unittest.test_image

+im : array
+ test: Image()

+ test_debug(None): None
+ test_find_intersection(None): None
+ test_finding_left_most_pt(None): None
+test_get_ROI(None): None

unittest.test_Trainer

+train_path: string
+val_path: string

+ test_trainer(None): None
+test_classifier(None): None

unittest.test_ImageLoader

+ rel_path : string
+test : Image_loader

+test_len(None): None
+test_setters(None): None
+ test_display_images(None): None
+test_create_labels(None):

Image

- DEBUG: boolean
- im: array

+ debug(None): None
+ get_ROI(array, integer): array, array
+ extract_digits(array): list
+ pad_image(array): padded array
+ filter_heights(array): array
+ filter_wdth(array): array
+filter_dominant_color(array, array): array
+find_dominant_color(array): array
+find_dominant_color_ls(list): array
+ crop_img(array, array): array
+f ilter_areas(array): arrays
+ give_five_num_summary(list): list

+ sort_bboxes(array, array): array
+ remove_outliers(list, array): array
+ find_IQR(list): float
+ find_area(array): float
+ non_max_suppression(array): array
+ make_new_region(array, array): array
+ show_debug_boxes(array, array, string): None
+ resize_image(array, integer, integer): array
+ group_clusters(array): clusters
+ find_clusters(array, float, float): array
+ filter_bounding_boxes (array, float, float): array
+ find_leftmost_pt(array, boolean): array
+ find_intersection(array, array, boolean): tuple
+ draw_boxes(array, array, tuple): None
- validate_image(array): araray

Trainer

- mode: string
- train_path: string
- val_path : string
- trainner : kNN object

+ train(None): kNN object
+classify(array, integer): array, array
+ add_noise(array): array

ImageLoader

- path: string

- mode: string
- data : list of string
- image_indx : integer

+ load(string): list of strings
+ load_dir(string): list of strings
+ load_image(string): array
+ create_labels(None): list of strings
+ __iter__(None): self
+ __len__(None): length of self
+ __next__(None): array
- validate_path(string): string
- validate_mode(string): string

Main