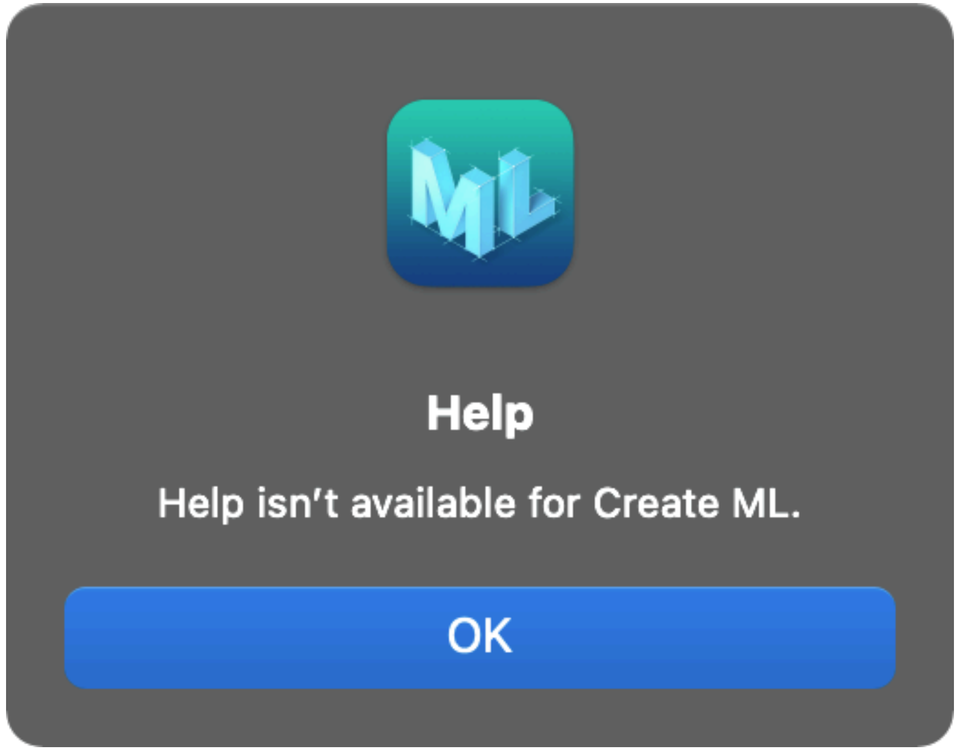
CreateML

@flashspys

CreateML's Documentation



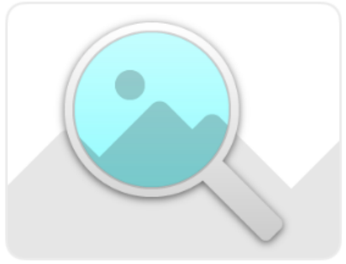
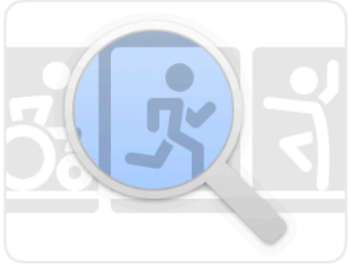


Image Classification

Object Detection

Style Transfer



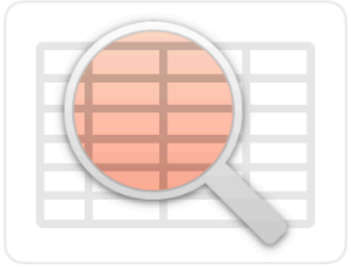
Action Classification

Activity Classification

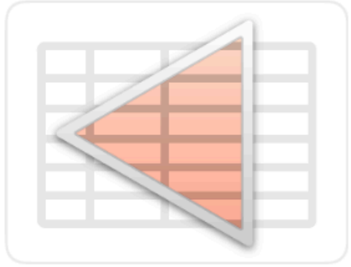
Sound Classification

Text Classification

Word Tagging



Tabular Classification



Tabular Regression

Recommendation

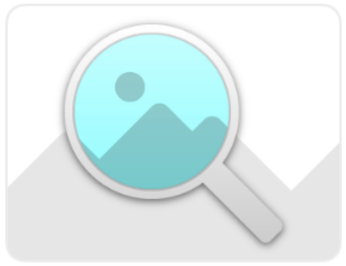
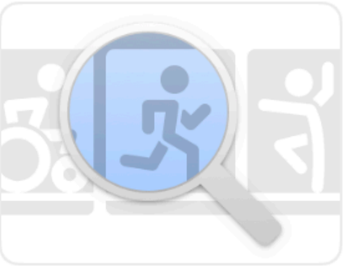


Image Classification

Object Detection

Style Transfer



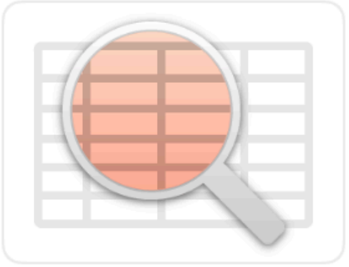
Action Classification

Activity Classification

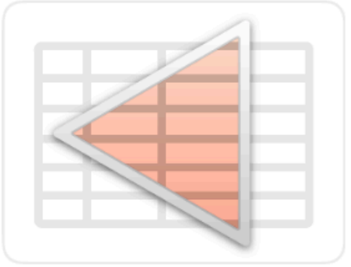
Sound Classification

Text Classification

Word Tagging



Tabular Classification



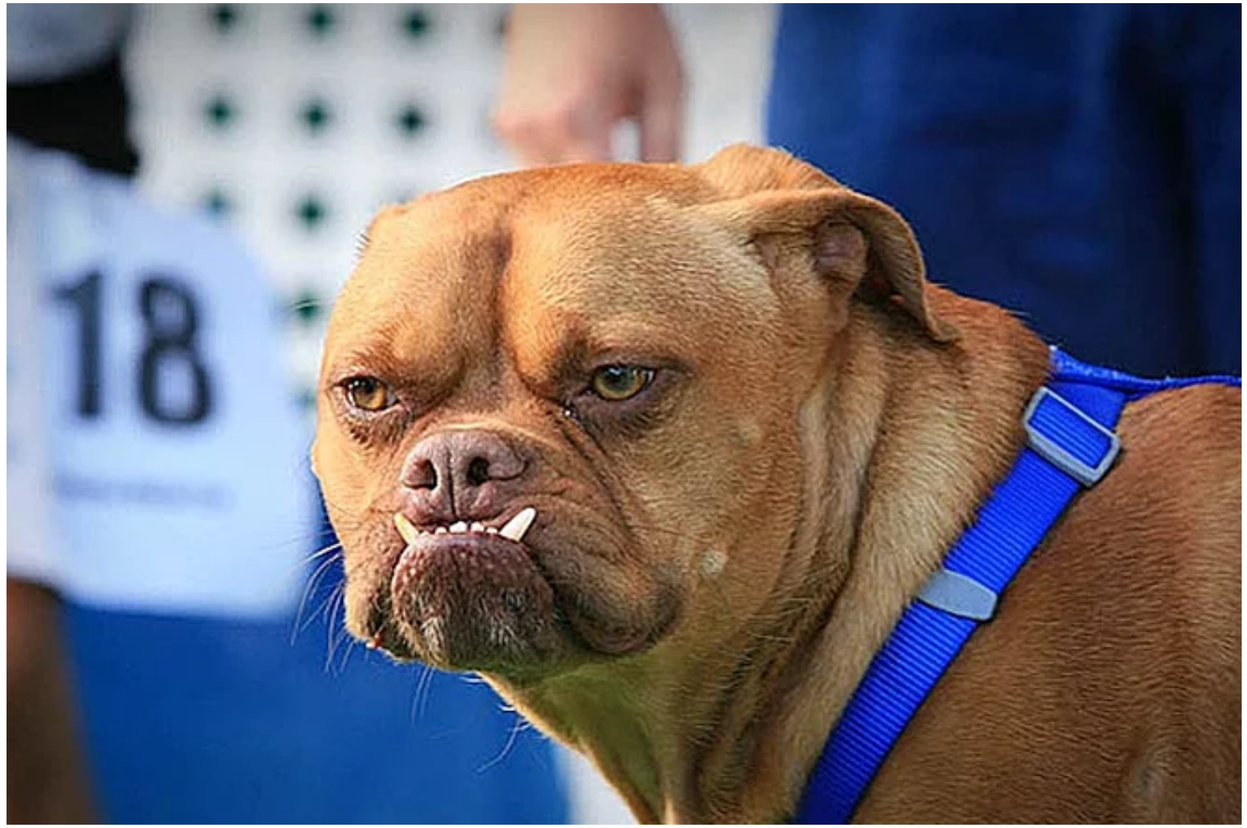
Tabular Regression

Recommendation

Understanding Machine Learning in 3 Minutes

Machine Learning

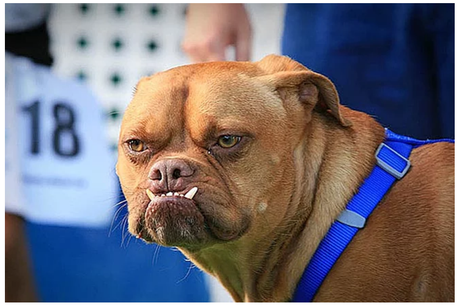
Cat



Dog

Machine Learning

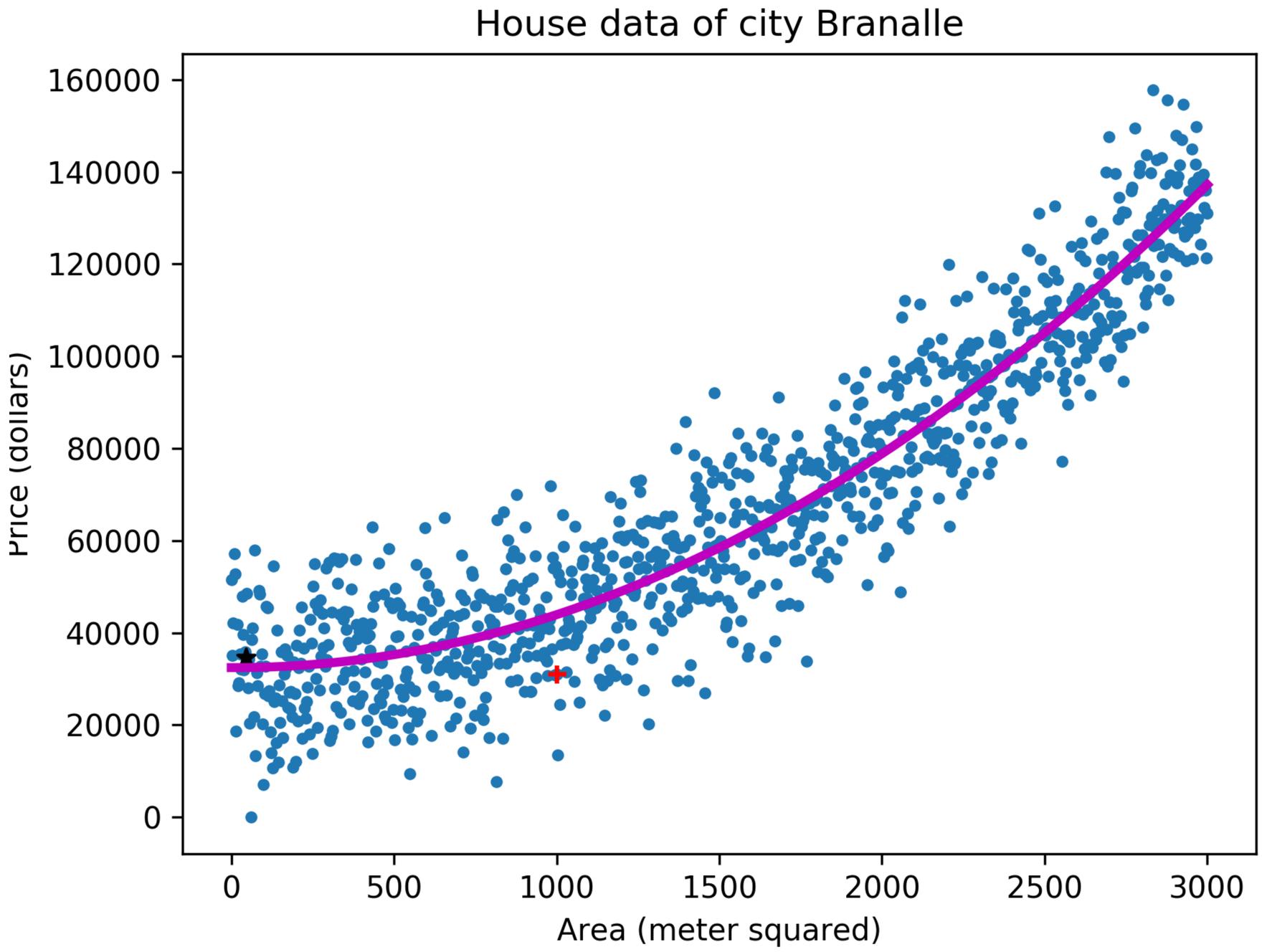
Cat

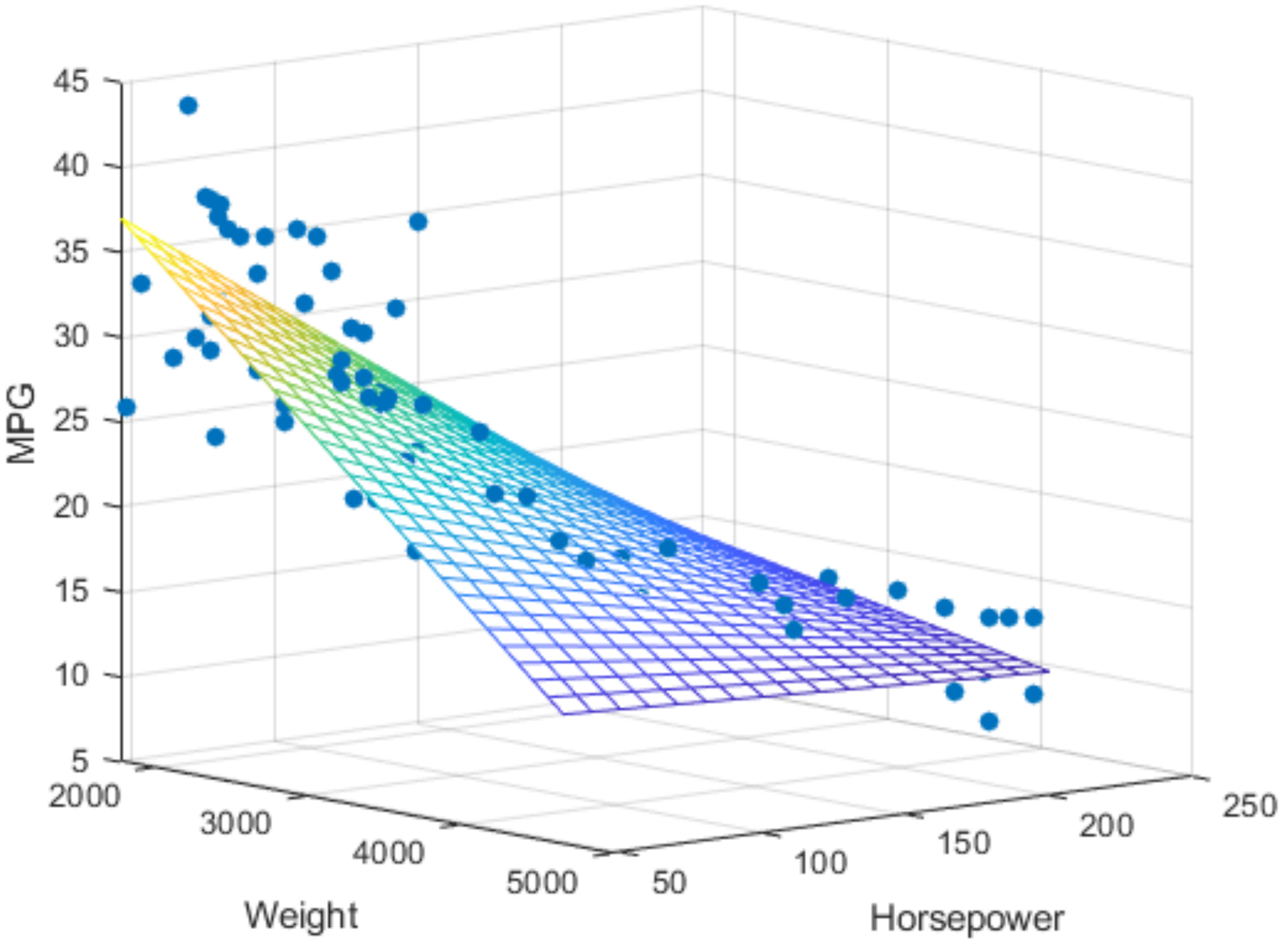


Dog

1.0

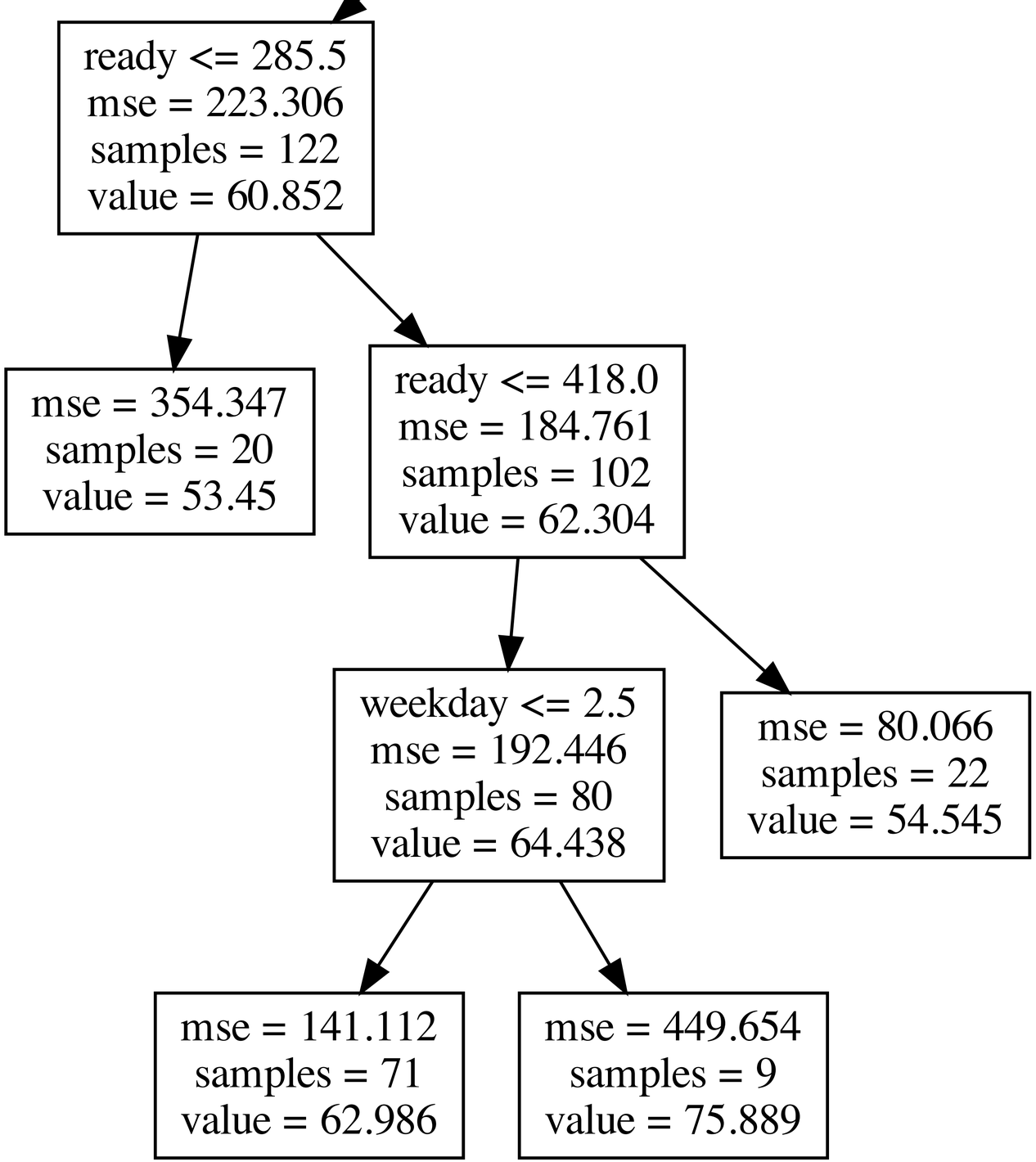
0.0

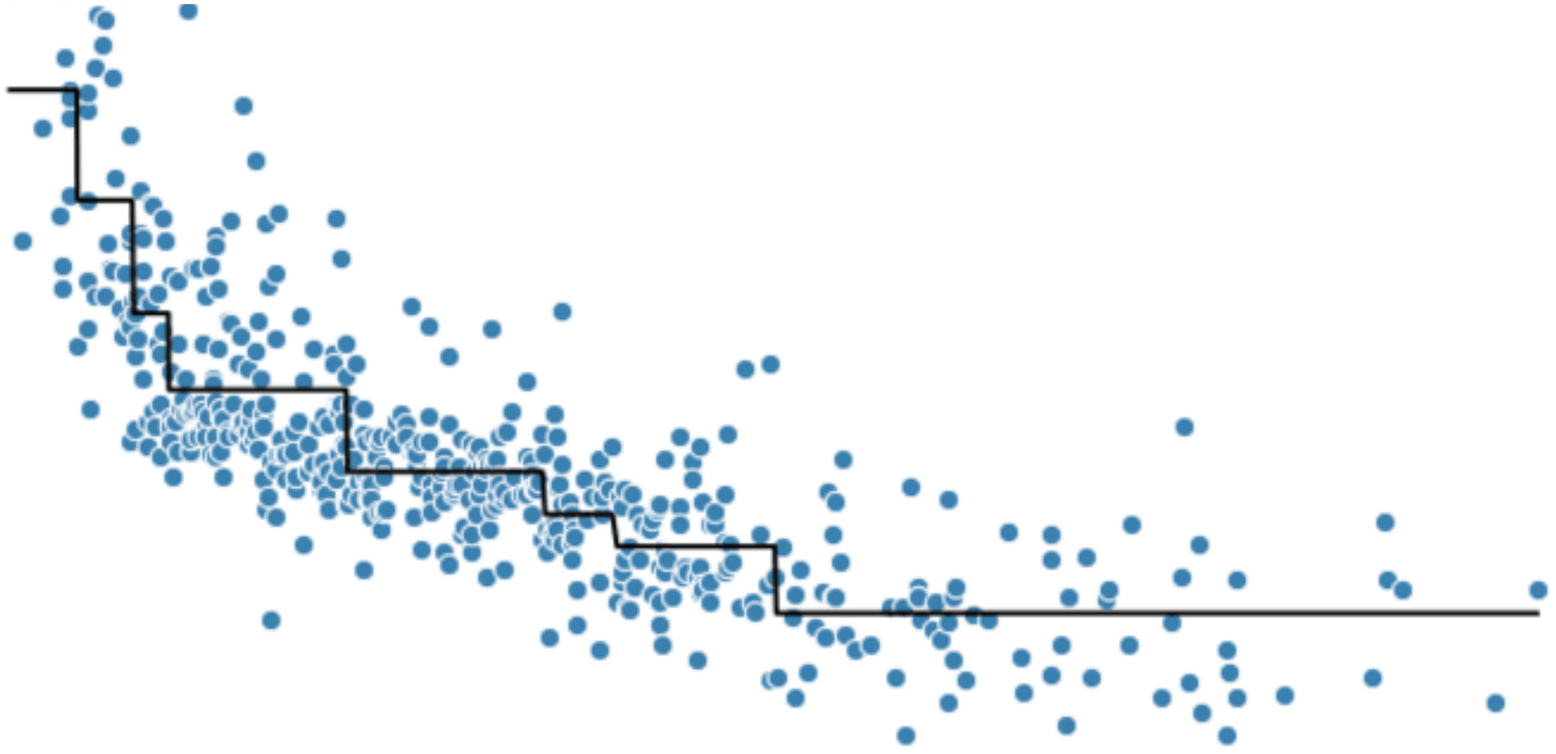

House data of city Branalle
Price (dollars)
160000
140000
120000
100000
80000
60000
40000
20000
0
0
500
1000
1500
2000
2500
3000
Area (meter squared)

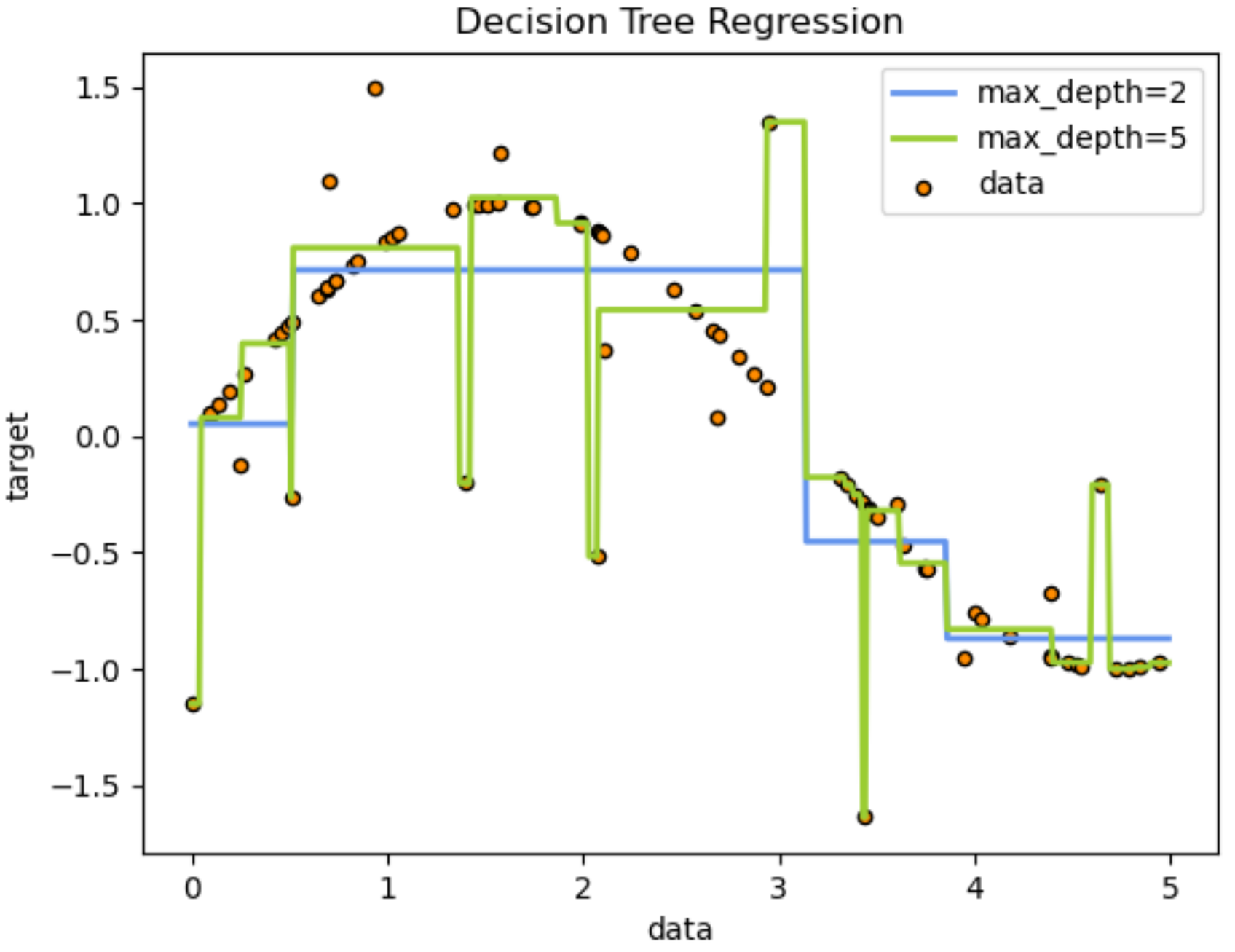

45
40
35
30
25
20
15
10
5
MPG
2000
3000
4000
5000
Weight
50
100
150
200
250
Horsepower


Regression Trees


hour <= 6.5
mse = 471.586
samples = 1541
value = 36.864
True
False
hour <= 0.5
mse = 144.995
samples = 399
value = 15.085
hour <= 11.5
mse = 362.078
samples = 1142
value = 44.473
mse = 322.97
samples = 38
value = 28.237
hour <= 5.5
mse = 106.138
samples = 361
value = 13.701
ready <= 282.0
mse = 192.76
samples = 380
value = 34.058
precipitation <= 0.05
mse = 365.445
samples = 762
value = 49.667
weekday <= 4.5
mse = 84.91
samples = 285
value = 11.835
mse = 123.737
samples = 76
value = 20.697
ready <= 205.5
mse = 185.856
samples = 93
value = 24.419
weekday <= 5.5
mse = 155.138
samples = 287
value = 37.181
ready <= 224.0
mse = 324.595
samples = 620
value = 53.348
ready <= 253.5
mse = 226.213
samples = 142
value = 33.592
humidity <= 97.5
mse = 47.959
samples = 204
value = 9.191
hour <= 2.5
mse = 116.028
samples = 81
value = 18.494
mse = 35.265
samples = 14
value = 8.143
humidity <= 86.5
mse = 157.275
samples = 79
value = 27.304
precipitation <= 0.8
mse = 153.001
samples = 253
value = 38.498
mse = 62.119
samples = 34
value = 27.382
mse = 104.248
samples = 20
value = 20.95
hour <= 20.5
mse = 295.785
samples = 600
value = 54.428
mse = 140.75
samples = 24
value = 18.5
precipitation <= 0.65
mse = 187.851
samples = 118
value = 36.661
hour <= 4.5
mse = 28.228
samples = 200
value = 8.68
mse = 368.188
samples = 4
value = 34.75
mse = 156.328
samples = 20
value = 29.65
mse = 48.629
samples = 61
value = 14.836
mse = 130.619
samples = 47
value = 32.383
mse = 102.882
samples = 32
value = 19.844
ready <= 580.5
mse = 150.964
samples = 240
value = 39.167
mse = 29.976
samples = 13
value = 26.154
hour <= 15.5
mse = 274.753
samples = 522
value = 56.713
ready <= 350.5
mse = 167.916
samples = 78
value = 39.141
mse = 187.879
samples = 65
value = 42.538
mse = 93.493
samples = 53
value = 29.453
hour <= 1.5
mse = 18.927
samples = 152
value = 7.184
mse = 28.16
samples = 48
value = 13.417
temp <= 7.85
mse = 148.522
samples = 227
value = 39.877
mse = 31.101
samples = 13
value = 26.769
temp <= 9.35
mse = 190.793
samples = 237
value = 50.215
hour <= 19.5
mse = 280.271
samples = 285
value = 62.116
mse = 198.765
samples = 28
value = 47.143
mse = 94.704
samples = 50
value = 34.66
mse = 21.826
samples = 24
value = 11.917
temp <= 12.15
mse = 13.396
samples = 128
value = 6.297
weekday <= 4.5
mse = 137.368
samples = 172
value = 38.099
mse = 142.61
samples = 55
value = 45.436
ready <= 739.5
mse = 163.304
samples = 172
value = 47.436
mse = 189.014
samples = 65
value = 57.569
weekday <= 3.5
mse = 275.019
samples = 219
value = 64.731
mse = 199.731
samples = 66
value = 53.439
precipitation <= 1.6
mse = 12.737
samples = 126
value = 6.183
mse = 2.25
samples = 2
value = 13.5
humidity <= 68.5
mse = 143.799
samples = 143
value = 39.182
mse = 71.356
samples = 29
value = 32.759
sun <= 21.5
mse = 152.644
samples = 171
value = 47.696
mse = 0.0
samples = 1
value = 3.0
temp <= 12.7
mse = 259.531
samples = 129
value = 61.938
weekday <= 5.5
mse = 270.018
samples = 90
value = 68.733
hour <= 2.5
mse = 12.098
samples = 123
value = 6.089
mse = 24.0
samples = 3
value = 10.0
mse = 91.75
samples = 8
value = 26.0
temp <= 2.0
mse = 135.976
samples = 135
value = 39.963
ready <= 256.5
mse = 147.388
samples = 125
value = 45.936
mse = 135.641
samples = 46
value = 52.478
ready <= 285.5
mse = 223.306
samples = 122
value = 60.852
mse = 512.408
samples = 7
value = 80.857
mse = 250.062
samples = 63
value = 73.968
mse = 103.435
samples = 27
value = 56.519
mse = 16.842
samples = 26
value = 7.346
hour <= 3.5
mse = 10.289
samples = 97
value = 5.753
mse = 171.442
samples = 21
value = 45.286
ready <= 378.5
mse = 123.263
samples = 114
value = 38.982
mse = 233.412
samples = 17
value = 38.0
hour <= 14.5
mse = 122.373
samples = 108
value = 47.185
mse = 354.347
samples = 20
value = 53.45
ready <= 418.0
mse = 184.761
samples = 102
value = 62.304
mse = 10.998
samples = 48
value = 4.958
mse = 8.372
samples = 49
value = 6.531
mse = 118.351
samples = 70
value = 37.386
mse = 120.568
samples = 44
value = 41.523
weekday <= 2.5
mse = 110.814
samples = 82
value = 45.646
mse = 127.806
samples = 26
value = 52.038
weekday <= 2.5
mse = 192.446
samples = 80
value = 64.438
mse = 80.066
samples = 22
value = 54.545
mse = 102.567
samples = 33
value = 42.091
mse = 102.121
samples = 49
value = 48.041
mse = 141.112
samples = 71
value = 62.986
mse = 449.654
samples = 9
value = 75.889


ready <= 285.5
mse = 223.306
samples = 122
value = 60.852
mse = 354.347
samples = 20
value = 53.45
ready <= 418.0
mse = 184.761
samples = 102
value = 62.304
weekday <= 2.5
mse = 192.446
samples = 80
value = 64.438
mse = 80.066
samples = 22
value = 54.545
mse = 141.112
samples = 71
value = 62.986
mse = 449.654
samples = 9
value = 75.889




Decision Tree Regression
max_depth=2
max_depth=5
data
target
data
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
0
1
2
3
4
5

But what has this to do with neural networks?

Nothing 😊

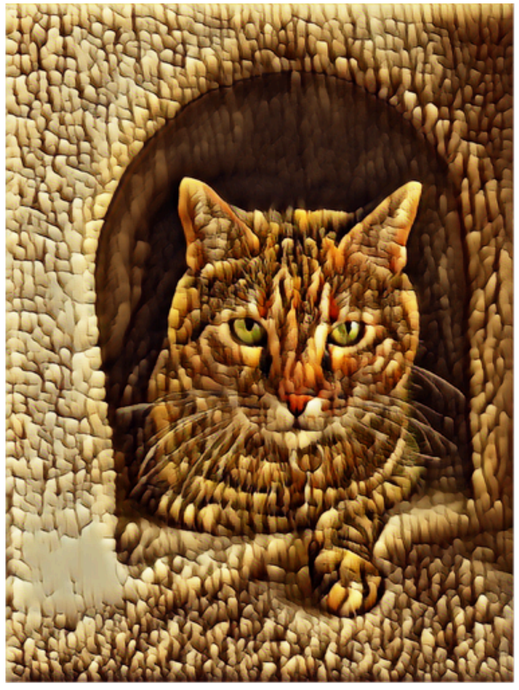
Why are you telling us this?

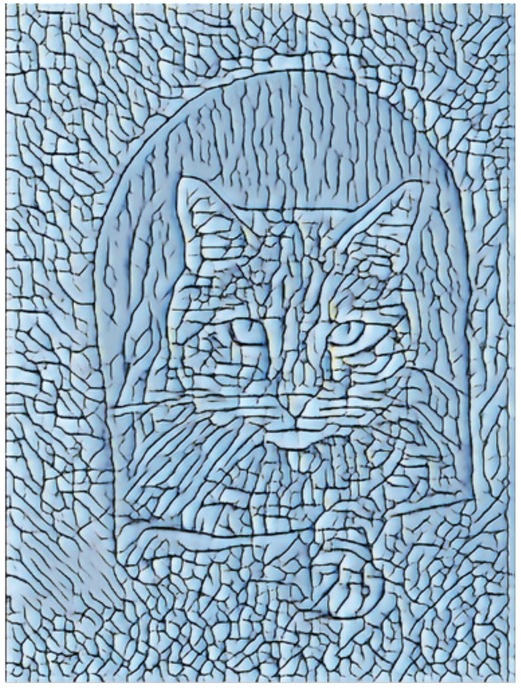
It's CreateML's only method for regression 😊

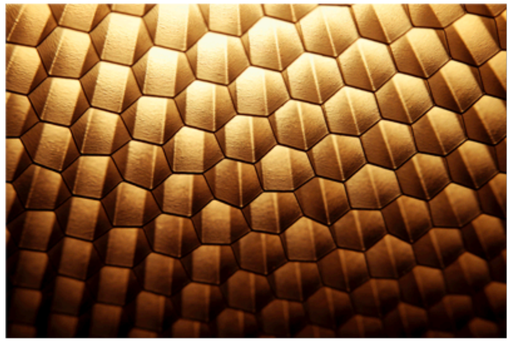
Live Demo!

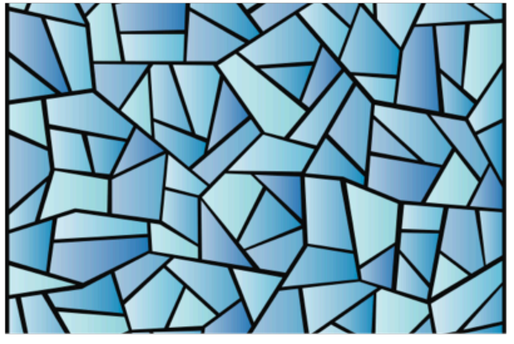
Style Transfer

By Google





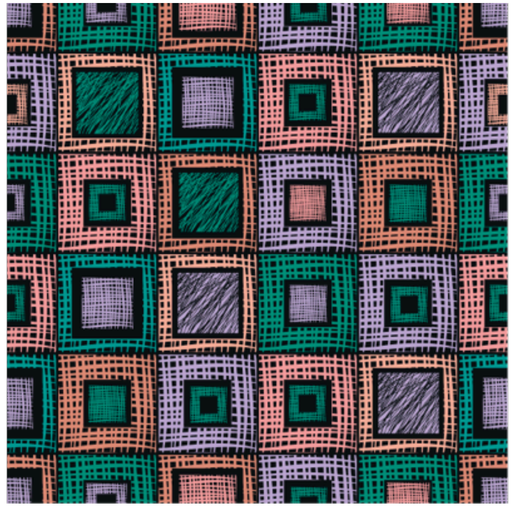










OPEN
OPEN


The style transfer system in Turi Create uses Convolutional Neural Networks (CNNs) to create high quality artistic images. Broadly speaking, we use CNNs to separate and recombine the content and style elements of arbitrary images.

TuriCreate Docs

CreateML
Conclusion

- Not designed for scientific use cases
- Custom made models outperform CreateML’s quite easily
- Complicated Machine Learning tasks become very simple
- No setup to try out at home
- Fits into ecosystem