A blue parallelogram and a light green parallelogram are positioned on the left side of the slide, overlapping each other and the dark background.

Predicting likes for Instagram influencers

Ryan Grosso
Insight Data Science Fellow
TODAY

Social Media Marketing is a Growing Space

Top Celebrity Profiles in 2017

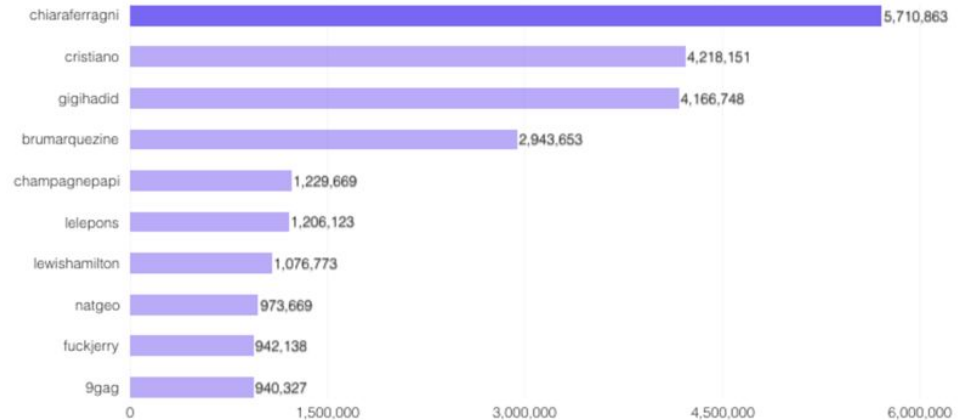
1. Selena Gomez – 122 million followers – \$550,000 per post
2. Kim Kardashian – 100 million followers – \$500,000 per post
3. Cristiano Ronaldo – 104 million followers – \$400,000 per post
4. Kylie Jenner – 95 million followers – \$400,000 per post
5. Kendall Jenner – 81.7 million followers – \$370,000 per post
6. Khloe Kardashian – 68 million followers – \$250,000 per post

Top Influencer Profiles in 2017

1. Huda Kattan – 20.5 million followers – \$18,000 per post
2. Cameron Dallas – 19.8 million followers – \$17,000 per post
3. Jen Selter – 11.3 million followers – \$15,000 per post
4. Zoella – 11.1 million followers – \$14,000 per post
5. Nash Grier – 10.2 million followers – \$13,000 per post
6. Chiara Ferragni – 9.7 million followers – \$12,000 per post

Top Instagram Influencers of July 2017

Total likes and comments on sponsored posts from Instagram accounts for July 1st through 21st, 2017



on content published between July 1st through July 21st, 2017 only, for posts containing sponsorship hashtags.

Social Media Marketing is a Growing Space

Top Celebrity Profiles in 2017

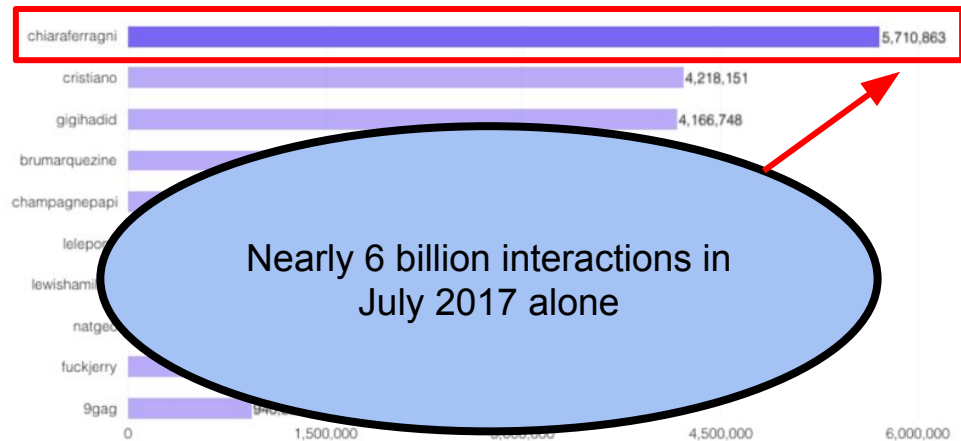
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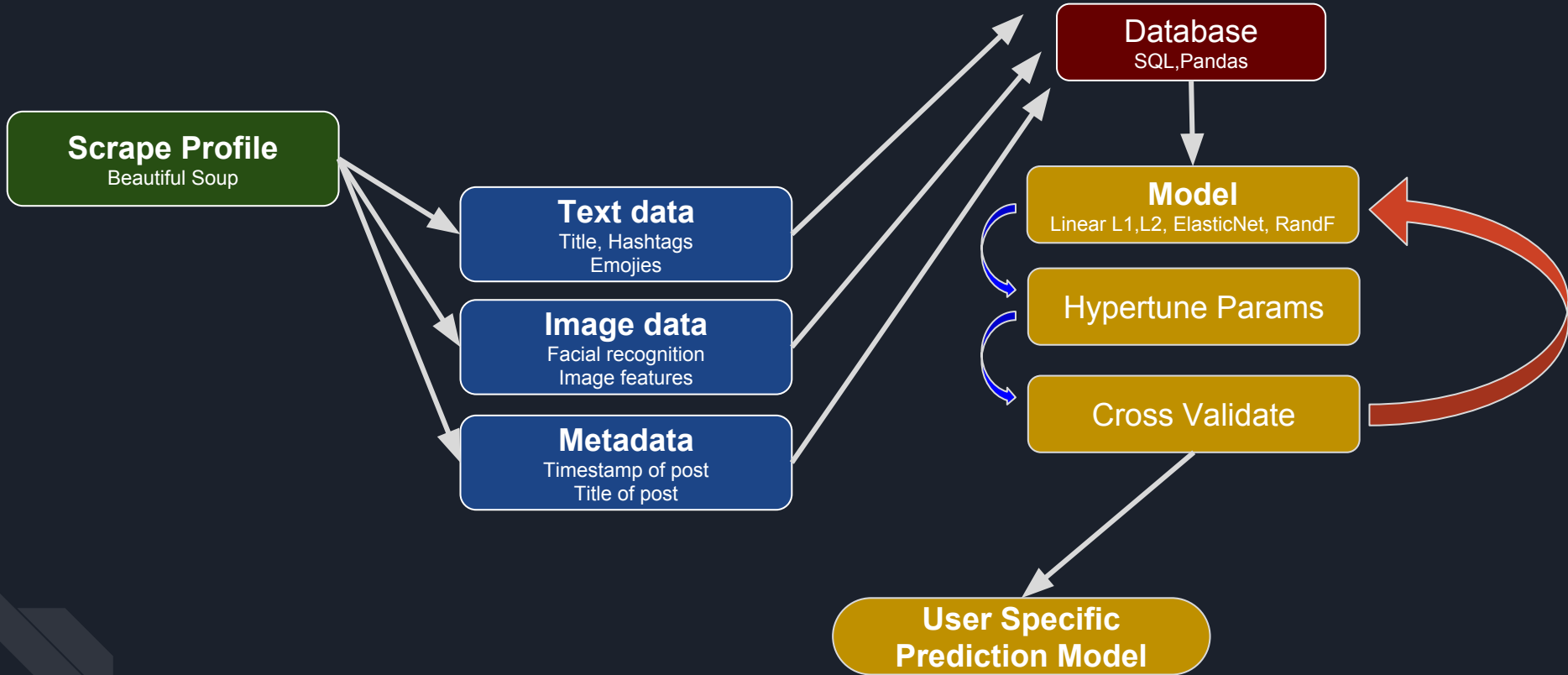


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Can we use data science
to provide insights to
marketing companies to
quantify and optimise
the value of their
advertisements?



Developing a general user model pipeline





Instagram Statistics Summary for chiaraferragni



FOLLOWERS
10,349,324

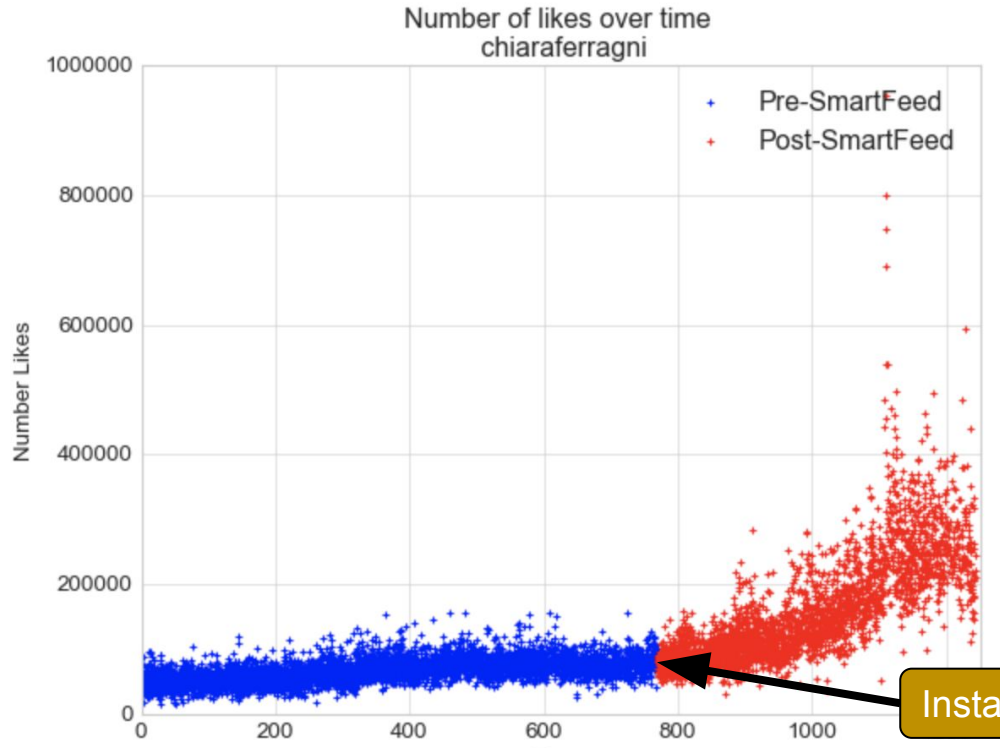
FOLLOWING
749

PICTURES UPLOADED
17,063

AVG DAILY FOLLOWERS
4,456

INSTAGRAM ID
19769622

FULL NAME
Chiara Ferragni

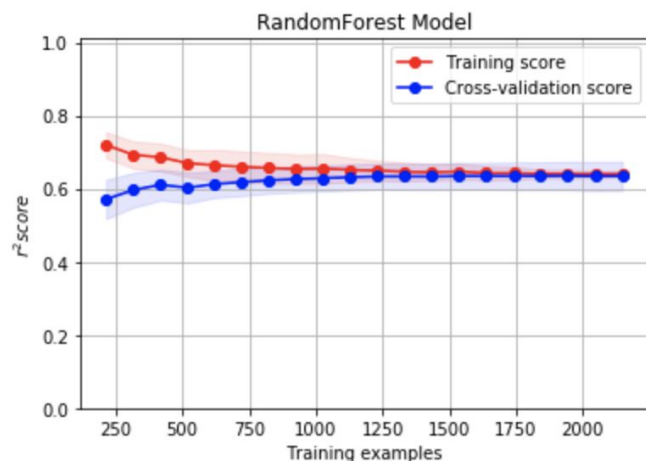


Instagram *SmartFeed* Algorithm

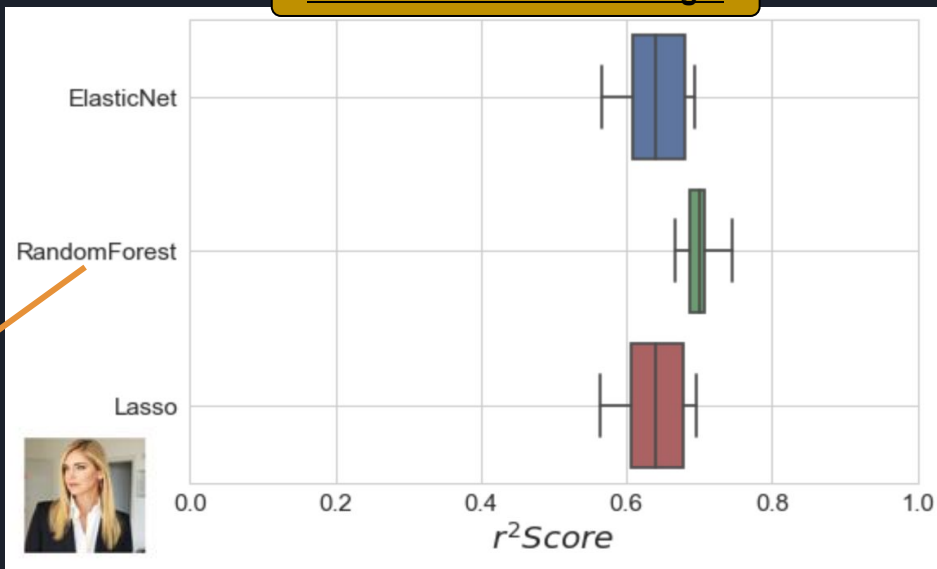
Increasing Post

Working with small datasets

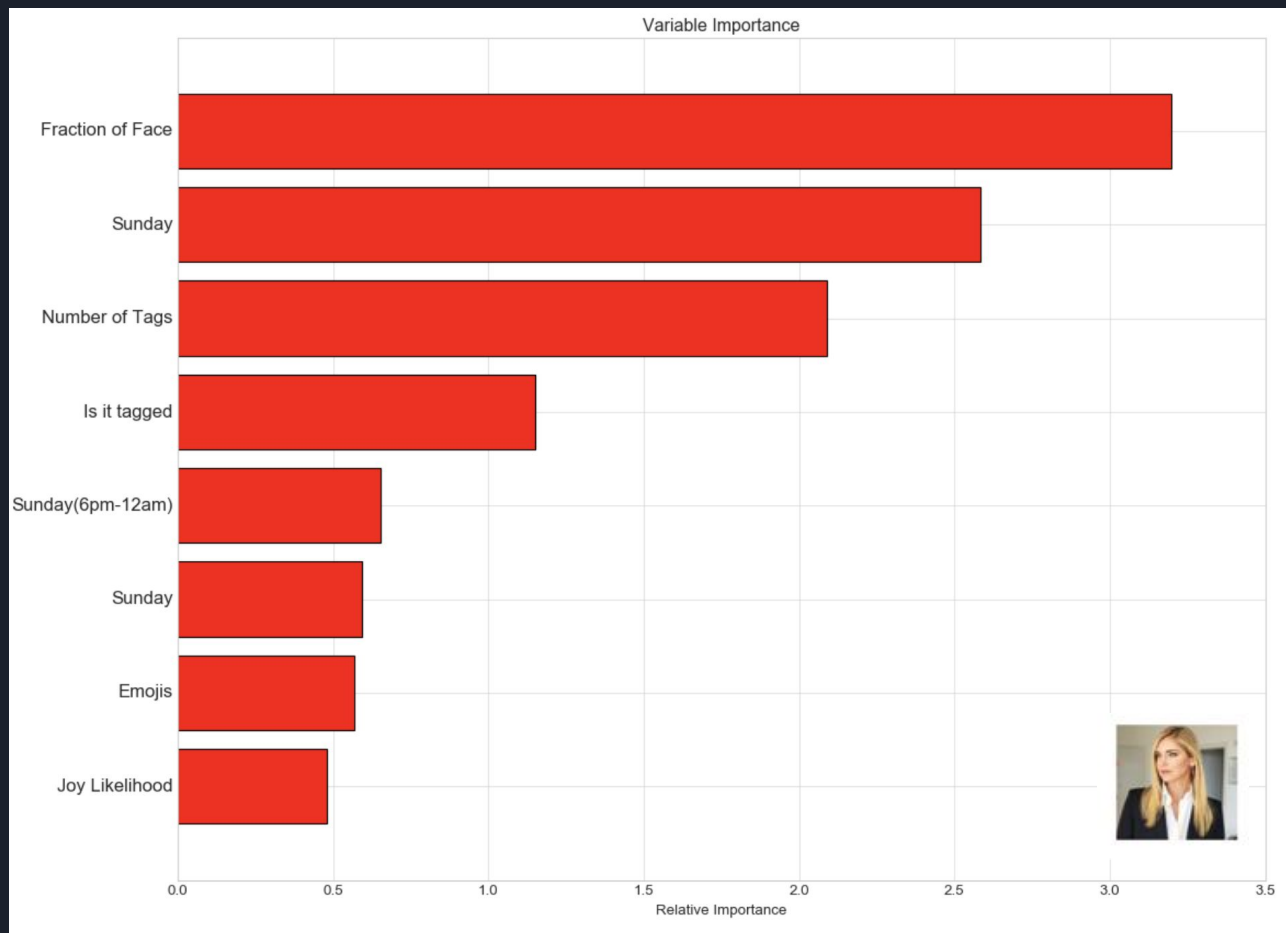
- Instagram Smartfeed algorithm was implemented on June/1/2016
- Approximately 2,700 posts after change



Model Fits for Chiara Ferragni



Important Model Features



Impact to Marketing Managers

Use case example:

Chiara Ferragni demands \$12,000/post

Number of Likes
Chiara Ferragni

Mean = ~155000



'Post this photo at 7pm
Sunday night and attach
4 hashtags to the post'

Predicted reach 460k likes
→ \$0.026/view



'Post this photo next
week'

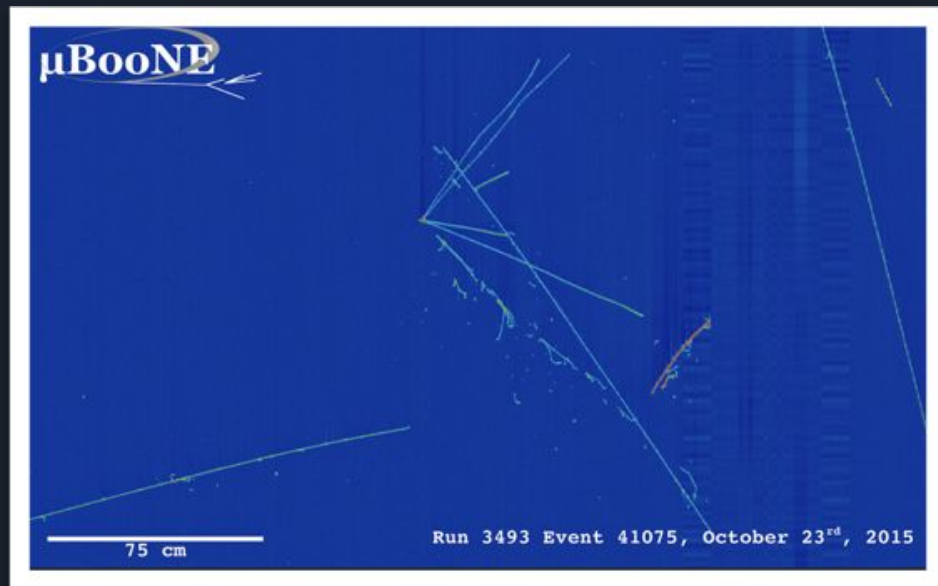
Predicted reach 110k likes
→ \$0.11/view



Wrap up

- Delivered a tool for marketing that can model and predict the number of likes for a given Instagram influencer.
- More details can be found at my blog
 - www.RyanGrosso.com/blog
- The code lives on my GitHub
 - www.github.com/1grossora

About Me



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Top celebrity profiles for 2017

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6. Khloe Kardashian – 68 million followers – \$250,000 per post
7. Kourtney Kardashian – 57.8 million followers – \$250,000 per post
8. Cara Delevingne – 40.4 million followers – \$150,000 per post
9. Gigi Hadid 34.7 million followers – \$120,000 per post
10. LeBron James – 30.7 million followers – \$120,000 per post

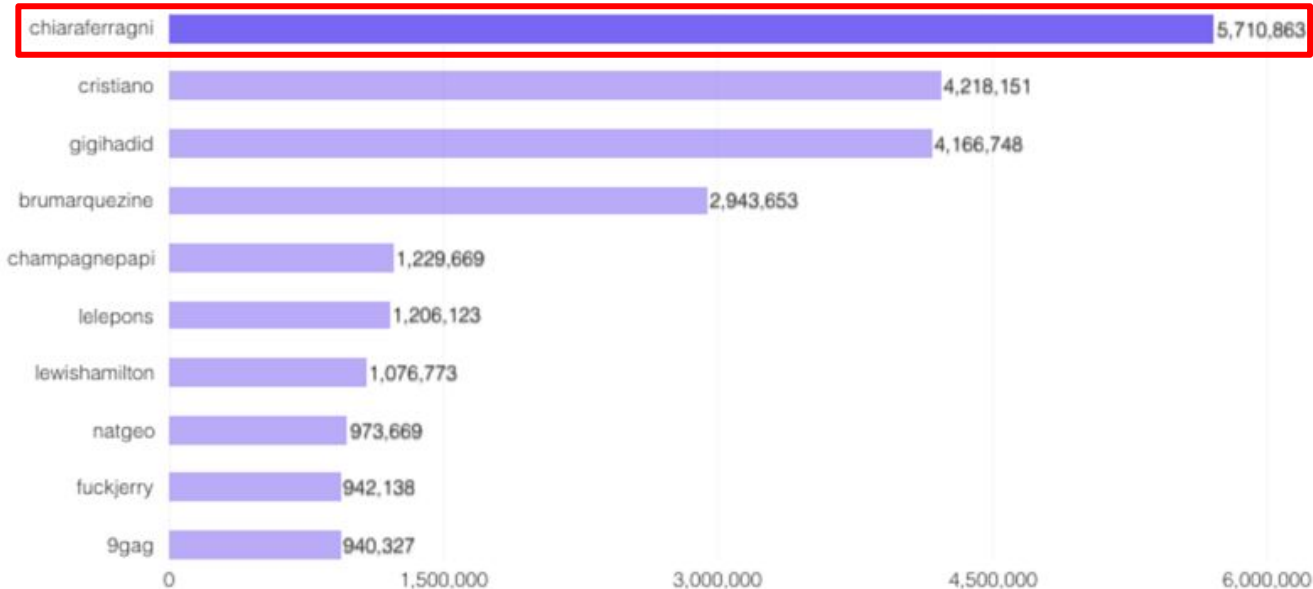
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6. Chiara Ferragni – 9.7 million followers – \$12,000 per post
7. Julie Sarinara – 4.6 million followers – \$10,000 per post
8. Aimee Song – 4.6 million followers – \$9,000 per post
9. Danielle Bernstein – 1.7 million followers – \$7,000 per post
10. Liz Eswein – 1.3 million followers – £6,000 per post

Social Media Marketing is a Growing Space

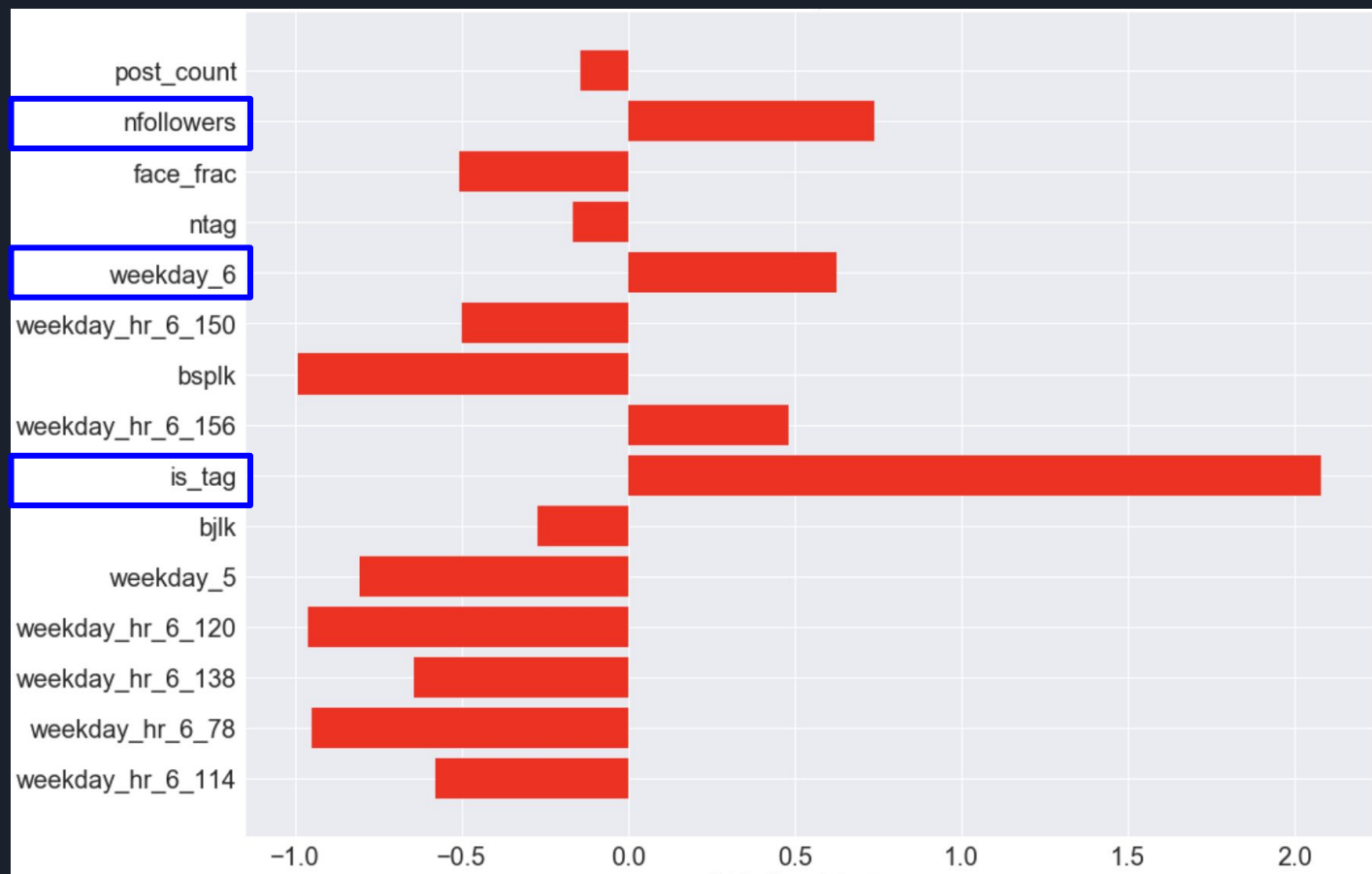
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Relative Change Between Model Features



Random Forest Regression

Text data

Title, Hashtags
Emojis

Image data

Facial recognition
Image features

Metadata

Timestamp of post
Title of photo

Random Forest Regression

