Optimizing Cookie Recipes for Ratings Using Machine Learning and Deep Vector-to-Sequence Recurrent Neural Models

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Abstract

This project employed machine learning concepts and processes in an attempt to teach a computer an algorithm that outputs a cookie recipe that is comparable to human-made recipes. The process involved feeding the algorithms a data set of cookie recipes that included details such as ingredients, ratings, and calories. A second algorithm was used to construct instructions for a recipe once ingredients were selected based off of instructions from the dataset of recipes. The recipes were gathered by scraping the website allrecipes.com for chocolate chip cookie recipes that were compiled in order to teach the computer to recognize tasty cookies by looking at things such as reviews, ingredients, and calories.