

# Predicting the “helpfulness” of product reviews

Jenny R. Kreiger, PhD  
January 21, 2020

# What makes a review helpful?

Review by **catluvverrr76**



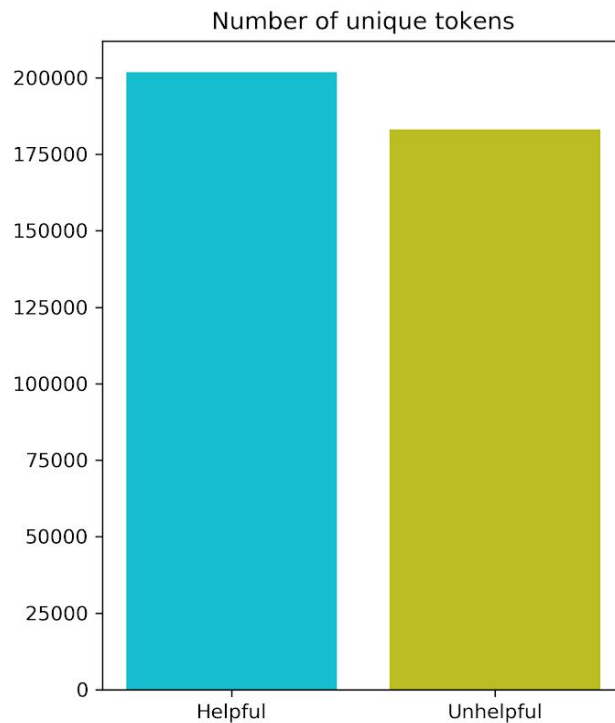
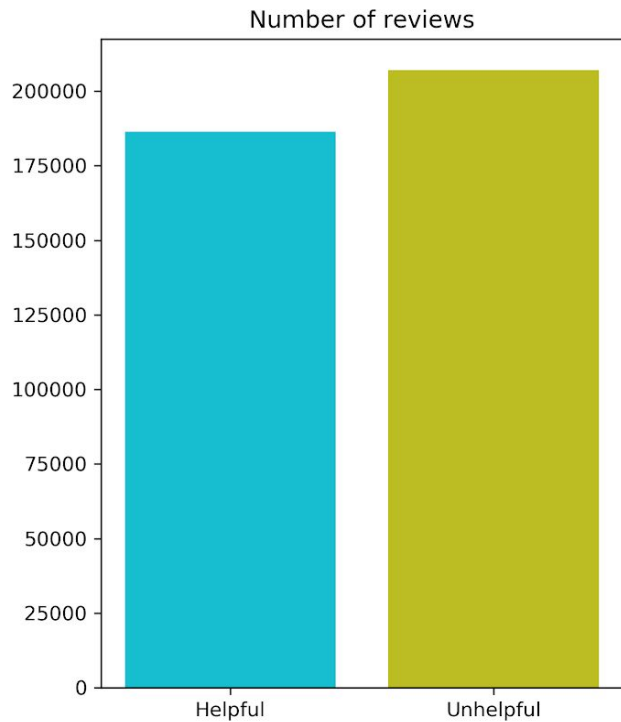
I love this product and so does my sweet Princess Foofie!!!! I let her have a little, as a treat. We agree that it is meow-velous. I just love her so much! <3<3

Was this helpful?

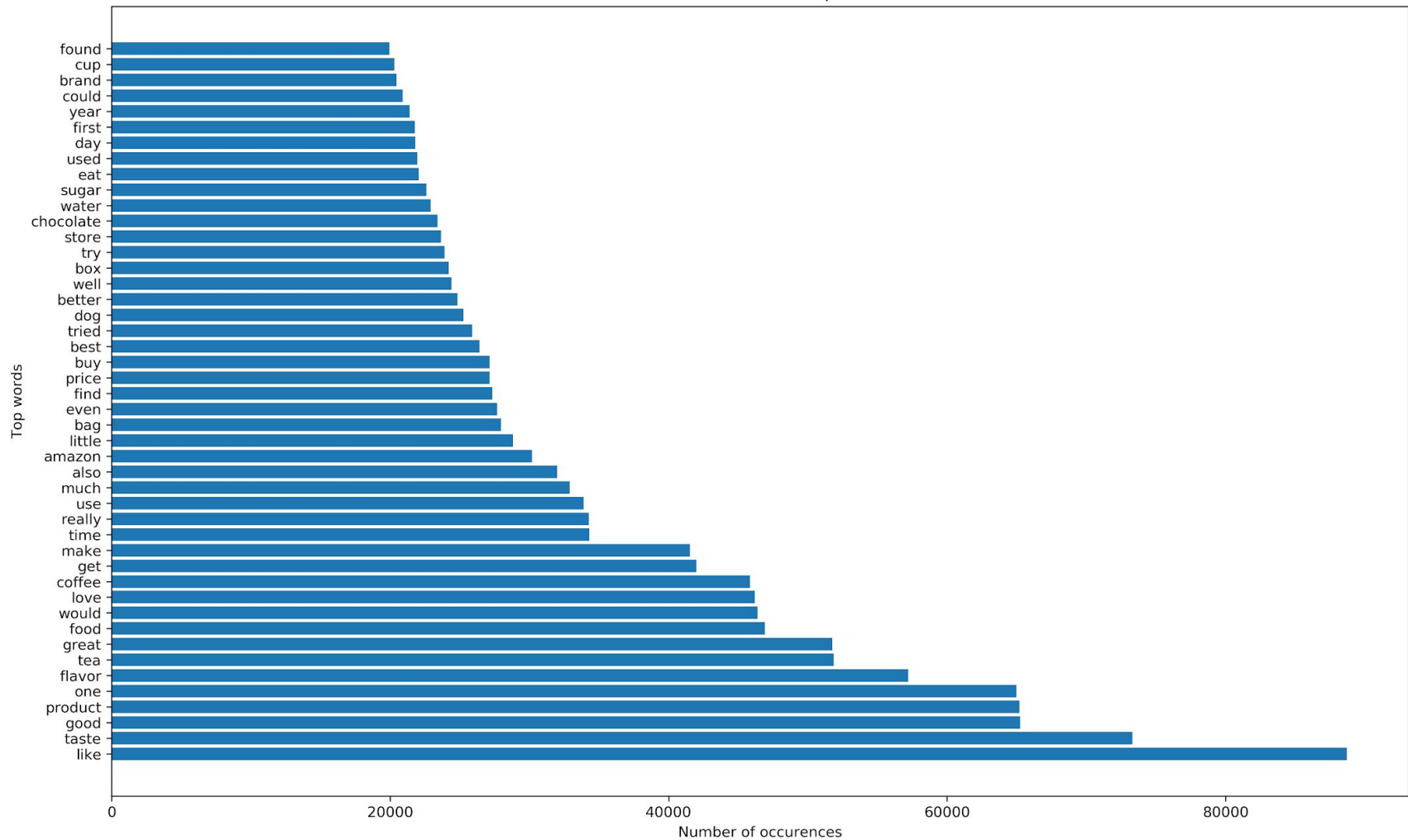
Yes

No

# The dataset



Most common words in "helpful" reviews



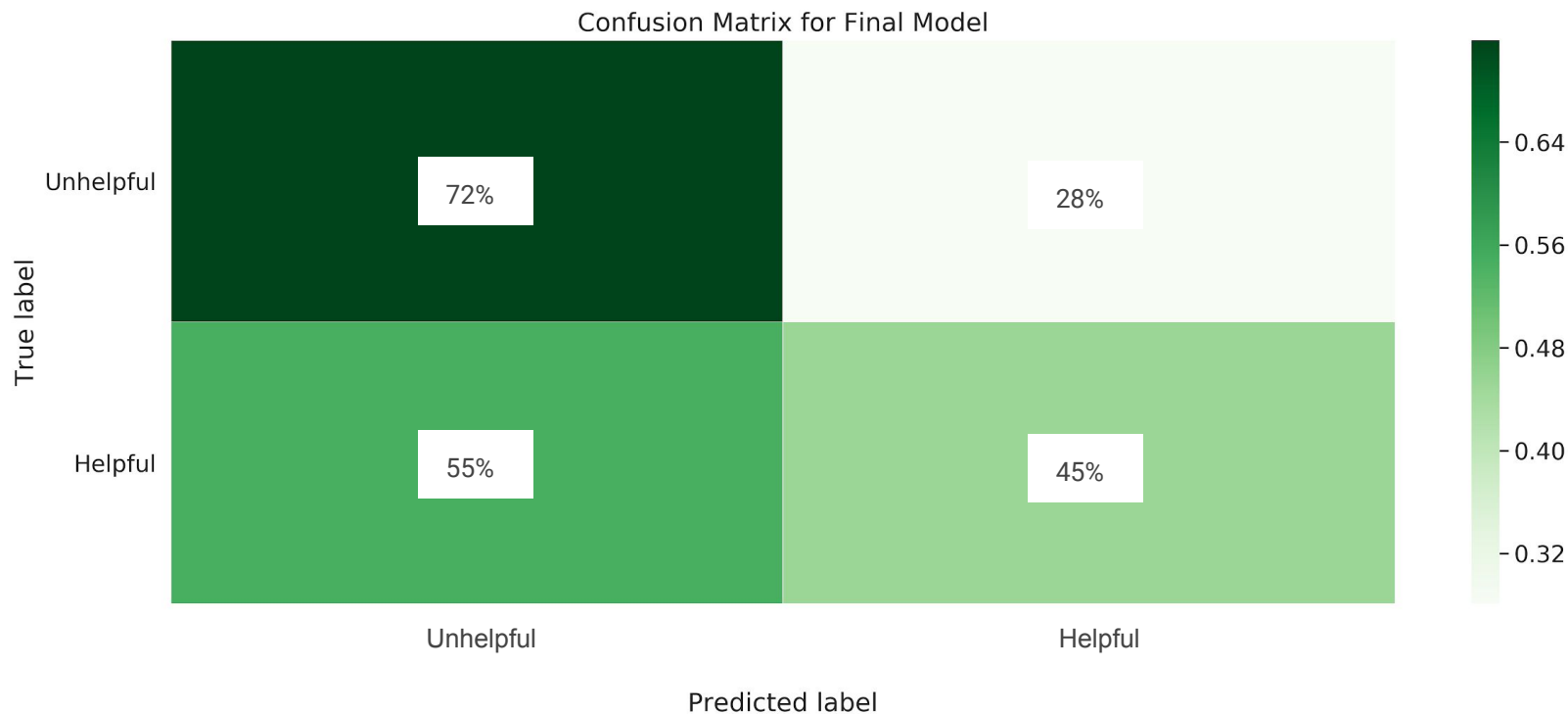
# 25 million

Parameters in the neural network

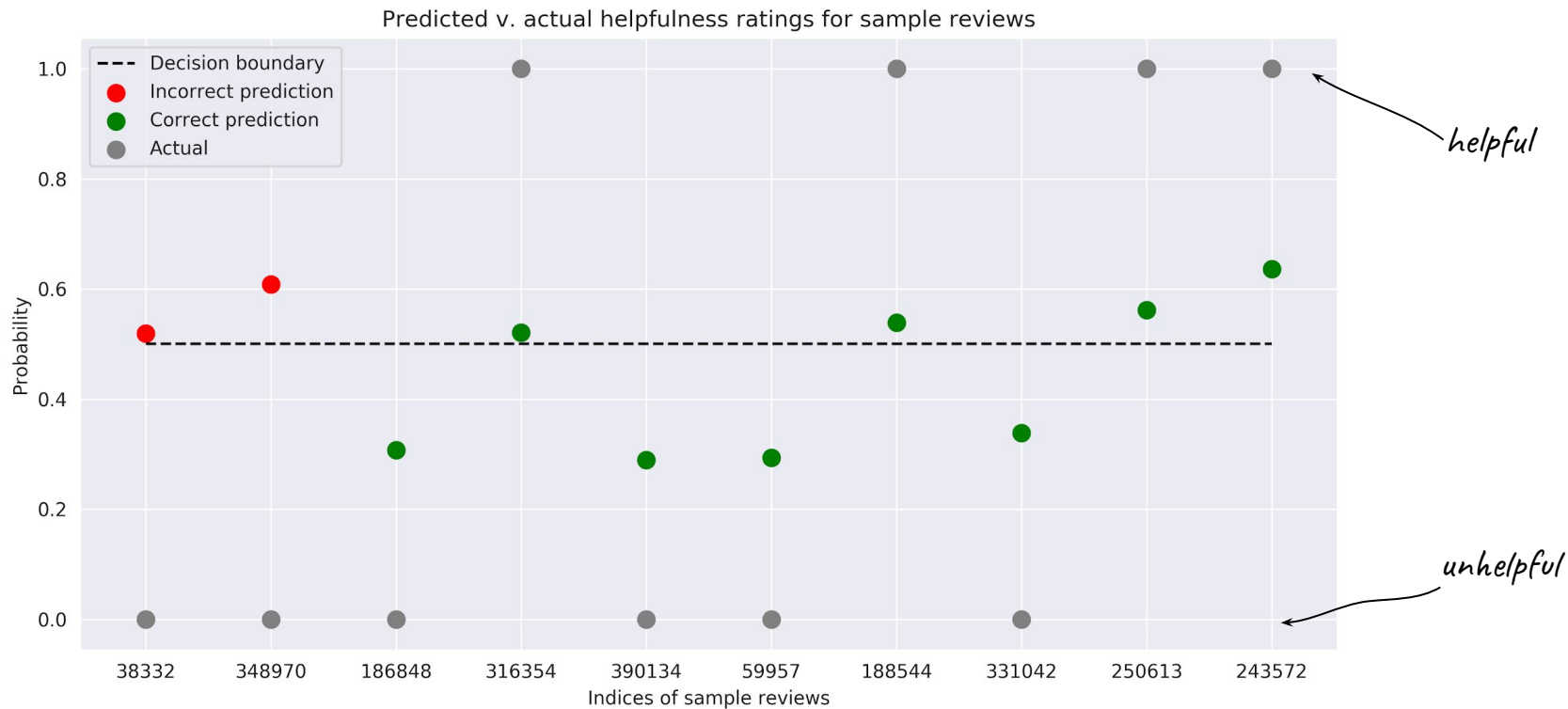
# 59%

Accuracy when classifying new reviews

# Model performance



# Sample predictions





# Recommendations

**Update product descriptions**

# Recommendations

Update product descriptions

**Screen reviews for helpfulness**

# Recommendations

Update product descriptions

Screen reviews for helpfulness

**Encourage helpful reviewing**

# Future work

Explore other potential influences on “helpfulness”

Try more complex network architecture

# Thanks!

GitHub: [github.com/jrkreiger/helpful-reviews](https://github.com/jrkreiger/helpful-reviews)

Twitter: [@j\\_re](https://twitter.com/j_re)

LinkedIn: [linkedin.com/in/jrkreiger](https://linkedin.com/in/jrkreiger)