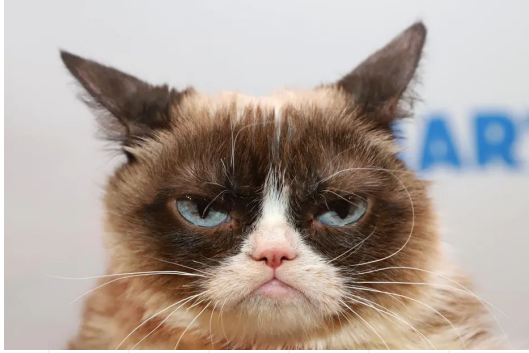


HACKILLINOIS - CATERPILLAR CHALLENGE

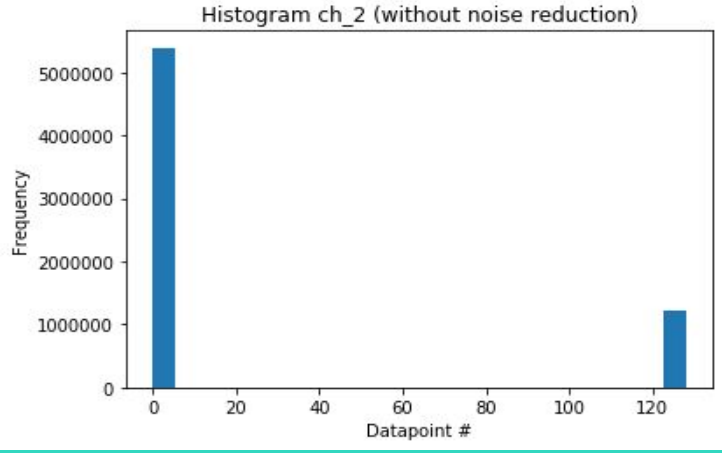
By: Pierre Motard, Zac Sanchez, Aumkar Renavikar
Team Oreo

OUR APPROACH

1) Data Cleaning
2) Data Exploration
3) Modelling
4) Predictions

CHANNELS WE FOCUSED ON

['ch_1', 'ch_10', 'ch_100', 'ch_102', 'ch_105', 'ch_106', 'ch_109', 'ch_11', 'ch_110', 'ch_111', 'ch_13', 'ch_14', 'ch_177', 'ch_178', 'ch_179', 'ch_198', 'ch_218', 'ch_226', 'ch_257', 'ch_258', 'ch_266', ‘ch_298', 'ch_305', 'ch_306', 'ch_307', 'ch_308', 'ch_31', 'ch_32', 'ch_33', 'ch_35', 'ch_36', 'ch_37', 'ch_38', 'ch_39', 'ch_4', 'ch_40', 'ch_41', 'ch_42', 'ch_43', 'ch_44', 'ch_46', 'ch_47', 'ch_48', 'ch_49', 'ch_50', 'ch_52', '
'ch_56', 'ch_57', 'ch_59', 'ch_60', 'ch_61', 'ch_62', '
'ch_7', 'ch_75', 'ch_76', 'ch_77', 'ch_79', 'ch_80', 'c
'ch_87', 'ch_88', 'ch_9', 'ch_90', 'ch_91', 'ch_93', 'c
'ch_98', 'ch_99']


Histogram ch_2 (without noise reduction)
Frequency
Datapoint #
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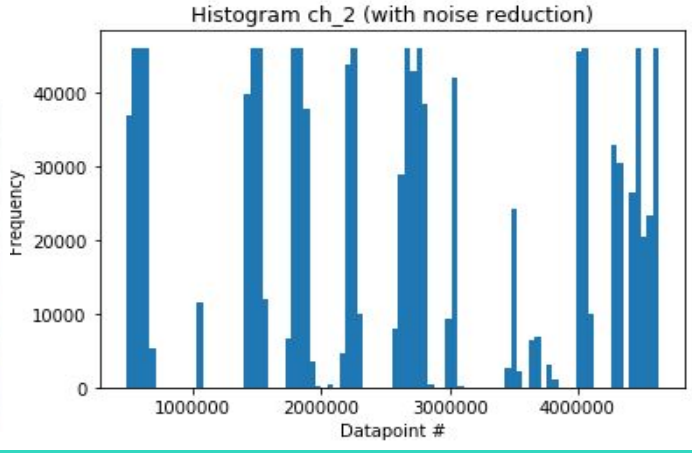
2000000
3000000
4000000
5000000
0
20
40
60
80
100
120

Me holding my last two brain cells together


Histogram ch_2 (with noise reduction)
Frequency
Datapoint #
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30000
40000
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2000000
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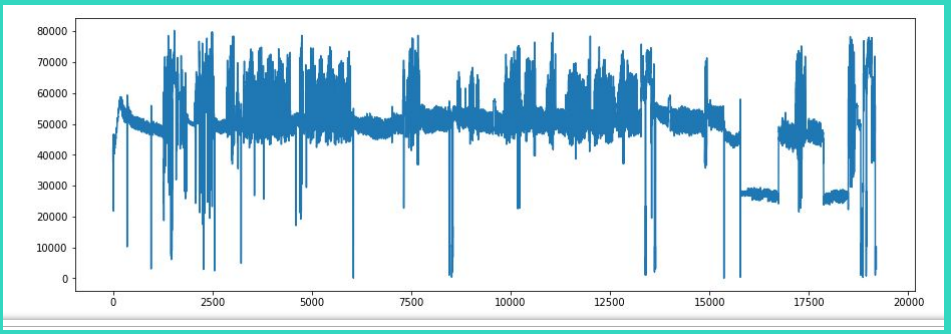
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15000
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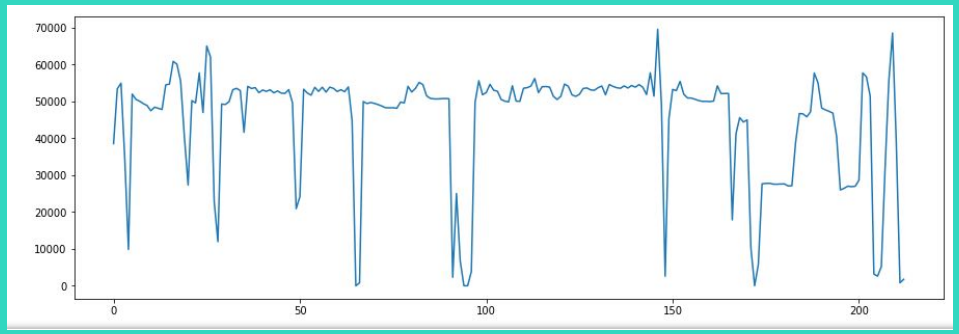
20000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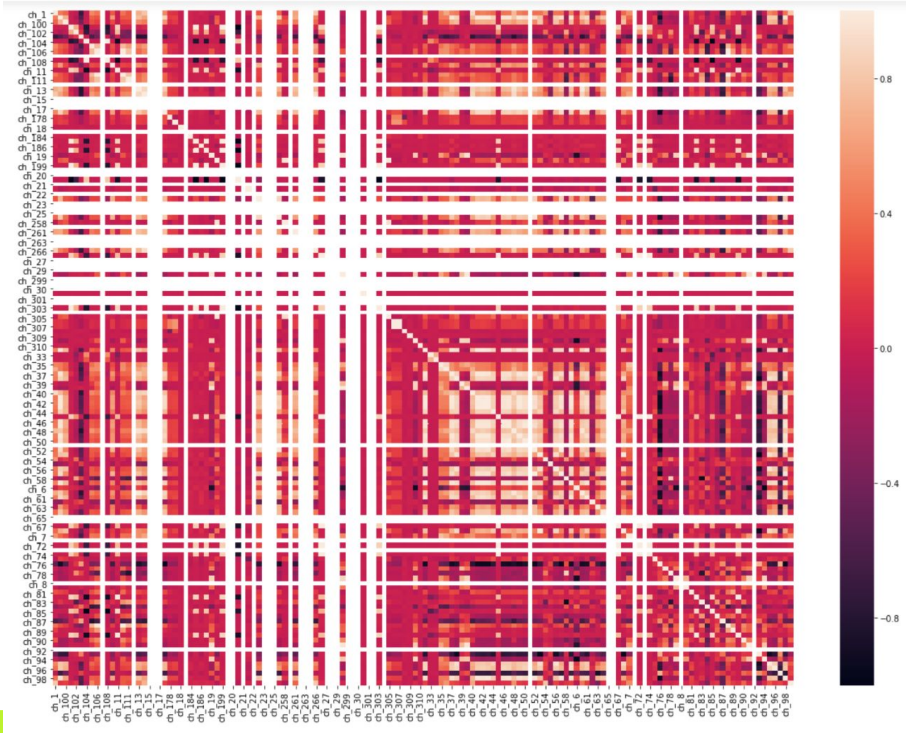
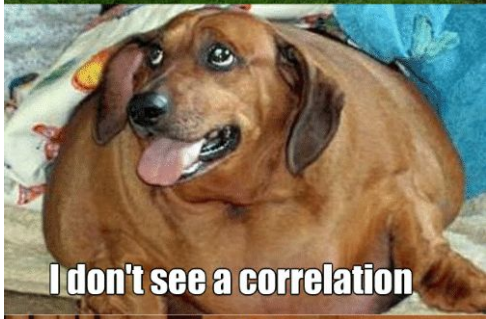
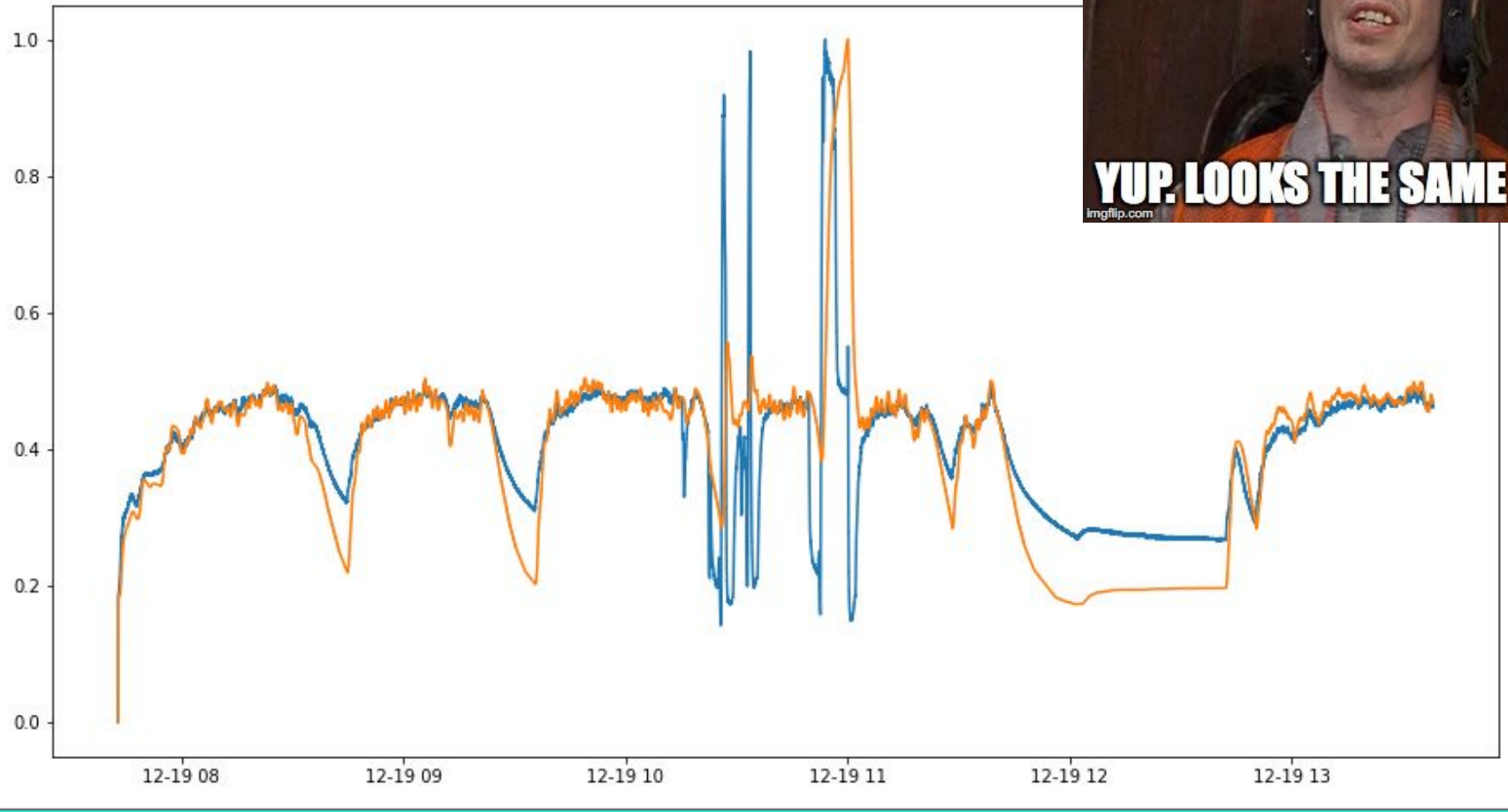
0
50
100
150
200

CORRELATION BETWEEN CHANNELS



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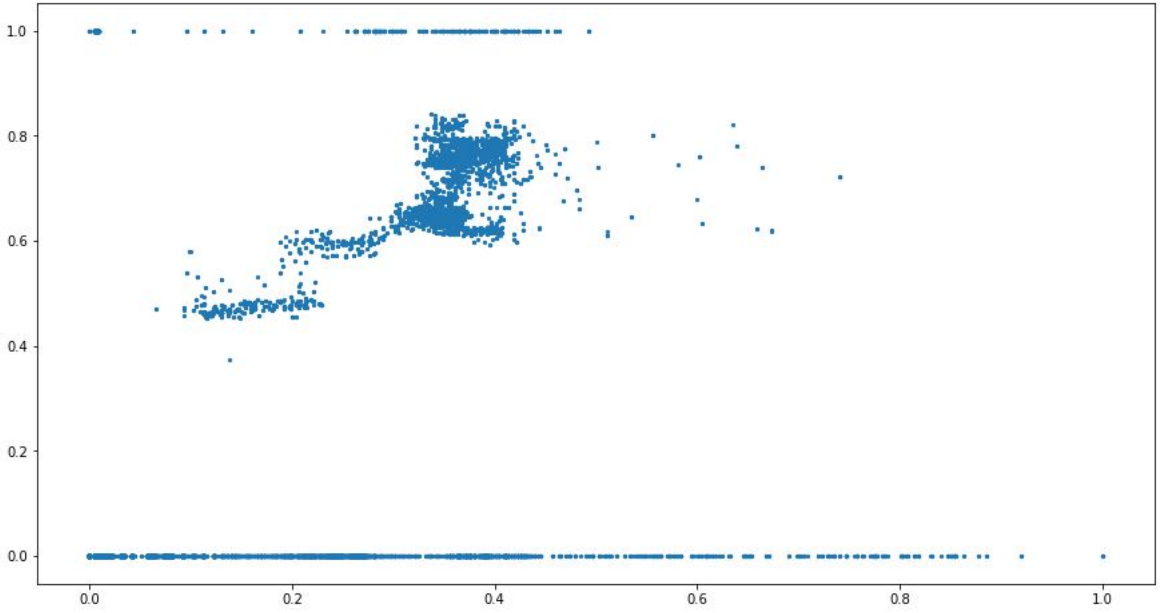
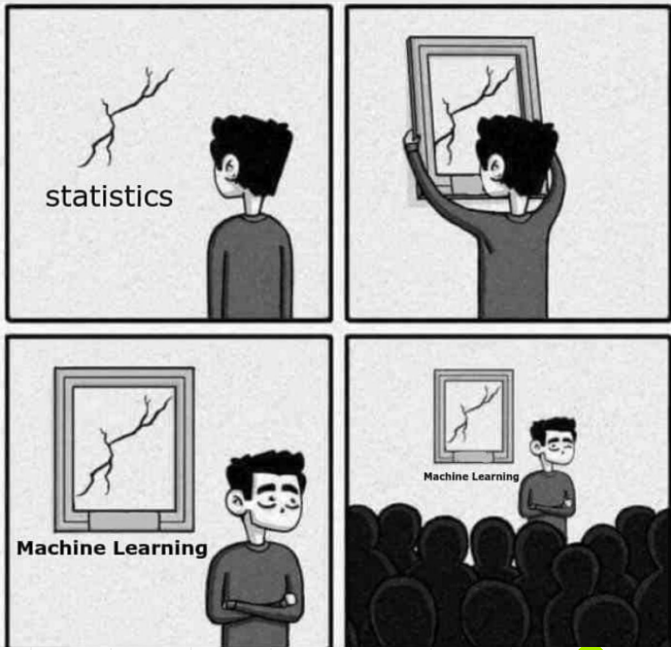
0.8
0.6
0.4
0.2
0.0
12-19 08
12-19 09
12-19 10
12-19 11
12-19 12
12-19 13

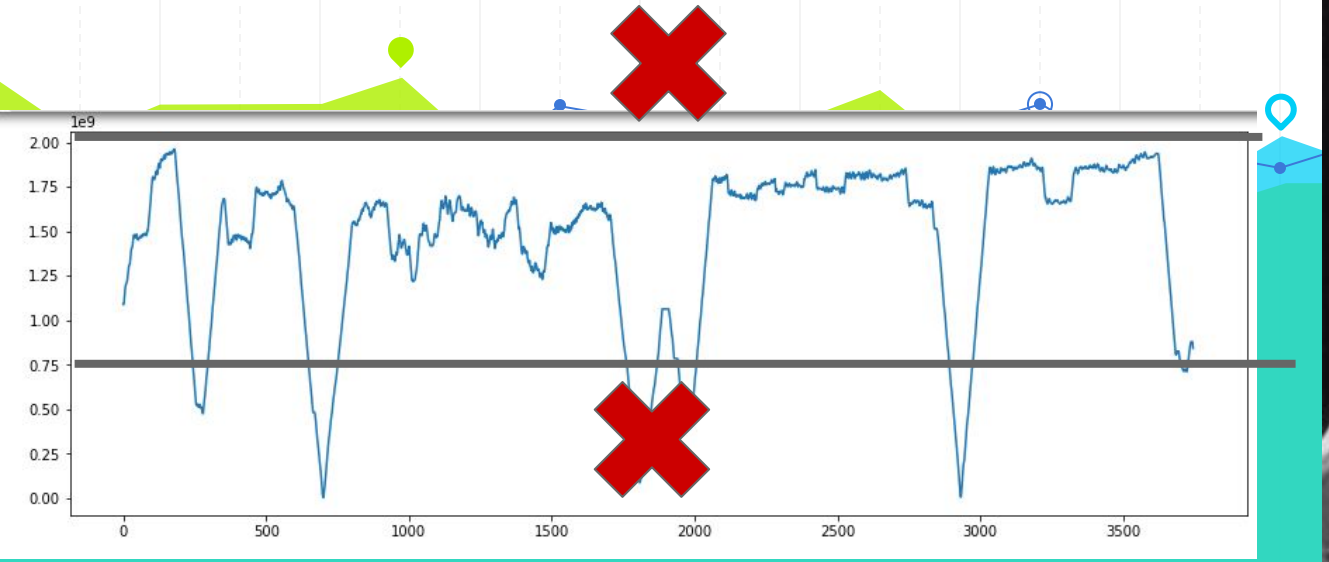
YUP. LOOKS THE SAME TO ME.
imgflip.com

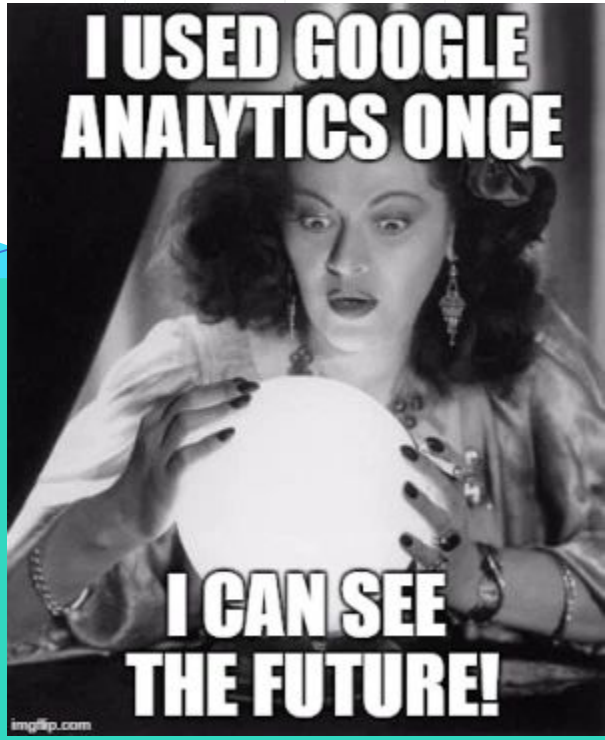
Machine Learning

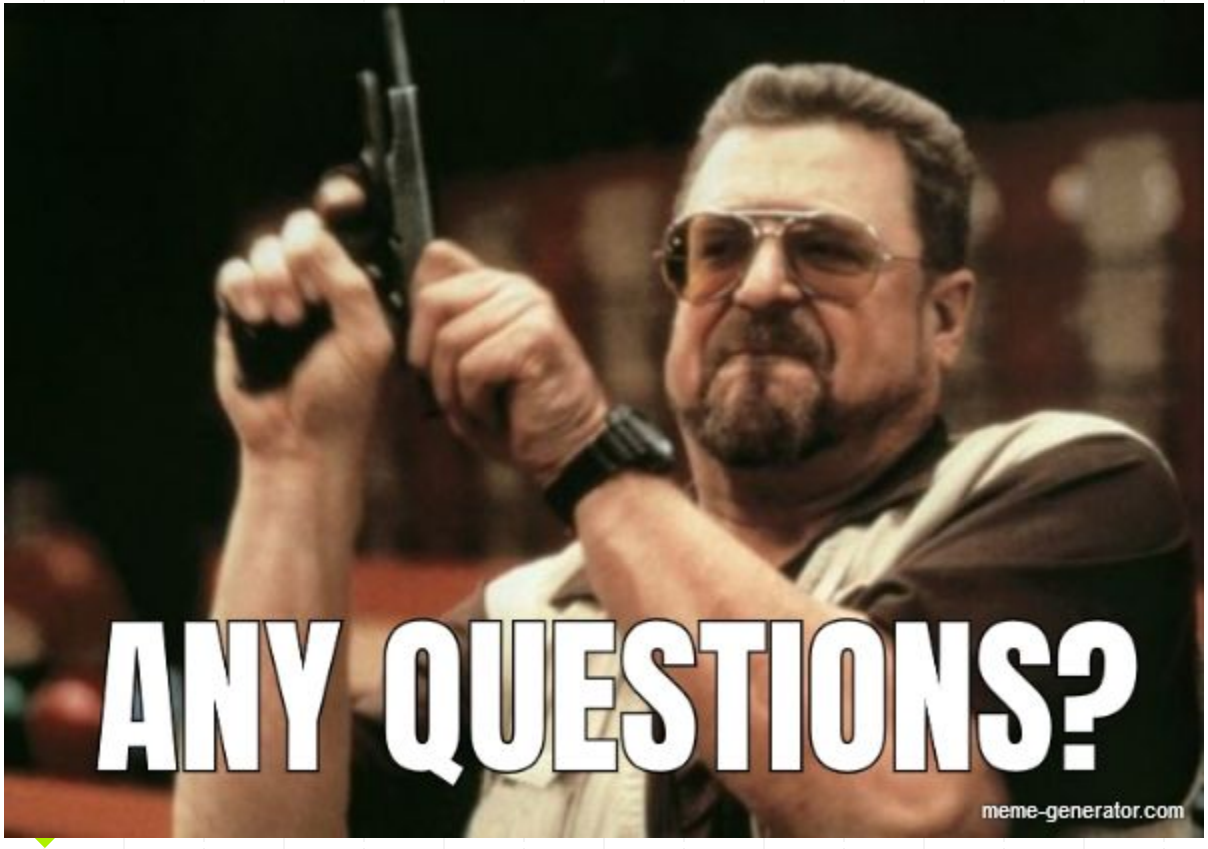




Our Predictions






ANY QUESTIONS?
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