```yaml
 1  PIN: # Pin declaration with BCM format
 2      pwm_speed: 18
 3      pwm_steering: 19
 4      proximity_trigger: 23
 5      proximity_echo: 24
 6
 7  APP:
 8      max_fps: 100
 9
10  CAMERA:
11      focal_lenght: 1.8 #mm
12      sensor_shape: [3.674, 2.738] #mm
13      parameters:
14          resolution: [320, 240] #[640, 480] #[2592,1944]  #
15          framerate: ~
16          sensor_mode: 2
17          awb_mode: 'auto'
18          awb_gains: ~
19          exposure_mode: 'auto'
20          exposure_speed: ~
21          iso: ~
22          brightness: ~
23          contrast: ~
24          saturation: ~
25          sharpness: ~
26
27  IMAGE_PROCESSING:
28      calibration:
29          param_file: "resources/cameraCalibrationParam_V2.pickle"
30      perspective_warp:
31          points_resolution: [2592, 1952] #in px
32          points: #in px
33              - [896, 920]
34              - [1819, 925]
35              - [2461, 1800]
36              - [262, 1803]
37          realworld_line_distance: [50,50] #[width, high] in cm
38          warp_margin: [80, 0, 80, 10] #[left, top, right, bottom] in % of the  ⮑
                base image
39      hsv_threshold:
40          low: [2,60,80] # [h,s,v]
41          high: [40,215,255]
42      line_filtering:
43          min_area: 0.1 # in % of img area
44          max_SD: 0.002 #standard deviation
45          slop_margin: 0.5
46          history_size: 5
47      line_spacing: 574
48
49  PROXIMITY:
50      min_distance: 0.5 #meter
51      max_fps: 20
52
```

```yaml
53  OBJECT_DETECTION:
54      model_fname: 'resources/model_quantized_edgetpu_V2.tflite'
55      match_threshold: 0.3 #%
56      max_obj: 3
57      detection_distance: 500 #mm
58      obj_height: #mm
59          StopSign: 80
60          TrafficLight: 80
61          SpeedLimit: 70
62          Battery: 70
63      stop_sign_wait_time: 3 #s
64      max_fps: 20
65
66  CAR:
67      speed_pwm_dc_min: 1.4
68      speed_pwm_dc_max: 1.8
69      steering_pwm_dc_min: 1.2
70      steering_pwm_dc_max: 1.8
71      real_speed_25: 0.35 #from 0 to 1
72      real_speed_50: 0.4 #from 0 to 1
73
74  CONTROLLER:
75      event_filename: '/dev/input/event0'
76      btn_start: "BTN_A" #List of inputs can be found in "linux/input.h" source ⮡
          code
77      btn_stop: "BTN_X"
78
79  DISPLAY:
80      show_plots: False
81      show_cam_preview: False
82      show_fps: True
83      linecolor_right: [0,255,0] #[255,0,255] #rgb
84      lineColor_left: [0,255,0] #[255,255,0] #rgb
85      lineColor_rejected: [255,0,0] #rgb
86      textColor: [0,255,255] #rgb
87
88
```