

Assignment 4 Pokémon Classification










Introduction/Problem

The final project for this course involves collecting data on various Pokémon. Specifically, their stats featured in the mobile game Pokémon Go! (Type of Pokémon, CP, HP, Stardust for power-up, and Level). Like previous assignments we will be using training and validation sets on the provided dataset. For this assignment I used category classifier to go through the images.

Solution

To find the solution I used category classifier and went through each stat. Classifying the ID, Stardust, HP, CP, and Level by processing each region to match training data and make class predictions using the test features. I then removed all unnecessary findings, found the size of the input image and obtained the grayscale representation. I then found the Top, Bottom, Left, and Right edges by noting the max and min difference between them. Finally cropping out the result based on the indexes found.

Result

Name ▲	Value
 accuracy_CP	0.6547
 accuracy_HP	0.6978
 accuracy_ID	0.5036
 accuracy_stardust	0.4892
 cir_center	[113,131]
 CP	139x1 double
 CP_gt	139x1 double
 HP	139x1 double
 HP_gt	139x1 double

CP		CP		
139x1 double		139x1 double		
	1	1	2	3
1	130	28		
2	347	51		
3	1541	11		
4	12655	26		
5	41	610		
6	1832	8555		
7	222	3		
8	1573	105		
9	1	10		
10	10	0		
11	343	51		
12	152	555		