

A photograph of a turtle, likely a Galapagos tortoise, standing on a black and white checkered floor. The turtle is holding a large sandwich in its mouth. The sandwich consists of a slice of tomato, a slice of white cheese, and a large amount of green lettuce. The turtle's head is visible, and it is looking towards the camera. The background is blurred, showing some greenery and a person's leg. The image is framed by a 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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1 **egg**
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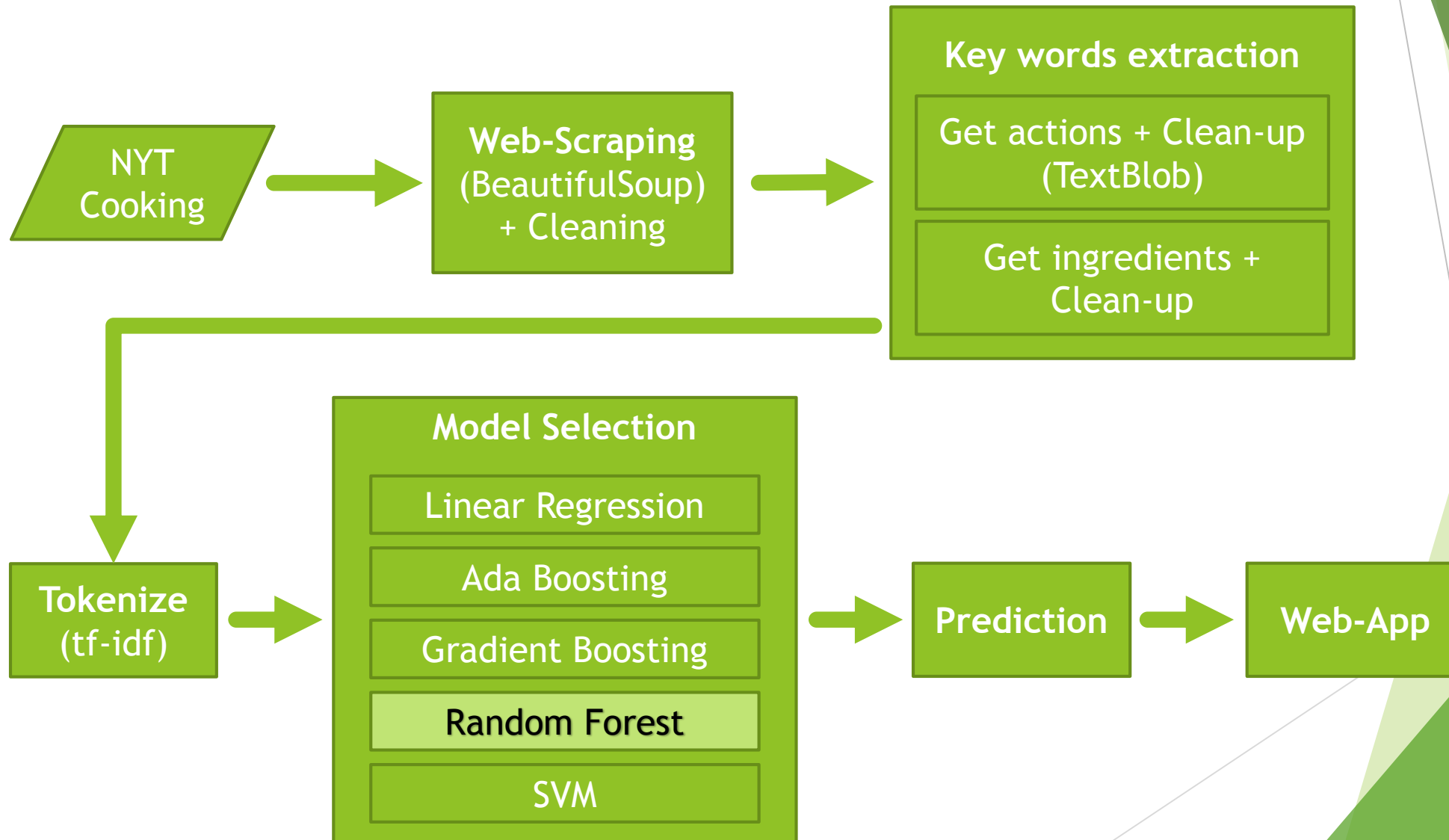
Step 2

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Features
(tf-idf)

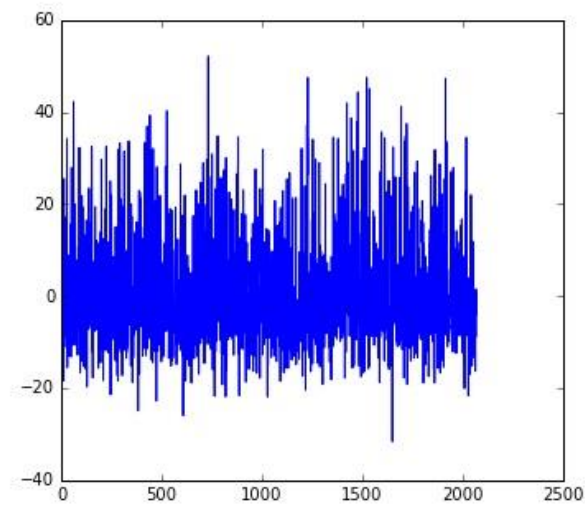
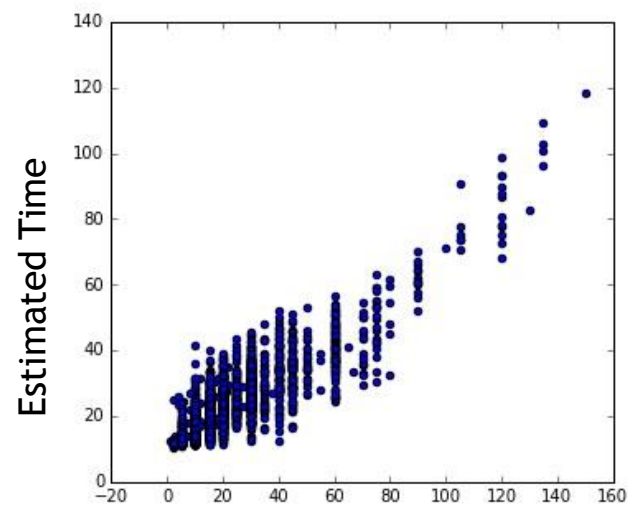


Pipeline



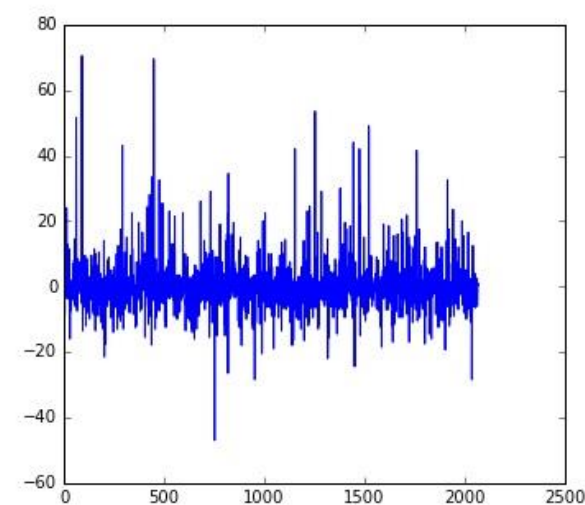
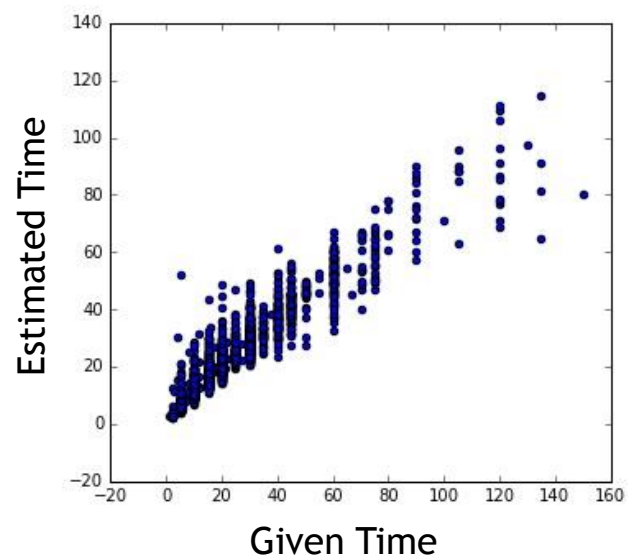
Model

Gradient
Boosting



Residual

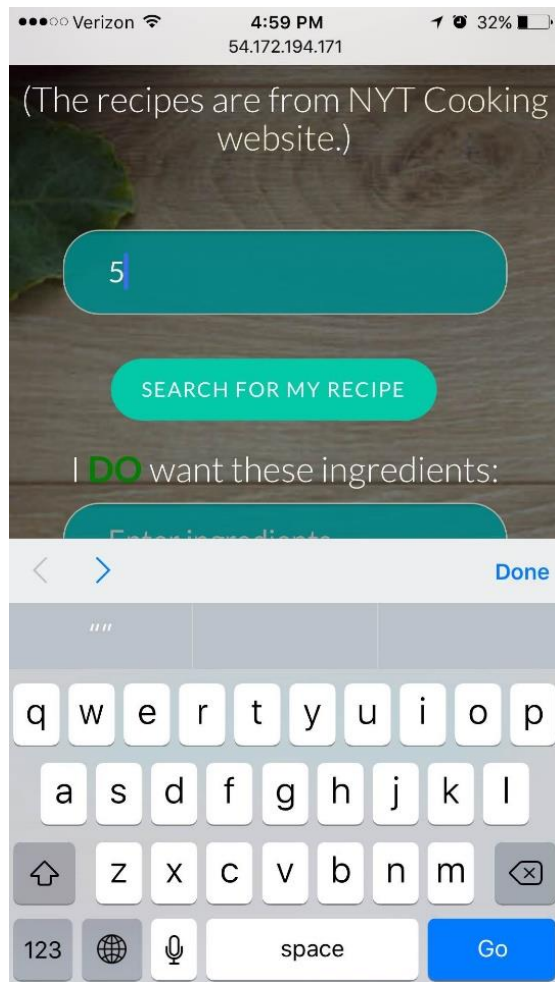
Random
Forest




Residual

Web-App

(<http://whattocook.family>)



A screenshot of the recipe results page on a mobile device. The status bar at the top shows 'Verizon', signal strength, time '5:00 PM', and battery level '32%'. The page has a dark background with a wood-grain texture. It displays a table of recipes with the following columns: 'Image', 'Given Time', 'Est. Time', and 'Name'. The table contains five rows of recipe data.

Image	Given Time	Est. Time	Name
No Image	5.0	5.0	Mayonnaise
	5.0	5.0	Sesame Ginger Vinaigrette
No Image	5.0	5.0	Salad of Kumquats, Dates and Shaved Parmesan
No Image	5.0	5.0	Turmeric Garlic Marinade
No Image	5.0	5.0	Minted Cantaloupe Salad With

Future work

- ▶ More features
- ▶ Better parameters
- ▶ 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?