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Permit me to introduce myself...

usage: simrdwn.py [-h] [--framework FRAMEWORK] [--mode MODE] [--gpu GPU]
                  [--single_gpu_machine SINGLE_GPU_MACHINE] [--nbands NBANDS]
                  [--outname OUTNAME] [--label_map_path LABEL_MAP_PATH]
                  [--weight_dir WEIGHT_DIR] [--weight_file WEIGHT_FILE]
                  [--append_date_string APPEND_DATE_STRING]
                  [--train_data_dir TRAIN_DATA_DIR]
                  [--yolt_train_images_list_file YOLT_TRAIN_IMAGES_LIST_FILE]
                  [--max_batches MAX_BATCHES] [--batch_size BATCH_SIZE]
                  [--train_input_width TRAIN_INPUT_WIDTH]
                  [--train_input_height TRAIN_INPUT_HEIGHT]
                  [--tf_cfg_train_file TF_CFG_TRAIN_FILE]
                  [--train_tf_record TRAIN_TF_RECORD]
                  [--train_val_tf_record TRAIN_VAL_TF_RECORD]
                  [--yolt_object_labels_str YOLT_OBJECT_LABELS_STR]
                  [--train_model_path TRAIN_MODEL_PATH]
                  [--use_tfrecords USE_TFRECORDS]
                  [--test_presliced_tfrecord_part TEST_PRESLICED_TFRECORD_PART]
                  [--test_presliced_list TEST_PRESLICED_LIST]
                  [--testims_dir TESTIMS_DIR]
                  [--slice_sizes_str SLICE_SIZES_STR]
                  [--edge_buffer_test EDGE_BUFFER_TEST]
                  [--max_edge_aspect_ratio MAX_EDGE_ASPECT_RATIO]
                  [--slice_overlap SLICE_OVERLAP]
                  [--nms_overlap_thresh NMS_OVERLAP_THRESH]
                  [--test_box_rescale_frac TEST_BOX_RESCALE_FRAC]
                  [--test_slice_sep TEST_SLICE_SEP]
                  [--val_df_root_init VAL_DF_ROOT_INIT]
                  [--val_df_root_aug VAL_DF_ROOT_AUG]
                  [--test_splitims_locs_file_root TEST_SPLITIMS_LOCS_FILE_ROOT]
                  [--test_prep_only TEST_PREP_ONLY] [--BGR2RGB BGR2RGB]
                  [--overwrite_inference_graph OVERWRITE_INFERENCE_GRAPH]
                  [--min_retain_prob MIN_RETAIN_PROB]
                  [--test_add_geo_coords TEST_ADD_GEO_COORDS]
                  [--yolt_nms_thresh YOLT_NMS_THRESH]
                  [--plot_thresh_str PLOT_THRESH_STR]
                  [--show_labels SHOW_LABELS] [--alpha_scaling ALPHA_SCALING]
                  [--show_test_plots SHOW_TEST_PLOTS] [--save_json SAVE_JSON]
                  [--rotate_boxes ROTATE_BOXES]
                  [--plot_line_thickness PLOT_LINE_THICKNESS]
                  [--n_test_output_plots N_TEST_OUTPUT_PLOTS]
                  [--test_make_legend_and_title TEST_MAKE_LEGEND_AND_TITLE]
                  [--test_im_compression_level TEST_IM_COMPRESSION_LEVEL]
                  [--keep_test_slices KEEP_TEST_SLICES]
                  [--shuffle_val_output_plot_ims SHUFFLE_VAL_OUTPUT_PLOT_IMS]
                  [--yolt_cfg_file YOLT_CFG_FILE]
                  [--subdivisions SUBDIVISIONS] [--use_opencv USE_OPENCV]
                  [--boxes_per_grid BOXES_PER_GRID]
                  [--building_csv_file BUILDING_CSV_FILE]
                  [--train_model_path2 TRAIN_MODEL_PATH2]
                  [--label_map_path2 LABEL_MAP_PATH2]
                  [--weight_dir2 WEIGHT_DIR2] [--weight_file2 WEIGHT_FILE2]
                  [--slice_sizes_str2 SLICE_SIZES_STR2]
                  [--plot_thresh_str2 PLOT_THRESH_STR2]
                  [--inference_graph_path2 INFERENCE_GRAPH_PATH2]
                  [--yolt_cfg_file2 YOLT_CFG_FILE2]
                  [--val_df_root_init2 VAL_DF_ROOT_INIT2]
                  [--val_df_root_aug2 VAL_DF_ROOT_AUG2]
                  [--test_splitims_locs_file_root2 TEST_SPLITIMS_LOCS_FILE_ROOT2]
                  [--val_df_root_tot VAL_DF_ROOT_TOT]
                  [--val_prediction_df_refine_tot_root_part
                 VAL_PREDICTION_DF_REFINE_TOT_ROOT_PART]
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                  [--multi_band_delim MULTI_BAND_DELIM]
                  [--zero_frac_thresh ZERO_FRAC_THRESH]
                  [--str_delim STR_DELIM]

optional arguments:
  -h, --help            show this help message and exit
  --framework FRAMEWORK
                        object detection framework [yolt2, 'yolt3', ssd,
                        faster_rcnn]
  --mode MODE           [compile, test, train, test]
  --gpu GPU             GPU number, set < 0 to turn off GPU support
  --single_gpu_machine SINGLE_GPU_MACHINE
                        Switch to use a machine with just one gpu
  --nbands NBANDS       Number of input bands (e.g.: for RGB use 3)
  --outname OUTNAME     unique name of output
  --label_map_path LABEL_MAP_PATH
                        Object classes, /raid/local/src/simrdwn2/data/class_la
                        bels_airplane_boat_car.pbtxt
  --weight_dir WEIGHT_DIR
                        Directory holding trained weights
  --weight_file WEIGHT_FILE
                        Input weight file
  --append_date_string APPEND_DATE_STRING
                        Switch to append date to results filename
  --train_data_dir TRAIN_DATA_DIR
                        folder holding training image names, if empty
                        simrdwn_dir/data/
  --yolt_train_images_list_file YOLT_TRAIN_IMAGES_LIST_FILE
                        file holding training image names, should be in
                        simrdwn_dir/data/
  --max_batches MAX_BATCHES
                        Max number of training batches
  --batch_size BATCH_SIZE
                        Number of images per batch
  --train_input_width TRAIN_INPUT_WIDTH
                        Size of image to input to YOLT [n-boxes * 32: 415,
                        544, 608, 896
  --train_input_height TRAIN_INPUT_HEIGHT
                        Size of image to input to YOLT
  --tf_cfg_train_file TF_CFG_TRAIN_FILE
                        Configuration file for training
  --train_tf_record TRAIN_TF_RECORD
                        tfrecord for training
  --train_val_tf_record TRAIN_VAL_TF_RECORD
                        tfrecord for test during training
  --yolt_object_labels_str YOLT_OBJECT_LABELS_STR
                        yolt labels str: car,boat,giraffe
  --train_model_path TRAIN_MODEL_PATH
                        Location of trained model
  --use_tfrecords USE_TFRECORDS
                        Switch to use tfrecords for inference
  --test_presliced_tfrecord_part TEST_PRESLICED_TFRECORD_PART
                        Location of presliced training data tfrecord if empty
                        us test_presliced_list
  --test_presliced_list TEST_PRESLICED_LIST
                        Location of presliced training data list if empty, use
                        tfrecord
  --testims_dir TESTIMS_DIR
                        Location of test images (look within simrdwn_dir
                        unless begins with /)
  --slice_sizes_str SLICE_SIZES_STR
                        Proposed pixel slice sizes for test, will be split
                        into array by commas (e.g.: '0.2,0.3' =>
                        [0.2,0.3])(Set to < 0 to not slice
  --edge_buffer_test EDGE_BUFFER_TEST
                        Buffer around slices to ignore boxes (helps with
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                        truncated boxes and stitching) set <0 to turn off if
                        not slicing test ims
    --max_edge_aspect_ratio MAX_EDGE_ASPECT_RATIO
                        Max aspect ratio of any item within the above buffer
    --slice_overlap SLICE_OVERLAP
                        Overlap fraction for sliding window in test
    --nms_overlap_thresh NMS_OVERLAP_THRESH
                        Overlap threshold for non-max-suppresion in python
                        (set to <0 to turn off)
    --test_box_rescale_frac TEST_BOX_RESCALE_FRAC
                        Defaults to 1, rescale output boxes if training boxes
                        are the wrong size
    --test_slice_sep TEST_SLICE_SEP
                        Character(s) to split test image file names
    --val_df_root_init VAL_DF_ROOT_INIT
                        Results in dataframe format
    --val_df_root_aug VAL_DF_ROOT_AUG
                        Results in dataframe format
    --test_splitims_locs_file_root TEST_SPLITIMS_LOCS_FILE_ROOT
                        Root of test_splitims_locs_file
    --test_prep_only TEST_PREP_ONLY
                        Switch to only prep files, not run anything
    --BGR2RGB BGR2RGB   Switch to flip training files to RGB from cv2 BGR
    --overwrite_inference_graph OVERWRITE_INFERENCE_GRAPH
                        Switch to always overwrite inference graph
    --min_retain_prob MIN_RETAIN_PROB
                        minimum probability to retain for test
    --test_add_geo_coords TEST_ADD_GEO_COORDS
                        switch to add geo coords to test outputs
    --yolt_nms_thresh YOLT_NMS_THRESH
                        Defaults to 0.5 in yolt.c, set to 0 to turn off nms in
                        C
    --plot_thresh_str PLOT_THRESH_STR
                        Proposed thresholds to try for test, will be split
                        into array by commas (e.g.: '0.2,0.3' => [0.2,0.3])
    --show_labels SHOW_LABELS
                        Switch to use show object labels
    --alpha_scaling ALPHA_SCALING
                        Switch to scale box alpha with probability
    --show_test_plots SHOW_TEST_PLOTS
                        Switch to show plots in real time in test
    --save_json SAVE_JSON
                        Switch to save a json in test
    --rotate_boxes ROTATE_BOXES
                        Attempt to rotate output boxes using hough lines
    --plot_line_thickness PLOT_LINE_THICKNESS
                        Thickness for test output bounding box lines
    --n_test_output_plots N_TEST_OUTPUT_PLOTS
                        Switch to save test pngs
    --test_make_legend_and_title TEST_MAKE_LEGEND_AND_TITLE
                        Switch to make legend and title
    --test_im_compression_level TEST_IM_COMPRESSION_LEVEL
                        Compression level for output images. 1-9 (9 max
                        compression
    --keep_test_slices KEEP_TEST_SLICES
                        Switch to retain sliced test files
    --shuffle_val_output_plot_ims SHUFFLE_VAL_OUTPUT_PLOT_IMS
                        Switch to shuffle images for plotting, if 0, images
                        are sorted
    --yolt_cfg_file YOLT_CFG_FILE
                        Configuration file for network, in cfg directory
    --subdivisions SUBDIVISIONS
                        Subdivisions per batch
    --use_opencv USE_OPENCV
                        1 == use_opencv
    --boxes_per_grid BOXES_PER_GRID
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                        Bounding boxes per grid cell
    --building_csv_file BUILDING_CSV_FILE
                        csv file for spacenet outputs
    --train_model_path2 TRAIN_MODEL_PATH2
                        Location of trained model
    --label_map_path2 LABEL_MAP_PATH2
                        Object classes
    --weight_dir2 WEIGHT_DIR2
                        Directory holding trained weights
    --weight_file2 WEIGHT_FILE2
                        Input weight file for second inference scale
    --slice_sizes_str2 SLICE_SIZES_STR2
                        Proposed pixel slice sizes for test2 == secondweight
                        file. Will be split into array by commas (e.g.:
                        '0.2,0.3' => [0.2,0.3])
    --plot_thresh_str2 PLOT_THRESH_STR2
                        Proposed thresholds to try for test2, will be split
                        into array by commas (e.g.: '0.2,0.3' => [0.2,0.3])
    --inference_graph_path2 INFERENCE_GRAPH_PATH2
                        Location of inference graph for tensorflow object
                        detection API
    --yolt_cfg_file2 YOLT_CFG_FILE2
                        YOLT configuration file for network, in cfg directory
    --val_df_root_init2 VAL_DF_ROOT_INIT2
                        Results in dataframe format
    --val_df_root_aug2 VAL_DF_ROOT_AUG2
                        Results in dataframe format
    --test_splitims_locs_file_root2 TEST_SPLITIMS_LOCS_FILE_ROOT2
                        Root of test_splitims_locs_file
    --val_df_root_tot VAL_DF_ROOT_TOT
                        Results in dataframe format
    --val_prediction_df_refine_tot_root_part VAL_PREDICTION_DF_REFINE_TOT_ROOT_PART
                        Refined results in dataframe format
    --multi_band_delim MULTI_BAND_DELIM
                        Delimiter for multiband data
    --zero_frac_thresh ZERO_FRAC_THRESH
                        If less than this value of an image chip is blank,
                        skip it
    --str_delim STR_DELIM
                        Delimiter for string lists
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