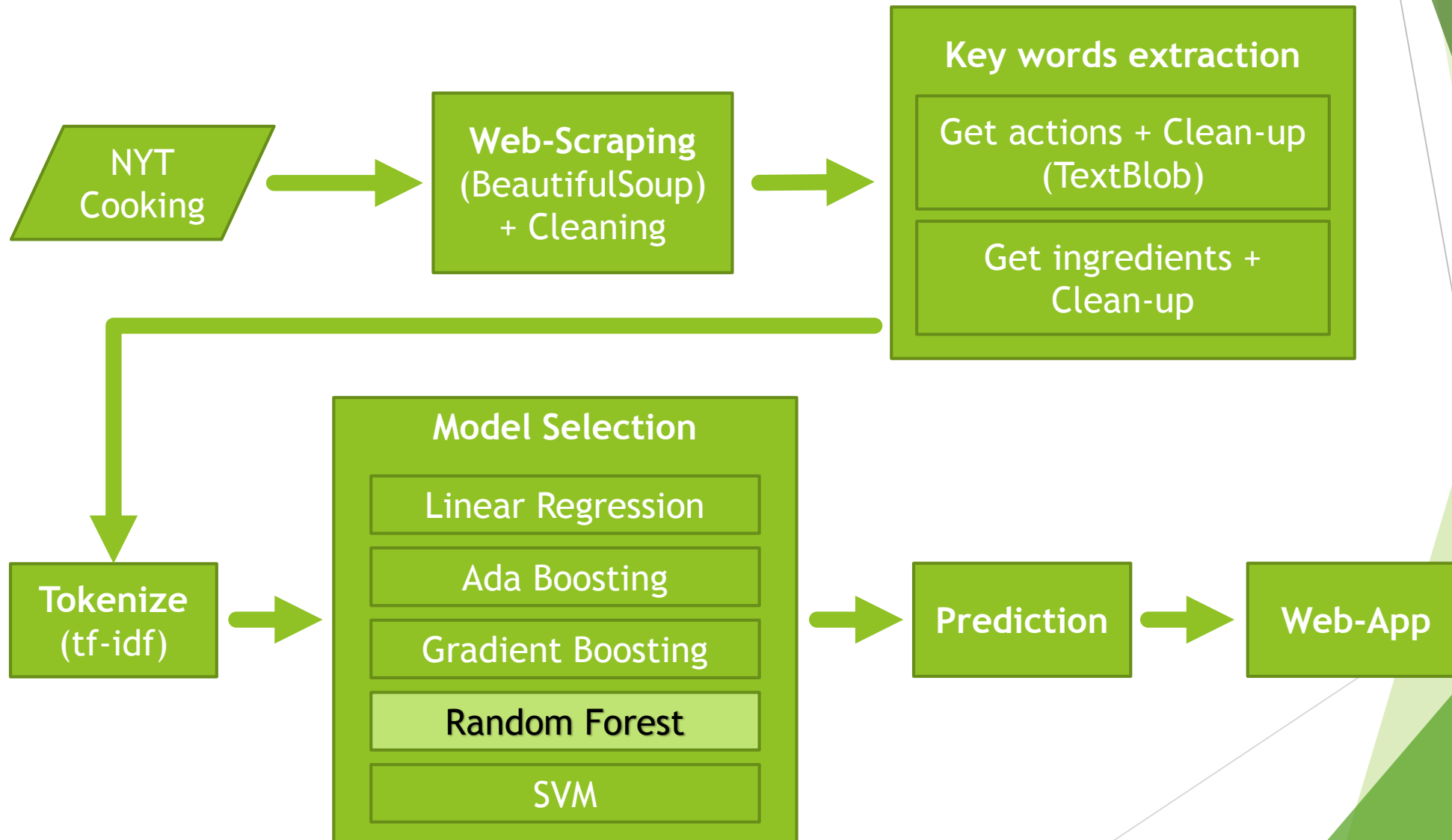
Step 2

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Features
(tf-idf)

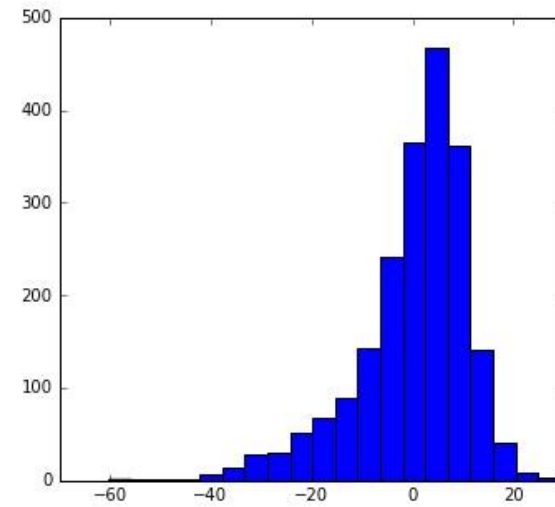
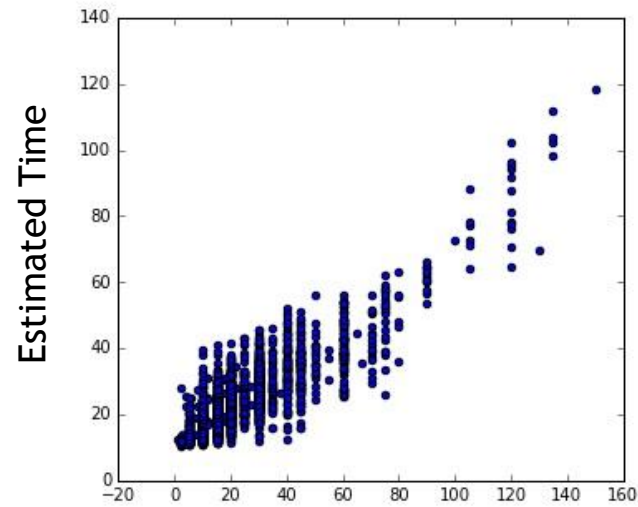


Pipeline

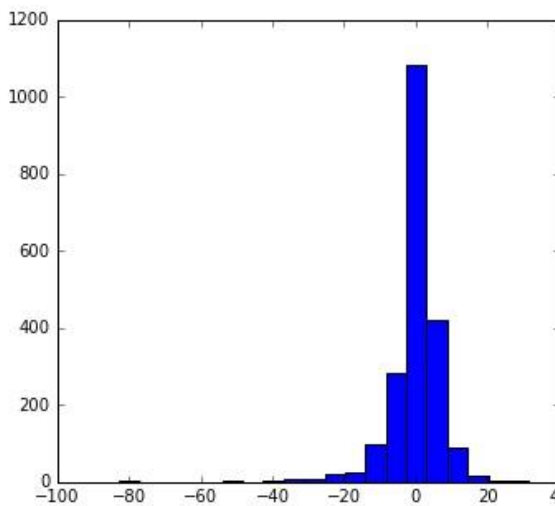
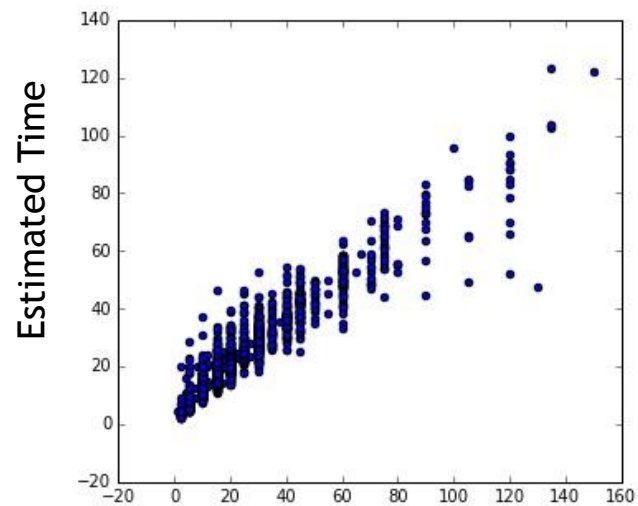


Model

Gradient
Boosting



Random
Forest



Given Time

Residual

Web-App

(<http://whattocook.family>)



A screenshot of a mobile web application interface showing a list of recipes. The status bar at the top shows 'Verizon', '10:56 AM', and '84%' battery. The list contains six items, each with a small image, two numerical ratings, and a recipe title.

	20.0	20.0	La Zucca Magicas Orange and Olive Salad
	20.0	20.0	Flavorfully Infused Oils
	20.0	20.0	Polenta With Goat Cheese and Rosemary
	20.0	20.0	Sauted Salmon With Brown Butter Cucumbers
	0.0	20.0	Tempura-Fried Green Beans With Mustard Dipping Sauce
No Image	0.0	20.0	Scrambled Eggs With Caviar

Future work

- ▶ More features
 - ▶ Quantity of the ingredients
 - ▶ Differentiate the verbs on whether they are affected by the quantity of the corresponding ingredients
- ▶ Focus on minimize negative residuals
- ▶ Better interface
 - ▶ More filters
 - ▶ Prettier interface

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

Thank you!

Any questions?