

Sentiment Analysis on Amazon Fine Food Reviews

This project uncovers what customers really think about their Amazon food purchases by analysing over 5,68,454 reviews using NLP techniques. With absurd precision, it dives into the chaotic world of snacks, spices, and suspiciously passionate tea drinkers, transforming raw text into juicy insights.

The problem? Too many opinions. The stakeholders (Product Managers, Customer Support, even that one intern who reads reviews for fun) need clarity. They crave insights that separate serious issues (like broken peanut butter jars) from dramatic overreactions ("The tea changed my life!").

We used Python, Pandas, and the VADER sentiment analyser to classify reviews into Positive, Negative, and Neutral. Word clouds were summoned. Sentiment scores were worshipped. Time trends were stalked from 2000 to 2012 like a detective in a rom-com.

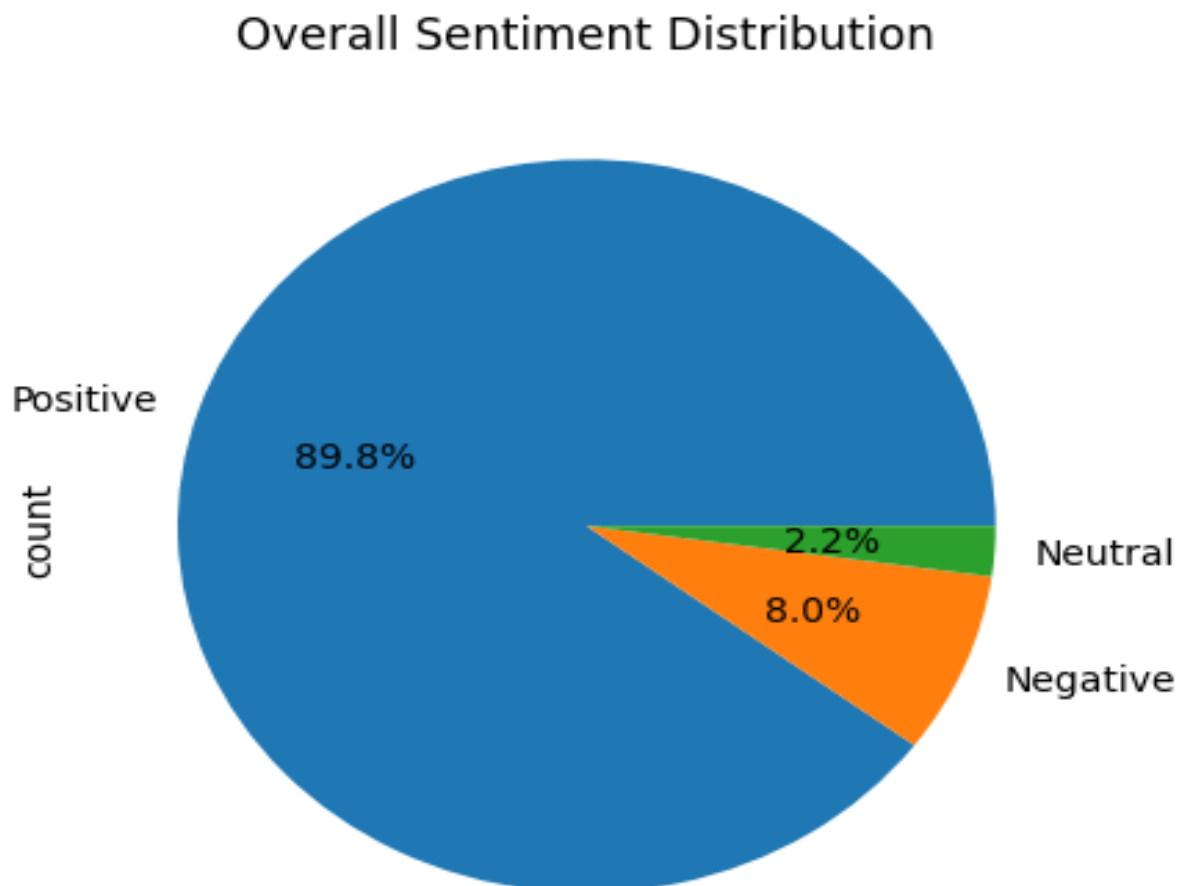
- 'Taste' appears way too often in negative reviews - food must be edible, who knew? • 'Recommend' dominates positive reviews - suggesting customers moonlight as brand ambassadors.
- Sentiment drops slightly over time - possibly because reviewers ran out of adjectives. • Customers love dogs more than humans - 'dog food' shows up in both good and bad reviews.
- Packaging complaints suggest some items were shipped by trebuchet.
- Improve taste. Seriously.
- Add warning labels like: "May cause extreme joy or existential despair."
- Send marketing swag to highly positive reviewers - they're already unpaid influencers.
- Fix packaging: Bubble wrap isn't optional, it's sacred.

Visual Insights

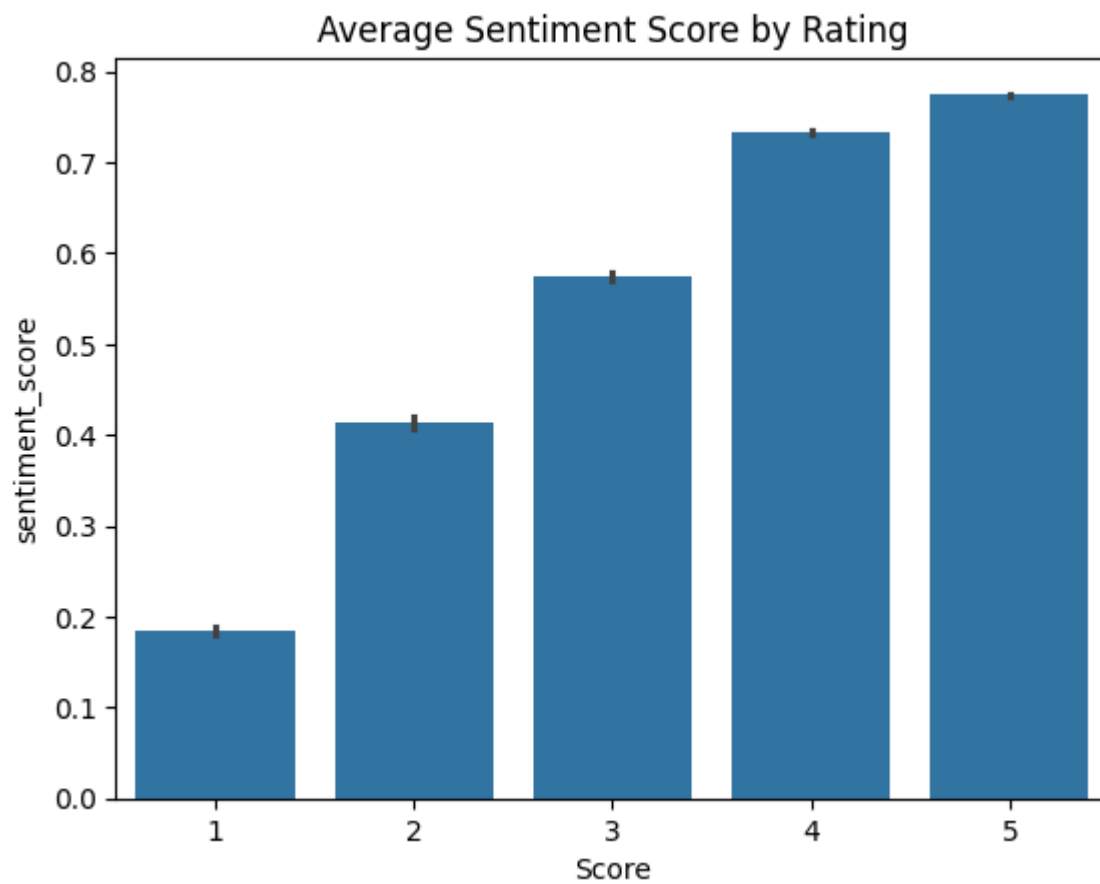
Word clouds showing top positive and negative terms



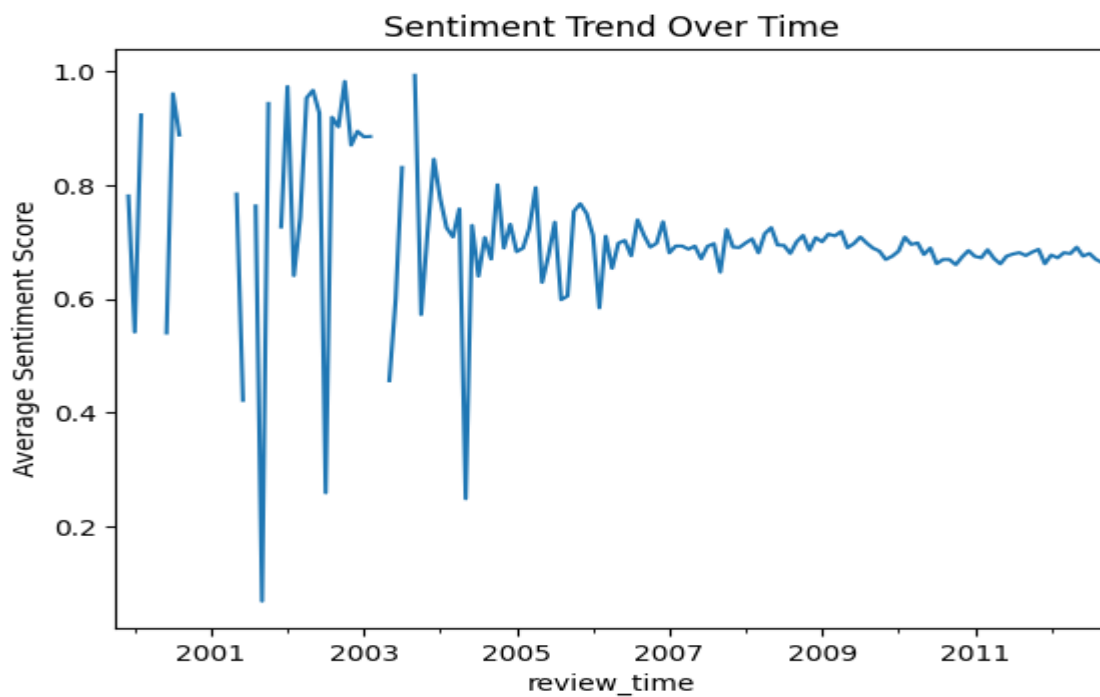
Pie chart of overall sentiment distribution



Bar chart comparing sentiment by rating



Line graph of sentiment trend over time



This project is more than analysis. It's a poetic exploration of edible emotions, wrapped in Pythonic logic. Perfect for stakeholders who like their insights like their snacks: crisp, sharp, and slightly absurd.