

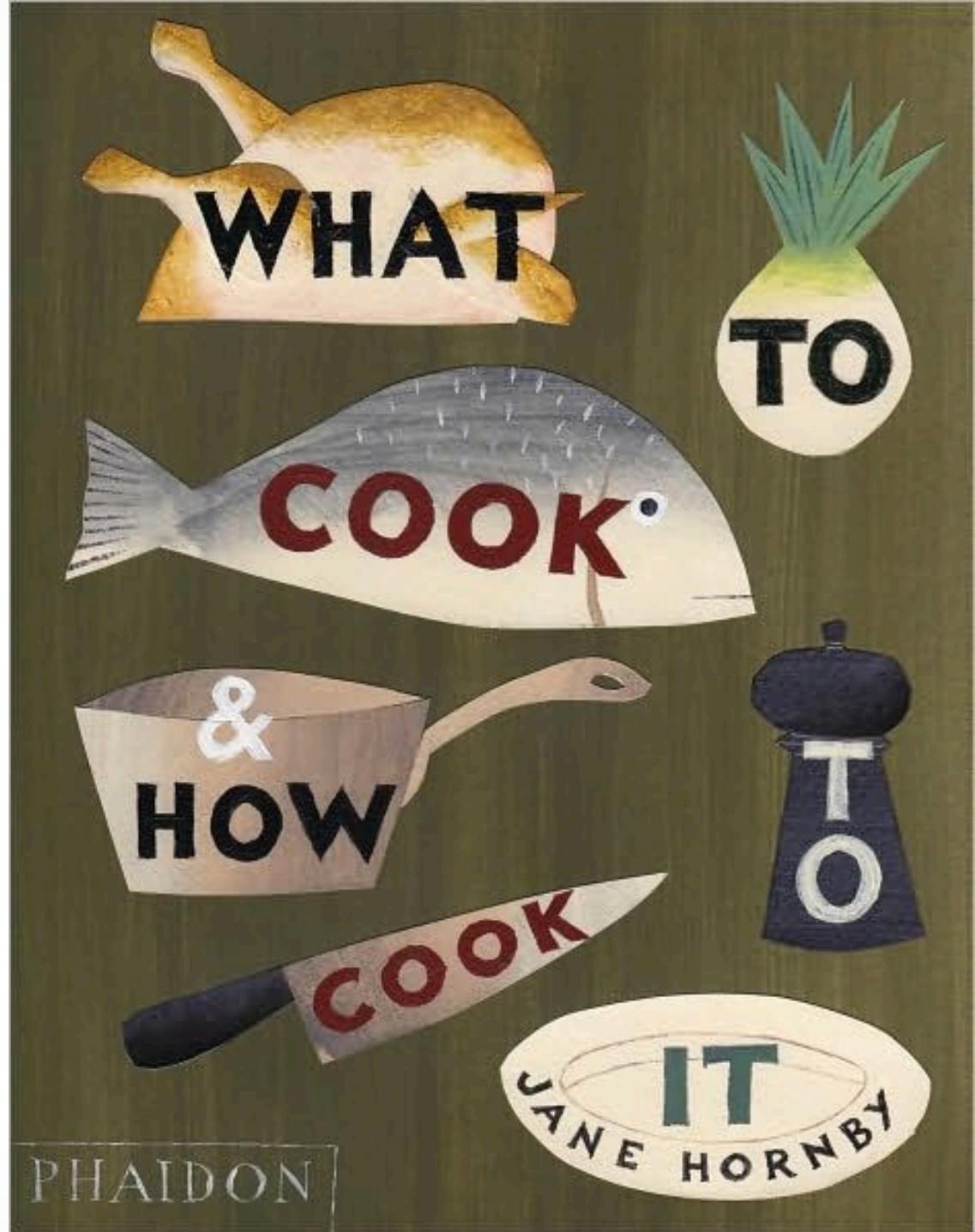
Recipe Suggestion

based on similar ingredient tokens

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- Pantry
- Preferences
- Allergies
- Craving
- Curiosity...
- Creativity...
- Recipes ???



An overview:



- ~10,080 recipes:
<http://www.bbcgoodfood.com/>
 - *Curating a list of 'ingredient' words... **
 - POS -TAGs | Tokenizing | Lemmatizing |
 - **word2vec** – context of words*
 1. INGREDIENTS
 2. INGREDIENTS + Recipe TITLEs

Items in INGREDIENTS:

- `w2vINGR.most_similar(positive =['rice'], topn=10)`
 - [('basmati', 0.954),
 - ('noodle', 0.884),
 - ('risotto', 0.874),
 - ('long-grain', 0.844),
 - ('paella', 0.83),
 - ('beansprouts', 0.819),
 - ('vermicelli', 0.813),
 - ('sushi', 0.811),
 - ('tamarind', 0.81),
 - ('dahl', 0.804)]
- `w2vINGR.most_similar(positive =[' flour'], topn=10)`
 - [('self-raising', 0.94),
 - ('yeast', 0.936),
 - ('polenta', 0.911),
 - ('suet', 0.878),
 - ('egg', 0.872),
 - ('semolina', 0.872),
 - ('soda', 0.865),
 - ('cross', 0.862),
 - ('bicarbonate-soda', 0.86),
 - ('cornmeal', 0.854)]

Items in INGREDIENTS:

- `w2vINGR.most_similar(positive=['chilli'], topn=10)`
 - `[('flake', 0.916),`
 - `('coriander', 0.901),`
 - `('harissa', 0.87),`
 - `('paprika', 0.863),`
 - `('chipotle', 0.859),`
 - `("bird's-eye", 0.858),`
 - `('mild-to-medium', 0.851),`
 - `('adobo', 0.849),`
 - `('lemongrass', 0.845),`
 - `('fingertip-length', 0.844)]`
- `w2vINGR.most_similar(positive=['strawberry'], topn=10)`
 - `[('raspberry', 0.988),`
 - `('jam', 0.978),`
 - `('punnet', 0.978),`
 - `('blueberry', 0.974),`
 - `('blackberry', 0.971),`
 - `('passion', 0.97),`
 - `('fruit', 0.961),`
 - `('mascarpone', 0.959),`
 - `('pectin', 0.959),`
 - `('curd', 0.957)]`
- `w2vINGR.n_similarity(['orange'],['lemon']) : 0.835`

Ingredients + Recipe Titles...

A hand-drawn style word cloud centered around the word "jam". The words are written in various colors (blue, red, yellow, green) and sizes, with some words having small descriptive words written near them. The words include: oranges, yolks, strips, double, best, caster, stemfat, milk, full, egg, cream, dessert, rhubarb, and sugar.

Thai chicken curry

'shallots onion stalk lemongrass vegetable oil chicken breast bite-size pieces fish sauce sugar brown kaffir lime leaves milk fresh coriander'

[['Pineapple, beef & ginger stir-fry', 0.825],
 ['Easy peasy risotto with chilli & mint crumbs', 0.82],
 ['Corn cups with prawns, mango & chillies', 0.808],
 ['Spicy prawn soup', 0.803],
 ['Sweet potato & lentil soup', 0.799]]

A collage of various food and drink words written in different colors and styles. The words include: soda, bicarbonate, sugar, flour, caster, vegetable oil, chicken, self-serve coffee, sugar brown kaffir lime, dark, raising, egg, cream, buttermilk, solids, chocolate, instant, muscovado, and jaggery.

A hand-drawn style illustration of a spiral menu featuring various food items. The items are arranged in a spiral pattern, starting from the center and moving outwards. The items include:

- ground
- olive oil
- shoulder
- onion
- stock
- vegetable
- lamb
- chicken
- stick
- oregano
- rice
- liver
- onion
- orzo
- olive oil

A hand-drawn style illustration featuring the words "squash", "cumin", "olive", "ground", "oil", "coriander", "seeds", "sesame", "butternut", and "hazelnuts". The words are written in a sketchy, textured font. "squash" is in green, "cumin" is in blue, "olive" is in yellow, "ground" is in green, "oil" is in light green, "coriander" is in teal, "seeds" is in red, "sesame" is in orange, "butternut" is in blue, and "hazelnuts" is in orange.

Ingredients + Recipe Titles...

Dukkah-crusted squash wedges

'hazelnuts coriander seeds sesame seeds ground cumin
butternut squash olive oil'

Out[1812]:
[['Samosa pie', 0.882],
 ['Butter bean & tomato chutney', 0.882],
 ['Fully loaded Cajun chicken', 0.882],
 ['Lamb kofta stew with naans', 0.882],
 ['Grilled flaky naans', 0.882]]

Ingredients + Recipe Titles...

Slow-roasted rhubarb with ginger ice cream

'best-quality rhubarb dessert wine caster sugar oranges zest strips stem ginger syrup full-fat milk egg yolks caster sugar double cream shortbread'

[['Sloe gin', 0.917],
['Baked apples with prunes, cinnamon & ginger', 0.901],
['Floating islands with caramel sauce', 0.9],
["Chilled strawberry & Pimm's zabaglione", 0.9],
['Roast sirloin of beef & Port gravy', 0.899]]

Ingredients + Recipe Titles...

Ultimate chocolate cake

dark chocolate cocoa solids butter instant coffee granules self-raising flour flour
soda bicarbonate-soda muscovado sugar golden caster sugar cocoa egg
buttermilk chocolate curls dark chocolate double cream golden caster sugar'

- [["Millionaire's chocolate tart", 0.936],
- [('Mini Mont Blancs', 0.933),
- [('Fudgy chocolate cake', 0.924),
- [('Freeze-ahead chocolate & chestnut parfait', 0.918),
- [('Double chocolate profiteroles with salted caramel cream', 0.912)]]

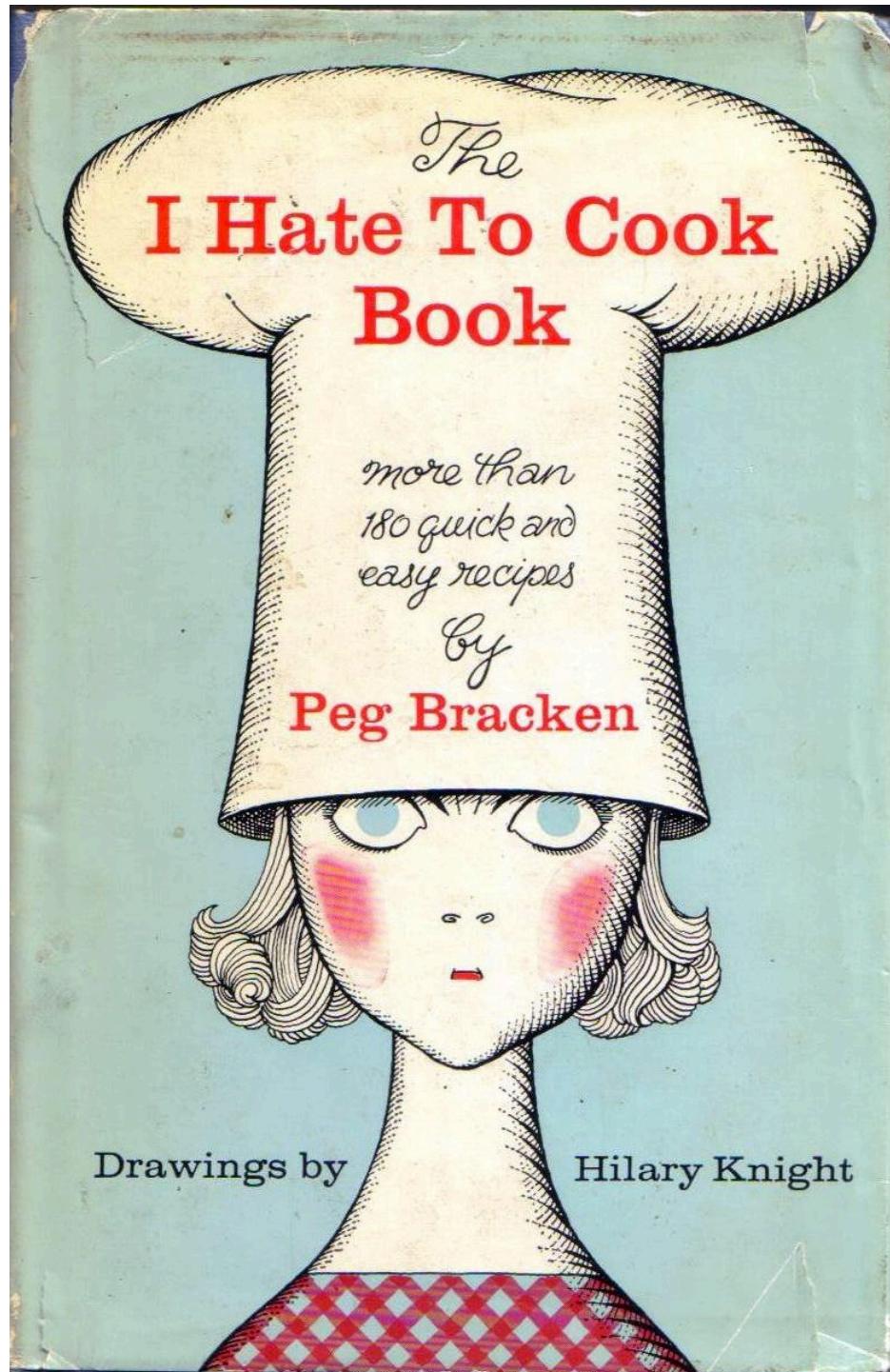
WebApp -

recipe suggestion based on ingredient similarity



Summary:

- **Input bag-of-words** determines the ‘quality’ | context of ‘associations’ – changes with ‘non-ingredient’ word list weeding update...
- “**Ingredient**” tokens vs. non-ingredient tokens...
MODELLING
- Some *sensible* recipe suggestions ~ similarity of ingredients
- Some *creative* recipe suggestions ~ ingredient descriptors



.... Just in case

Recipe Suggestor based on similar ingredient tokens

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