Conversion to Blur .py - C:/Users/chgan/AppData/Local/Programs/Python/Python311/...

File Edit Format Run Options Window Help

```python
import cv2
import numpy as np

kernel = np.ones((5,5),np.uint8)
print(kernel)

path = "C:\\Users\\chgan\\Desktop\\KANGAROOS.jpeg"
img =cv2.imread(path)
imgGray = cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
imgBlur = cv2.GaussianBlur(imgGray,(7,7),0)

cv2.imshow("Img Blur",imgBlur)
cv2.waitKey(0)
```

Ln: 13 Col: 14

Blur.png

27%

Img outline.py - C:/Users/chgan/AppData/Local/Programs/Python/Python311/Img outl...

File Edit Format Run Options Window Help

```python
import cv2
import numpy as np

kernel = np.ones((5,5),np.uint8)
print(kernel)

path = r"C:\Users\chgan\Downloads\LH 44.jpg"
img =cv2.imread(path)
imgGray = cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
imgBlur = cv2.GaussianBlur(imgGray,(7,7),0)
imgCanny = cv2.Canny(imgBlur,100,200)

cv2.imshow("Img Canny",imgCanny)
cv2.waitKey(0)
```

Ln: 14 Col: 0

Close

Img Canny.png

37%

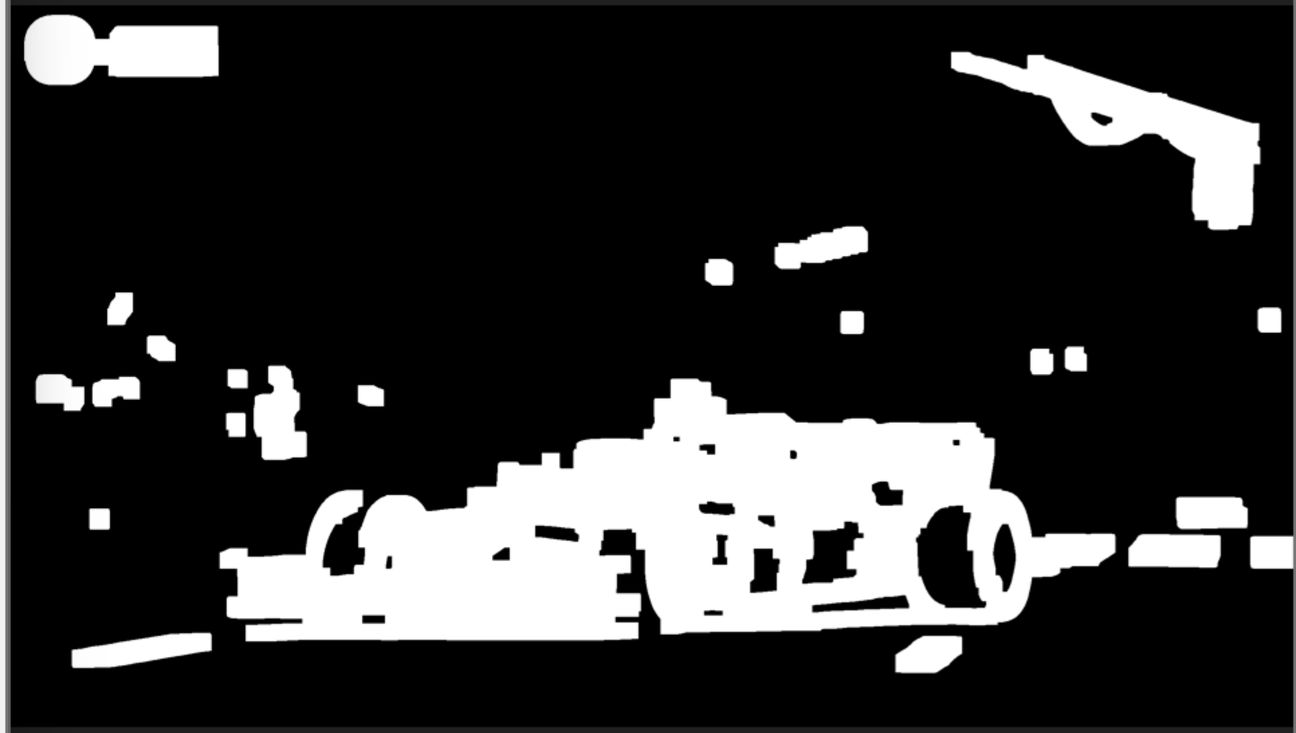
Read Img and Dilate Img.py - C:/Users/chgan/AppData/Local/Programs/Python/Python...

File Edit Format Run Options Window Help

```
import cv2
import numpy as np

kernel = np.ones((5,5),np.uint8)
print(kernel)

path = r"C:\Users\chgan\Downloads\W11 NYC.png"

img =cv2.imread(path)
imgGray = cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
imgBlur = cv2.GaussianBlur(imgGray,(7,7),0)
imgCanny = cv2.Canny(imgBlur,100,200)
imgDilation = cv2.dilate(imgCanny,kernel , iterations = 10)
imgEroded = cv2.erode(imgDilation,kernel,iterations=2)

cv2.imshow("Img Erosion",imgEroded)
cv2.waitKey(0)
```

Ln: 18 Col: 0

Img Erosion.png



37%

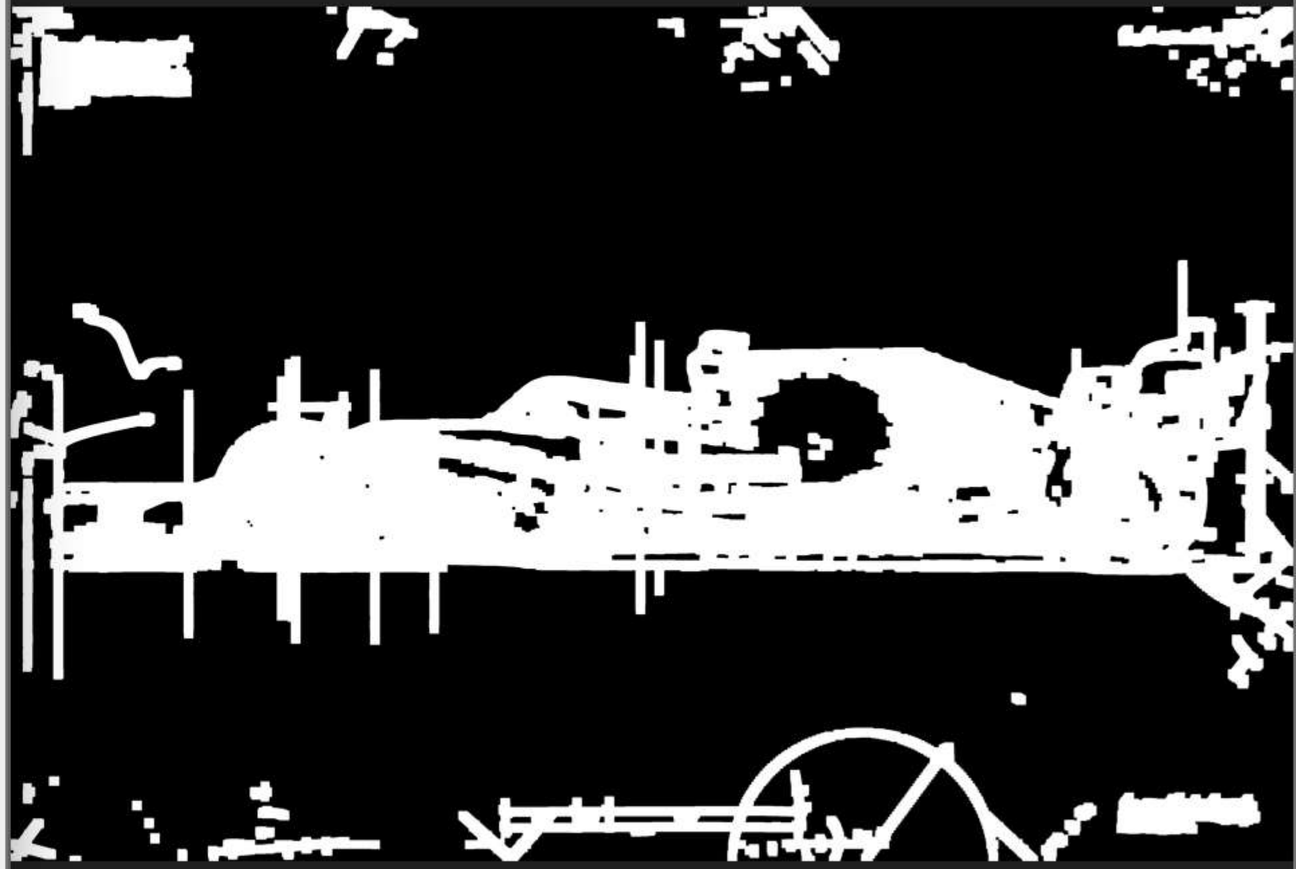
Img Ersoion.py - C:/Users/chgan/AppData/Local/Programs/Python/Python311/Img Ers...

File Edit Format Run Options Window Help

```
import cv2
import numpy as np

kernel = np.ones((5,5),np.uint8)
print(kernel)

path = r"C:\Users\chgan\Downloads\W13.jpg"
img =cv2.imread(path)
imgGray = cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
imgBlur = cv2.GaussianBlur(imgGray,(7,7),0)
imgCanny = cv2.Canny(imgBlur,100,200)
imgDilation = cv2.dilate(imgCanny,kernel , iterations = 10)
imgEroded = cv2.erode(imgDilation,kernel,iterations=2)

cv2.imshow("Img Erosion",imgEroded)
cv2.waitKey(0)
```

Ln: 17 Col: 0

Img Erosion 2.p...



19%

Video FM & SM.py - C:/Users/chgan/AppData/Local/Programs/Python/Python311/Vid...

File Edit Format Run Options Window Help

```
import cv2
import numpy as np

cap = cv2.VideoCapture("C:\\Users\\chgan\\Downloads\\LEWIS HAMILTON WINS THE

if (cap.isOpened()== False):
 print("Error opening video file")
while(cap.isOpened()):
 ret, frame = cap.read()
 if ret == True:
  cv2.imshow('Frame', frame)
  if cv2.waitKey(250) & 0xFF == ord('q'):
   break
 else:
  break

cap.release()
cv2.destroyAllWindows()
```

Ln: 19 Col: 0

Frame.png

74%

WEBCAM.py - C:/Users/chgan/AppData/Local/Programs/Python/Python311/WEBCAM....

File Edit Format Run Options Window Help

```python
import cv2

video_capture = cv2.VideoCapture(0)
output_file_path = r"C:\Users\chgan\Downloads\WEBCAM.mp4"
fourcc = cv2.VideoWriter_fourcc(*'mp4v')
out = cv2.VideoWriter(output_file_path, fourcc, 20.0, (640, 480))

print("Press 'q' to stop capturing.")

while True:
    ret, frame = video_capture.read()
    if ret:
        out.write(frame)
        cv2.imshow('Webcam Capture', frame)
        if cv2.waitKey(1) & 0xFF == ord('q'):
            break
    else:
        break

video_capture.release()
out.release()
cv2.destroyAllWindows()

print(f"Video saved to {output_file_path}")

def play_slow_motion(video_path):
    cap = cv2.VideoCapture(video_path)
    while cap.isOpened():
        ret, frame = cap.read()
        if ret:
            cv2.imshow('Slow Motion', frame)
            if cv2.waitKey(100) & 0xFF == ord('q'):
                break
        else:
            break
    cap.release()
    cv2.destroyAllWindows()
def play_fast_motion(video_path):
    cap = cv2.VideoCapture(video_path)
    while cap.isOpened():
        ret, frame = cap.read()
        if ret:
            cv2.imshow('Fast Motion', frame)
            if cv2.waitKey(10) & 0xFF == ord('q'):
```

Ln: 53 Col: 0

WEBCAM.png

49%

Img Resize.py - C:/Users/chgan/AppData/Local/Programs/Python/Python311/Img Resiz...

File Edit Format Run Options Window Help

```
import cv2
import numpy as np

kernel = np.ones((5,5),np.uint8)

img = cv2.imread("C:\\Users\\chgan\\Downloads\\REDBULL 2016.jpg",
                 cv2.IMREAD_COLOR)
img = cv2.resize(img,(200,200))

cv2.imshow("image",img)
cv2.waitKey(0)
```

Ln: 12 Col: 0

Img Resize.jpg

100%

Img rotation.png

27%

FERRARI SF-75....

16%

Clock and Anticlock wise.py - C:/Users/chgan/AppData/Local/Programs/Python/Python...

File Edit Format Run Options Window Help

```
import cv2

path = r"C:\Users\chgan\Downloads\FERRARI SF-75.jpg"

src = cv2.imread(path)
window_name = 'Image'
image = cv2.rotate(src, cv2.ROTATE_180)

cv2.imshow(window_name, image)
```

Ln: 3 Col: 52

Affine Transformation.py - C:/Users/chgan/AppData/Local/Programs/Python/Python31...

File Edit Format Run Options Window Help

```
import cv2
import numpy as np

img = cv2.imread("C:\\Users\\chgan\\Downloads\\ALPINE A523.jpg")
rows,cols,_ = img.shape

pts1 = np.float32([[50,50],[200,50],[50,200]])
pts2 = np.float32([[10,100],[200,50],[100,250]])
M = cv2.getAffineTransform(pts1,pts2)
dst = cv2.warpAffine(img,M,(cols,rows))

cv2.imshow("Affine Transform", dst)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

Ln: 15 Col: 0

Affine Transfor...

24%

*Conversion to Grayscale.py - C:/Users/chgan/AppData/Local/Programs/Python/Pytho...

File Edit Format Run Options Window Help

```
import cv2
import numpy as np
kernel = np.ones((5,5),np.uint8)

print(kernel)
path = ("C:\\Users\\chgan\\Desktop\\KANGAROOS.jpeg")
img =cv2.imread(path)

imgGray = cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
cv2.imshow("GrayScale",imgGray)
cv2.waitKey(0)
```

Ln: 12 Col: 0

GrayScale.png

59%