

Fitness & Fitness30plus

Eli Curme

Introducing our subreddits

Fitness

About Community

Discussion of physical fitness/exercise goals and how they can be achieved

7.6m

Members

6.5k

Viewers



Created May 7, 2008

Fitness30plus

About Community

A subreddit of /r/fitness for issues more relevant to individuals both male and female over the age of 30.

50.9k

Members

93

Online



Created Jan 17, 2014

Guess the subreddit!

Hey need some help with macros:

Hi guys I'm a 32, 148lbs 5'7 gal. With a 34% body fat yikes. So right now I look skinny fat and I hate it. Most of my fat comes exactly from my belly. Anyways I need some advice would love to have some crazy muscle mass in here. I have been doing macros but my goal is to calculate them again and start clean help!!!

Answer: Fitness

Feature Engineering:

Most common words by subreddit

Relative frequencies:

Total word count:

Fitness: 47,623

Fitness30plus: 30,099

*Fitness30plus allows
pictures, videos

	word	fit_frequency	fit30_frequency	disparity
0	day	0.013628	0.010133	0.003495
1	weight	0.011906	0.010067	0.001839
2	like	0.008987	0.007608	0.001379
3	workout	0.008777	0.006612	0.002166
4	week	0.008735	0.008904	-0.000169

Feature Engineering +

- Length
- Age tokens (13 - 29, 30 - 80)

Final Recipe

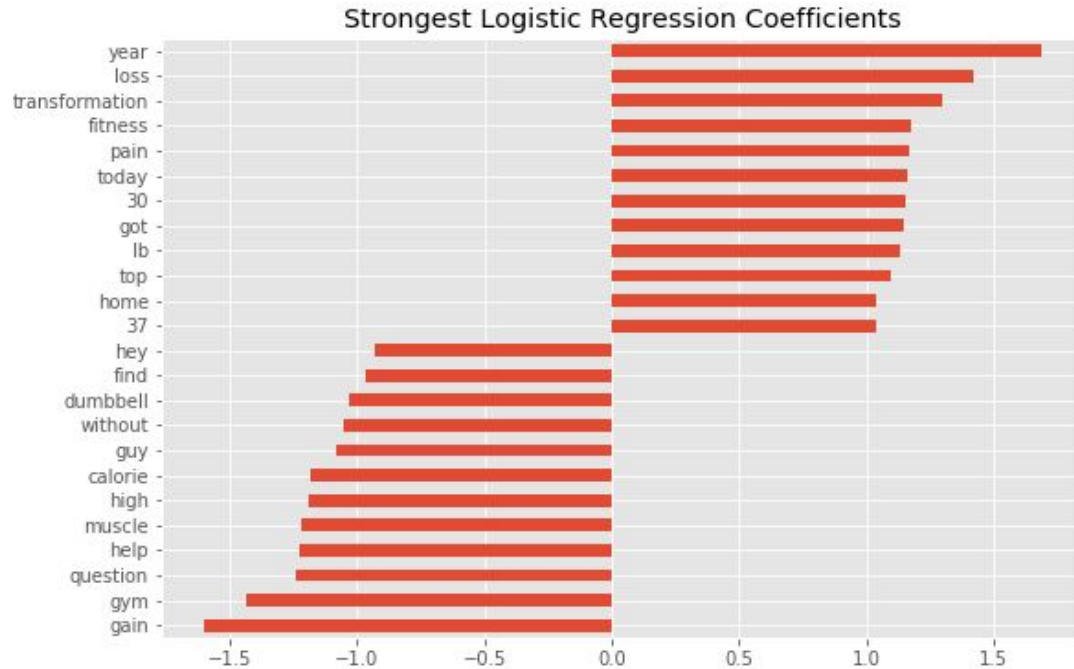
- Tokenize > Lemmatize > Remove Stopwords
- TfidfVectorizer > Logistic regression > predict_proba
- Engineered features + predict_proba > Gaussian Naive Bayes

Accuracy Scores:

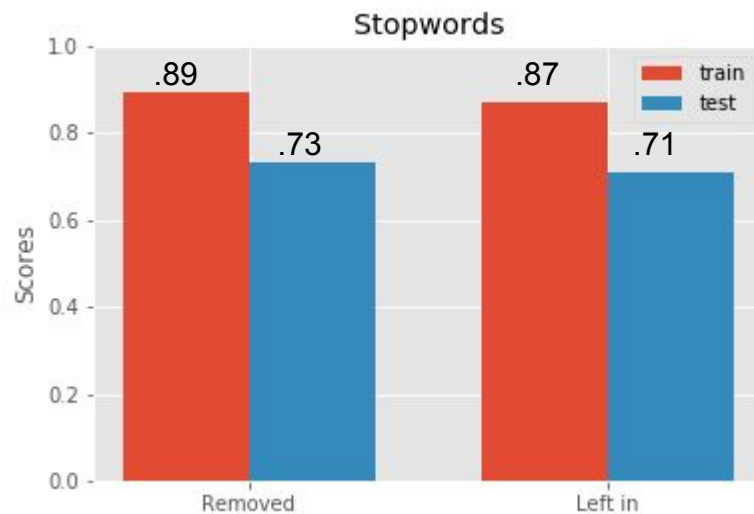
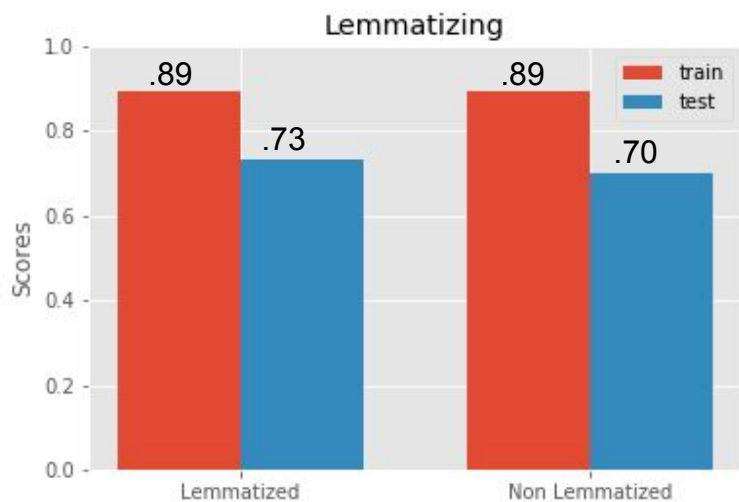
Train: .89

Test: .73

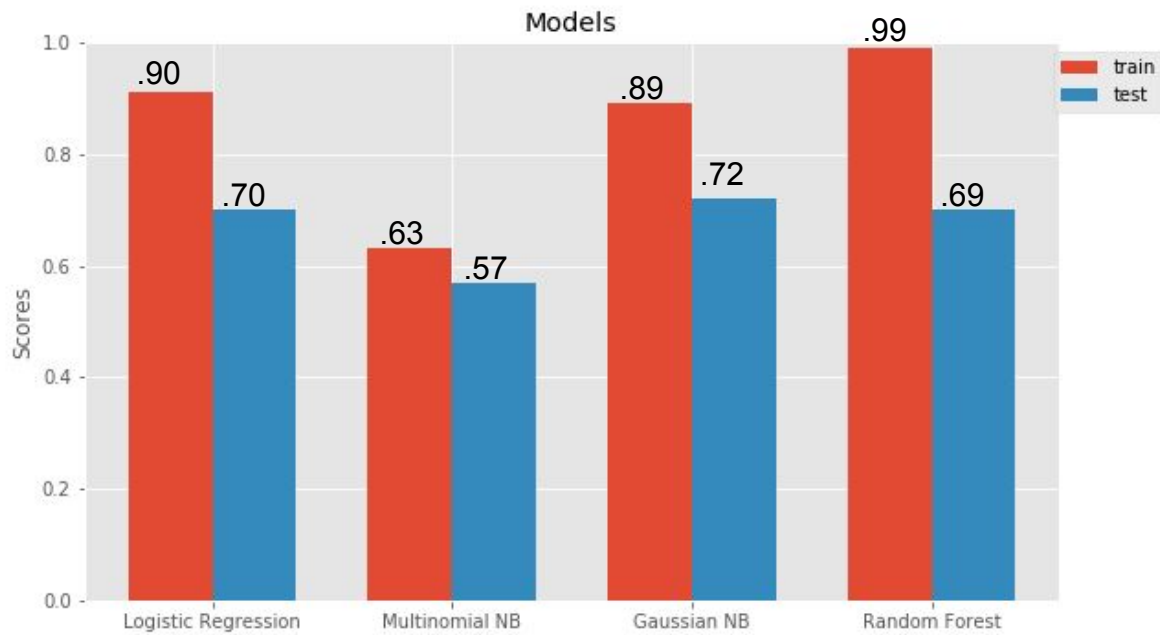
Strongest Coefficients



Comparing Transformers



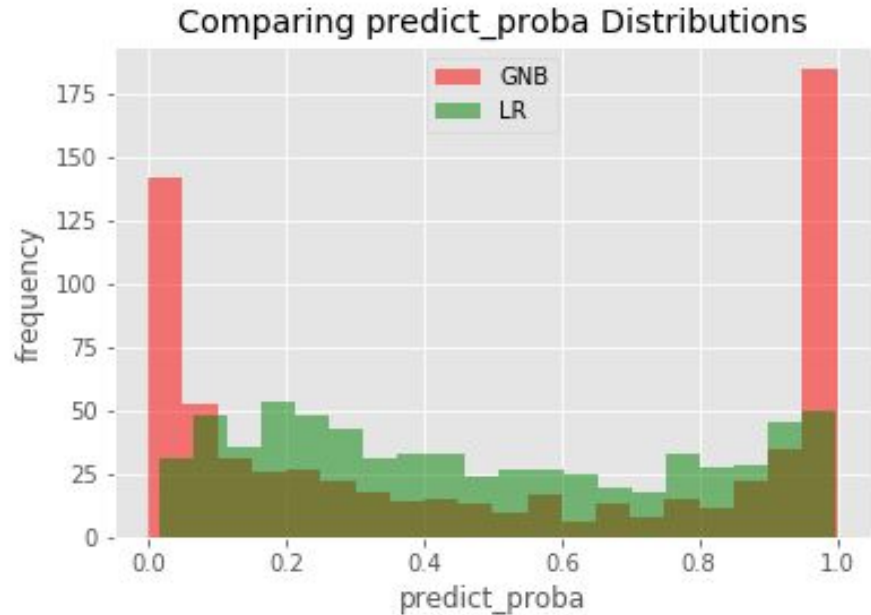
Comparing Models



Classifiers and Estimators

Naive Bayes is known as a decent classifier, but bad estimator. The `predict_proba` isn't meaningful. Why?

Since it's Naive, it assumes the features are independent.



Wrong Predictions

False Positive: Predicted Fitness30plus, actually Fitness

For one whole year I tracked my body weight. At the end of 2018 going into 2019, I lost about 12 kg from a diet and for every Monday from 21st January 2019-21st January 2020 I recorded my weight. For context, I'm a late 20's male that is 172 cm. So I'm proud to be under 80 kg for a whole year.

False Negative: Predicted Fitness, actually Fitness30plus

Some days you're the nail and not the hammer. Did my work set of box squats 285x5 then decided to go off program and do another set ATG and promptly got stapled to the ground. This should have been no problem. I deadlifted 425 for 5 before this so strength is there. Chalk this up to a shit day.

What's the difference?

Fitness:

- Training frequency, recovery, routines/programs
- Diet / caloric balance
- Running
- Improving strength at barbell movements

Fitness30plus:

- Time management (with career, family, kids, etc.)
- Joint pain related to aging
- Posting personal record lifts that are more impressive relative to age
- Weight loss

References

<https://medium.com/@cristhianboujon/how-to-list-the-most-common-words-from-text-corpus-using-scikit-learn-dad4d0cab41d>

<https://www.forbes.com/sites/benmidgley/2018/09/26/the-six-reasons-the-fitness-industry-is-booming/#33a08c27506d>

<https://stats.stackexchange.com/questions/399722/why-naive-bayes-classifier-is-known-to-be-a-bad-estimator>