

Data 620

Wine Reviews



Group 3 • Fireflies



What we are going to cover?

- Sentiment Analysis for Wine Reviews
- Wine Vocab 101
- Pick-your-wine map - Wine Recommendation in Diner
- Top Wine Social Media Influencers
- Find the Best Value Wines

Overview

Source

- Wine Reviews from Wine Enthusiast as of Nov 22, 2017
- Available on Kaggle (keywords: "Wine Reviews")

Data overview

- 37,419 reviews
- 446 wine varieties
- 16 Tasters

1. Sentiment for Reviews

Analyze tasters' reviews by NLTK's VADER Sentimental Analyzer

VADER gives the Positive, Negative and Neutral scores to represent the proportion of text that falls in these categories. All these should add up to

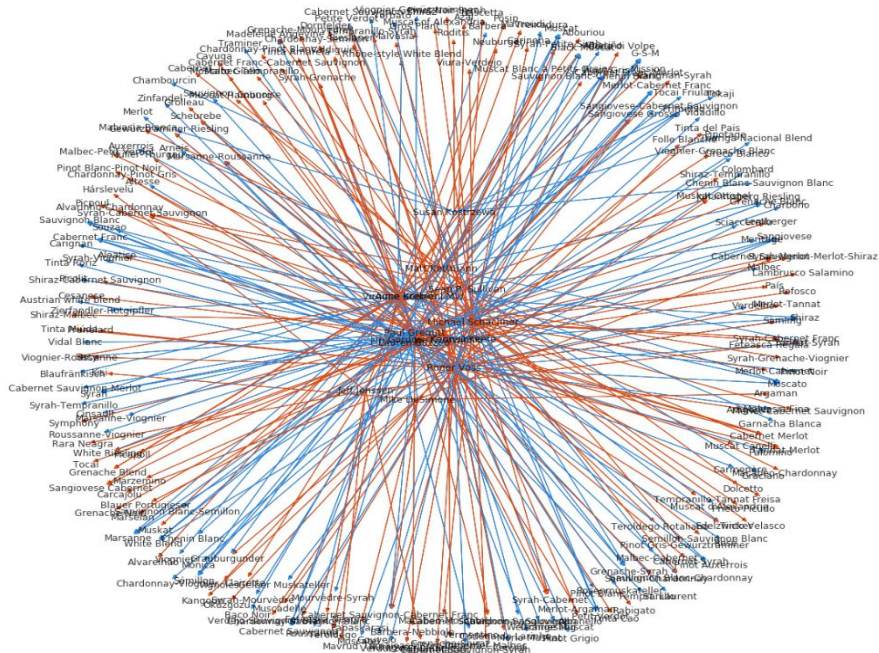
ONE

Question:

Whose review are top 3
for each wine by
sentiment score?

		taster_name	VADER_pos
variety			
Altesse	19798	Roger Voss	0.333
Alvarelhão	13898	Virginie Boone	0.045
Alvarinho	1052	Roger Voss	0.343
	4234	Roger Voss	0.330
...
Weissburgunder	29933	Anne Krebiehl MW	0.370
	18984	Anne Krebiehl MW	0.292
	15745	Anne Krebiehl MW	0.277
Welschriesling	4949	Roger Voss	0.336
	27362	Anne Krebiehl MW	0.326
	15231	Roger Voss	0.286
White Blend	28248	Paul Gregutt	0.463
	21834	Roger Voss	0.408
	12213	Jim Gordon	0.385

1. Sentiment for Tasters' Reviews (cont.)

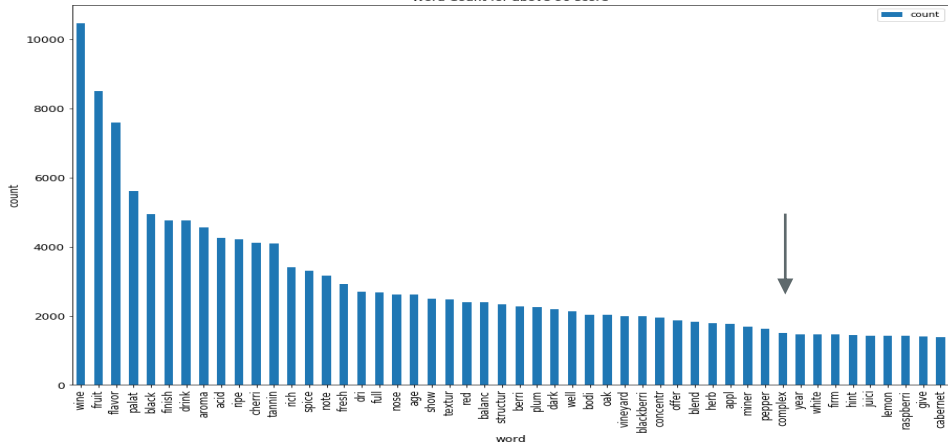


- Taster to Wine
- Blue (above Avg), Red (above Avg)

2. Sentiment Analyze: Wine Word List

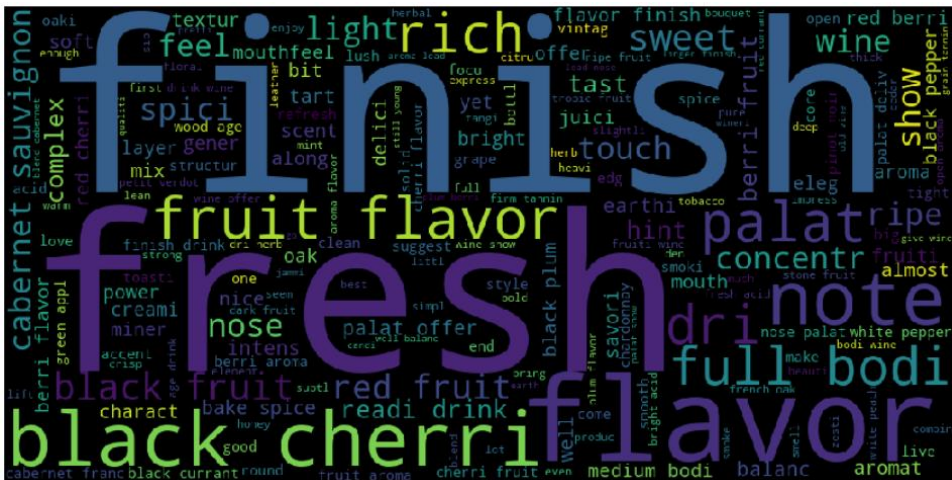
- Build up sentimental keyword list for wine reviews based on score (below or above 90 points) from tasters (e.g. "Complex" is negative in English but Positive in Wine Vocab)
- Example #1: Analyze social media message: is it for wine?
- Example #2: Advertisement keywords for wines

Word Count for above 90 score



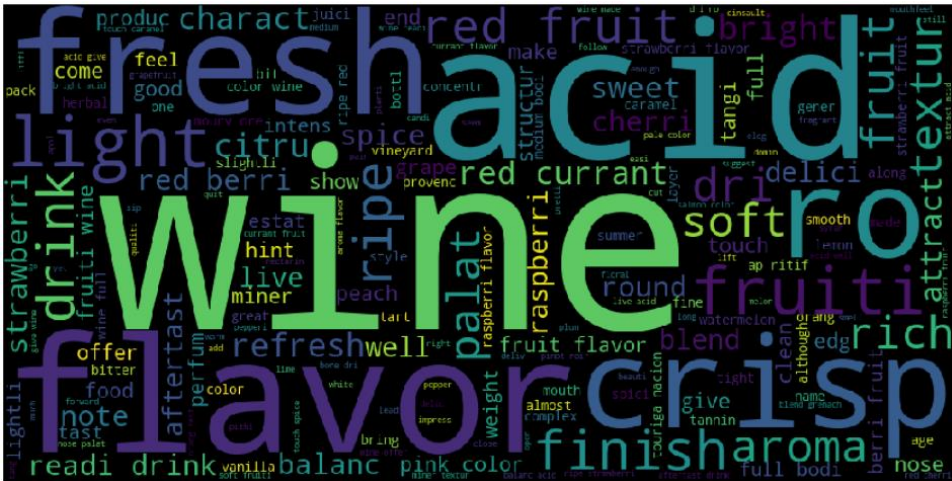
3. Wine Vocab 101

The Most Commonly used words for wine

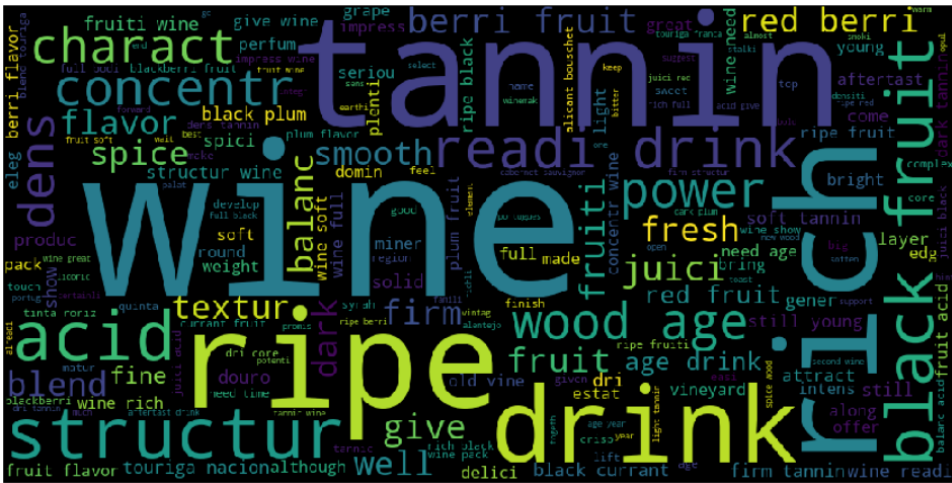


3. Wine Vocab 101 (Cont.)

Rosé-word cloud

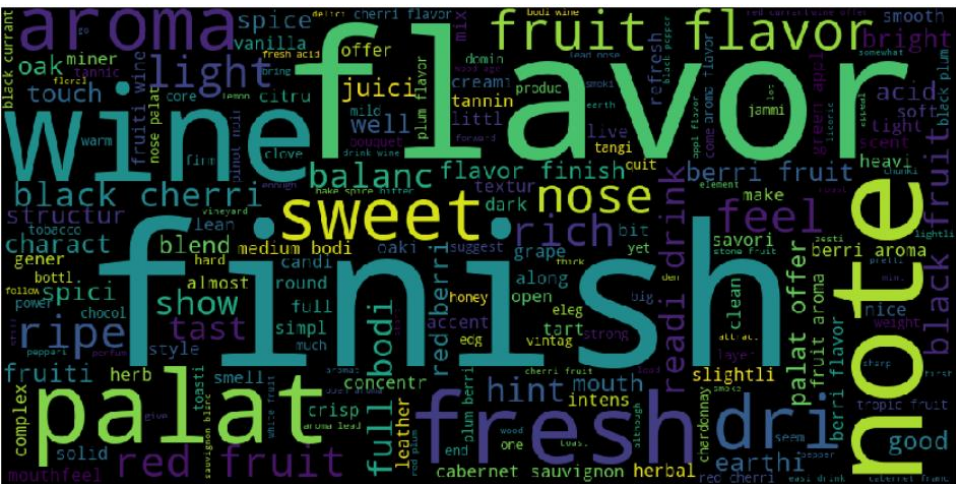


Portuguese Red -word cloud

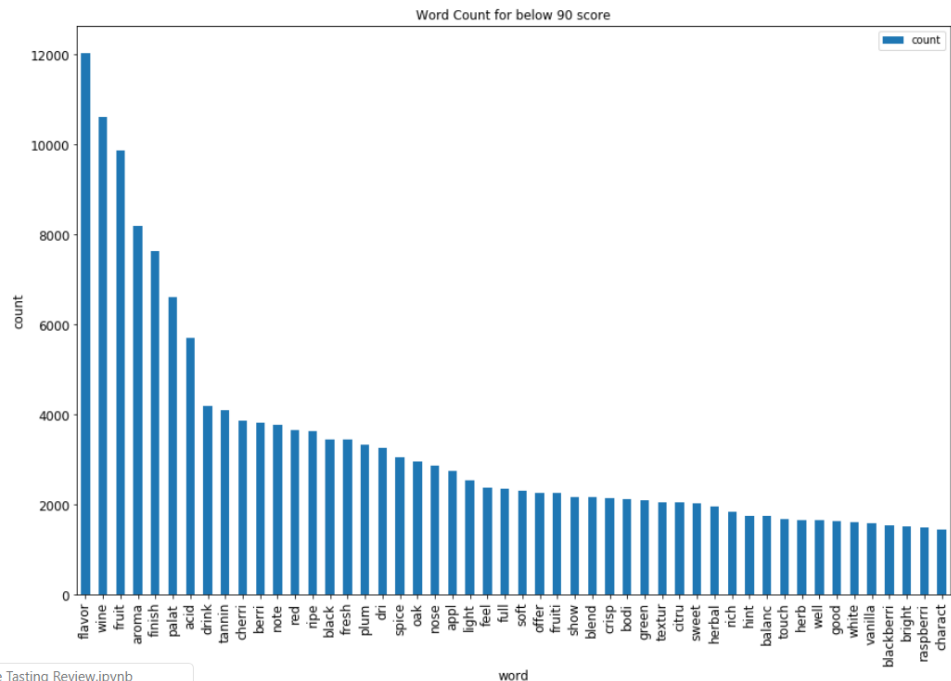


<90 Word cloud

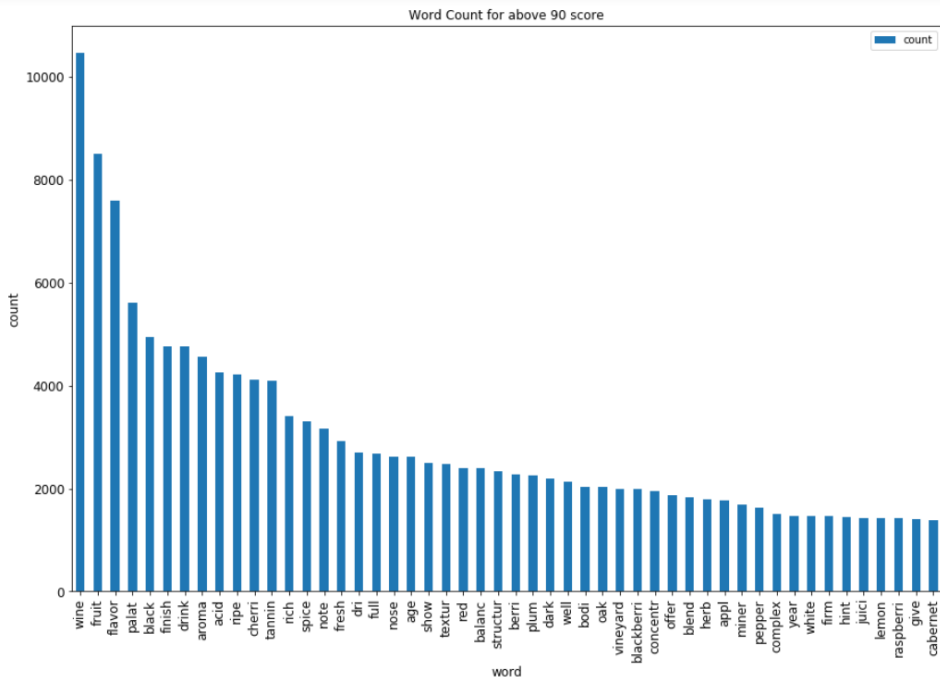
Finish, flavor, Note, Sweet, Palat, Fresh



Top 50 words for <90 score wine



Top 50 words for >90 score wine



4. *Pick-your-wine* map

Wine Recommendation in Diner

Regular Wine menu
(right) with wine
name and description

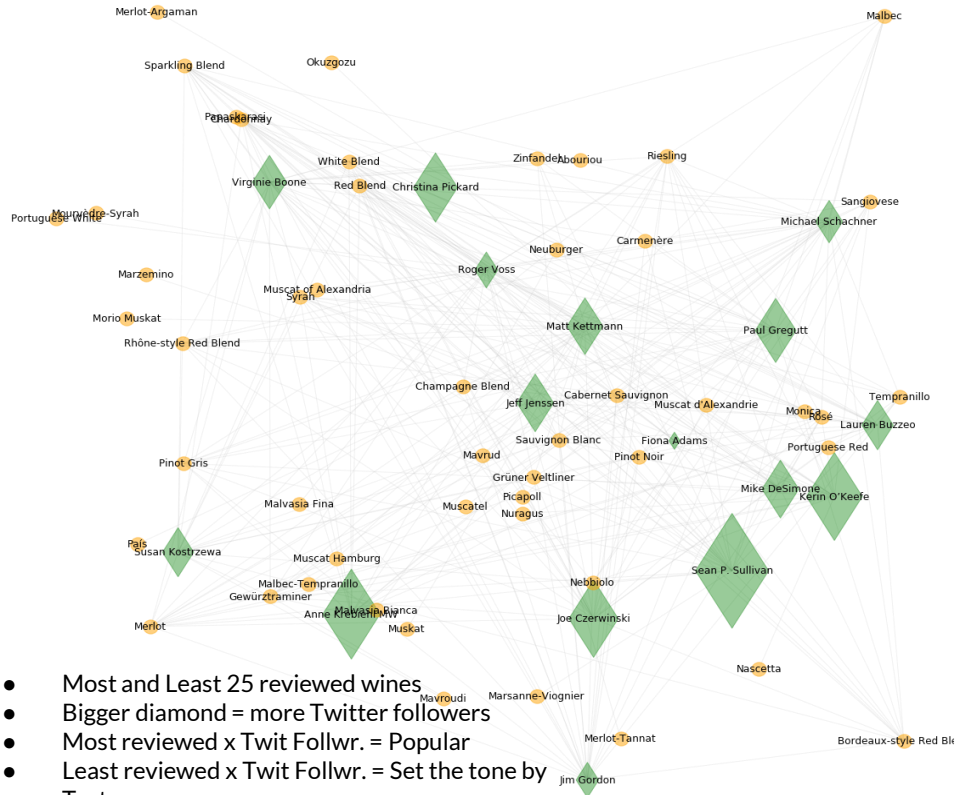
Pick wine by
description



LA BASQUE
WINEHOUSE

BLANC DE BLANC familiar aromas of grape jelly, cherry turnover, and cinnamon with a lively effervescence	€10
LUX PINOT NOIR ripe red fruit and earthy aromas, delicate yet complex palate with a long, spicy finish	€10
SPARKLING ROSÉ creamy with strawberry and crisp green apple flavors	€10
LUX CHARDONNAY zesty with lemon, green apple, and melon aromas and flavors	€10
PETITE SIRAH aromas of mixed berries, herbs, and spice with balanced acidity and tannins	€10
WHITE ZINFANDEL zesty with lemon, green apple, and melon aromas and flavors	€10

5. Top Wine Social Media Influencers



6. Best Value Wine

Best Value = Sentiments Per Price * 100



Variety	Value	Price
Macabeo-Moscatel	8.870000	\$8.0
White Riesling	7.923516	\$16.5
Grenache Noir	7.781111	\$9.0
Treixadura	6.442667	\$15.0
Symphony	6.350000	\$12.0

Any Questions?

- Sentiment Analysis for Wine reviews
- Wine Vocab 101
- Pick-your-wine map - Wine Recommendation in Diner
- Top Wine Test influencers
- Find the Best Value Wine

End