7 Categorical Data Encoding Techniques blog. Daily Dose of Ds. com



1) One-hot encoding



Green	Red	Black	Orange
1	0	0	0
0	1	0	0
0	0	1	0
0	0	0	1

2) Dummy encoding

3) Effect encoding

Green	Red	Black
1	0	0
0	1	0
0	0	1
-1	-1	-1

Set value of row with all zeros to -1

Green	Red	Black
1	0	0
0	1	0
0	0	1
0	0	0

Drop one feature randomly from one-hot encoding

4) Label encoding

Color	
Green	
Red	
Black	

Green

Assign unique labels to each category

Encodin	9
1	Ī
2	Ī
3	
1	

5) Ordinal encoding

Γ	Size
r	xs
r	S
Г	L
r	M

Assign unique labels to each category

E	Encoding		
	1		
	2		
	4		
	3		

ordered categories

6) Count encoding

Color
Green
Red
Black
Green

Encode based on frequency

Encodin	19
2	
1	Ī
1	
2	Ī

7) Binary encoding

Color
Green
Red
Black
Green

Assign binary labels

Color_0	Color_1
0	0
0	1
1	0
1	1

