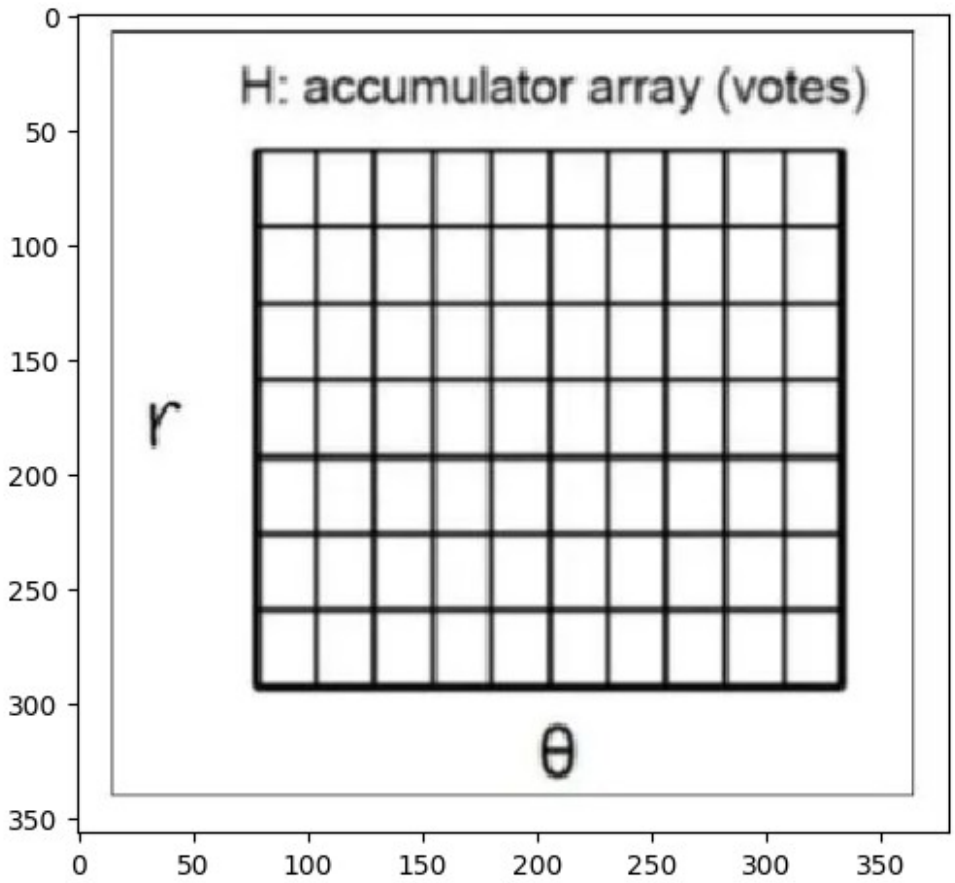
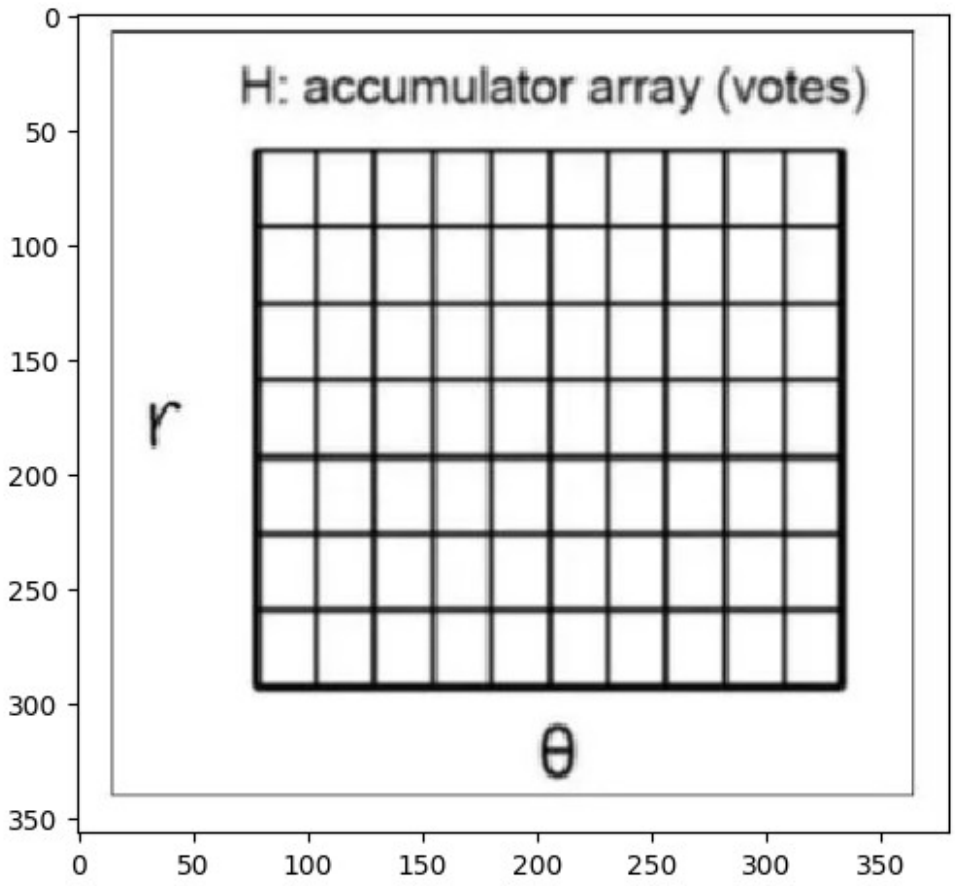
```
import cv2
import skimage
from pathlib import Path
import numpy as np

ASSETS_FOLDER_PATH = "./assets"
OUTPUT_FOLDER_PATH = "."

Path(OUTPUT_FOLDER_PATH).mkdir(parents=True, exist_ok=True)

acumulator = skimage.io.imread(f"{ASSETS_FOLDER_PATH}/acumulator.png")
skimage.io.imshow(acumulator)
```

```
<matplotlib.image.AxesImage at 0x78c050388e20>
```



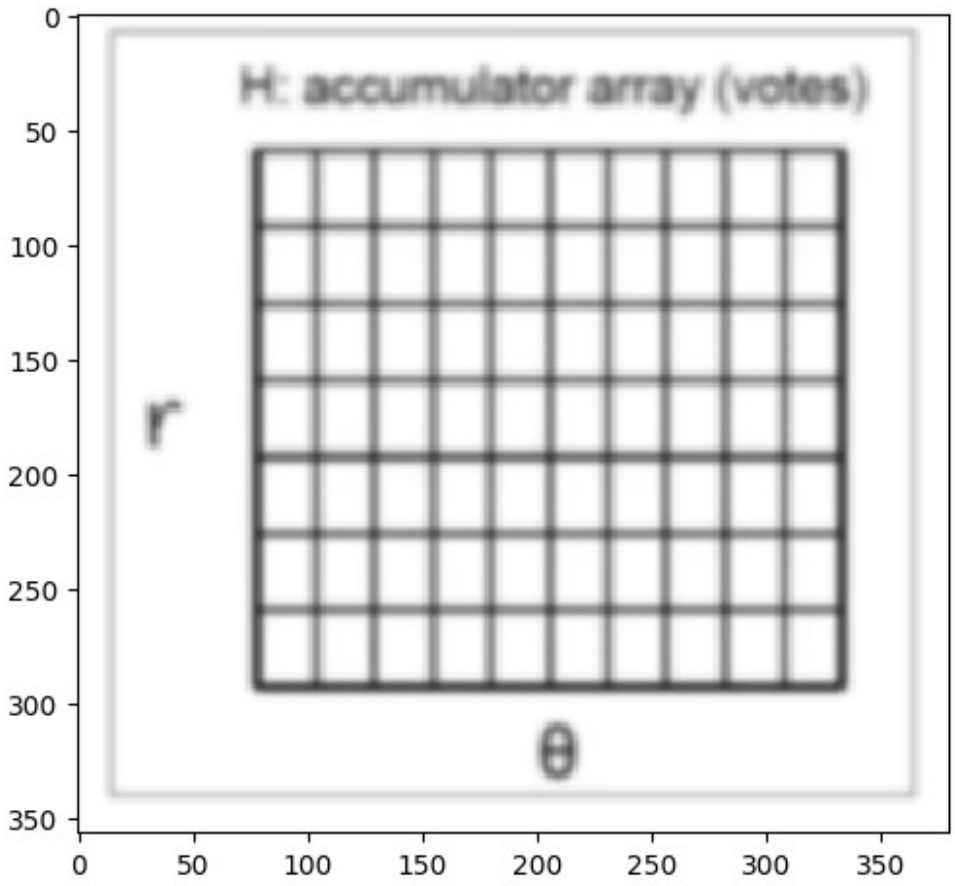

```
acumulator_bw = cv2.cvtColor(acumulator, cv2.COLOR_RGB2GRAY)
skimage.io.imshow(acumulator_bw)
```

```
<matplotlib.image.AxesImage at 0x78c05025dab0>
```



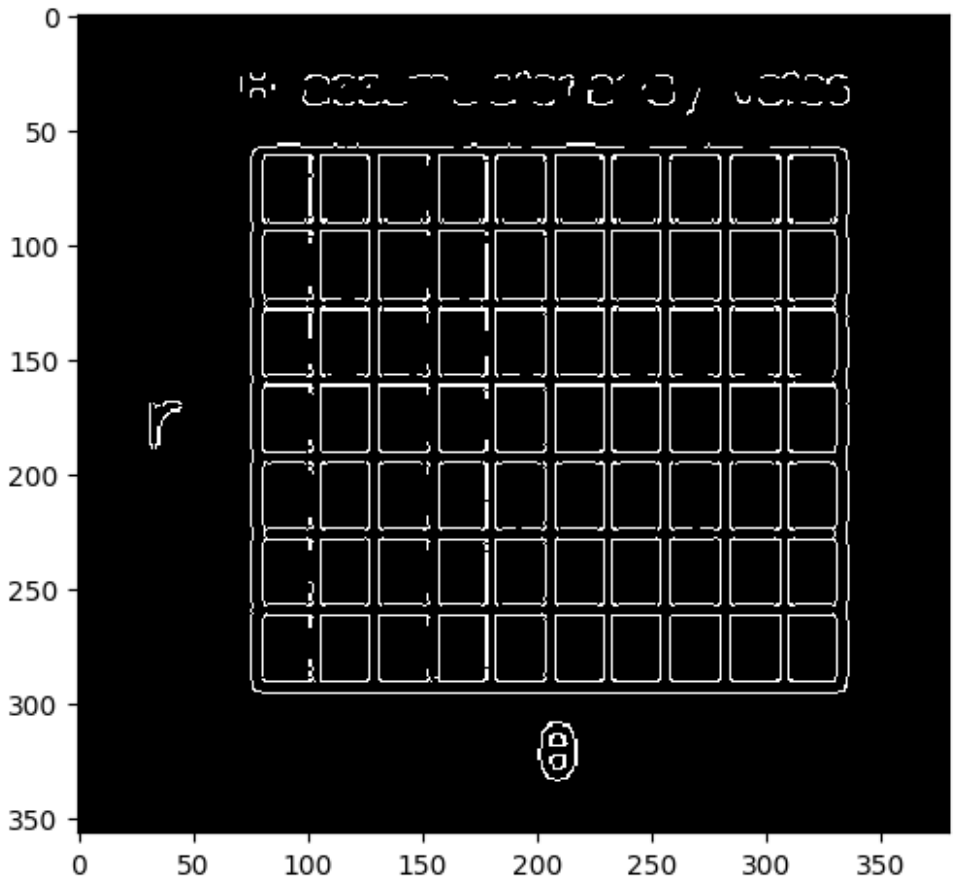

```
blurred_acumulator = cv2.GaussianBlur(acumulator_bw, (5, 5), 0)
skimage.io.imshow(blurred_acumulator)
blurred_acumulator = cv2.GaussianBlur(blurred_acumulator, (5, 5), 0)
skimage.io.imshow(blurred_acumulator)
blurred_acumulator = cv2.GaussianBlur(blurred_acumulator, (5, 5), 0)
skimage.io.imshow(blurred_acumulator)
```

```
<matplotlib.image.AxesImage at 0x78c0502abbb0>
```



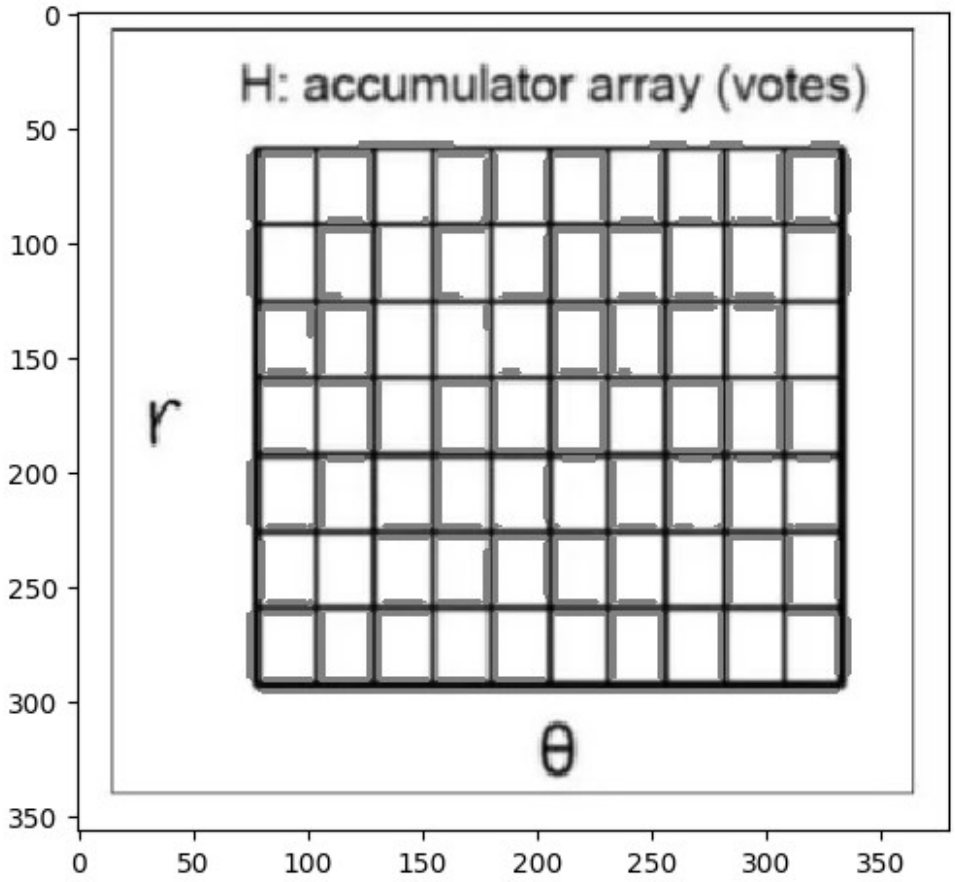

```
canny_acumulator = cv2.Canny(blurred_acumulator, 225, 255)
skimage.io.imshow(canny_acumulator)
```

```
<matplotlib.image.AxesImage at 0x78c04d356fb0>
```



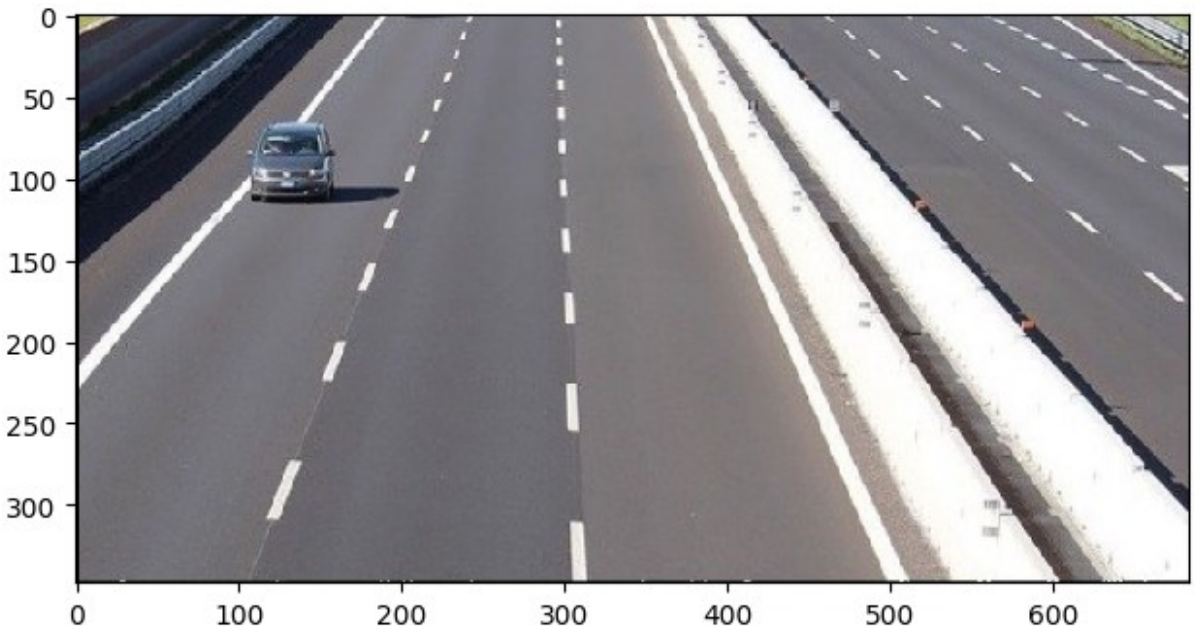

```
acumulator_lines = cv2.HoughLinesP(canny_acumulator,1,np.pi/180,80)
for line in acumulator_lines:
    x1,y1,x2,y2 = line[0]
    cv2.line(acumulator_bw,(x1,y1),(x2,y2),128,2)

skimage.io.imshow(acumulator_bw)
```

```
<matplotlib.image.AxesImage at 0x78c04d3e9ed0>
```



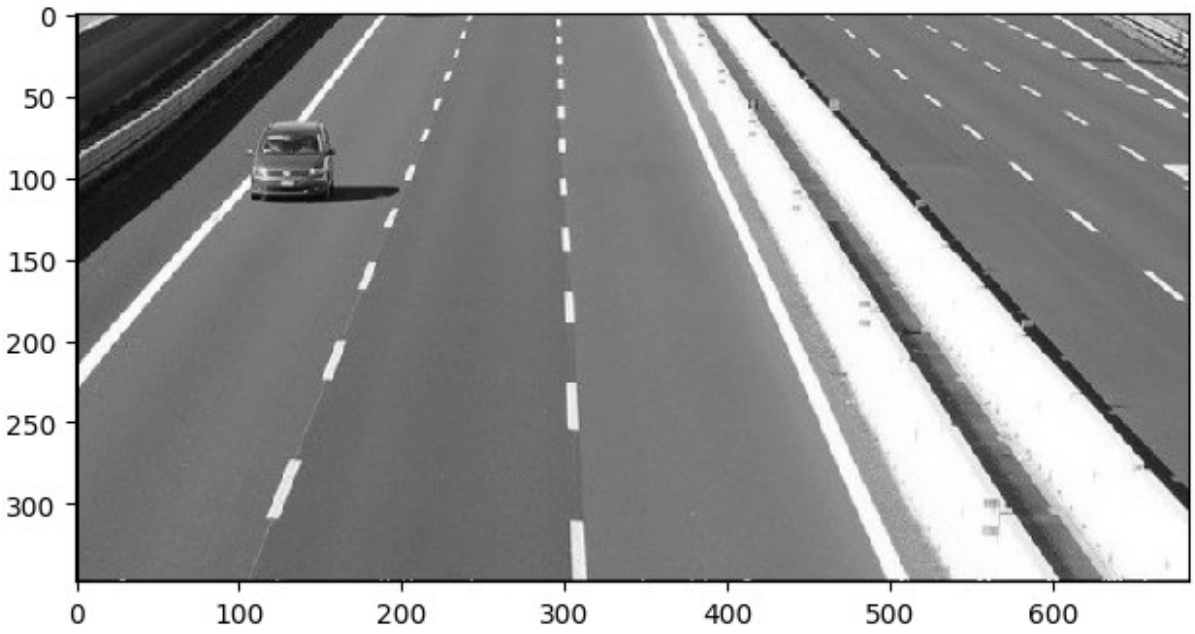

```
lanes = skimage.io.imread(f"{ASSETS_FOLDER_PATH}/lanes.png")
skimage.io.imshow(lanes)
```

```
<matplotlib.image.AxesImage at 0x78c04d26ded0>
```



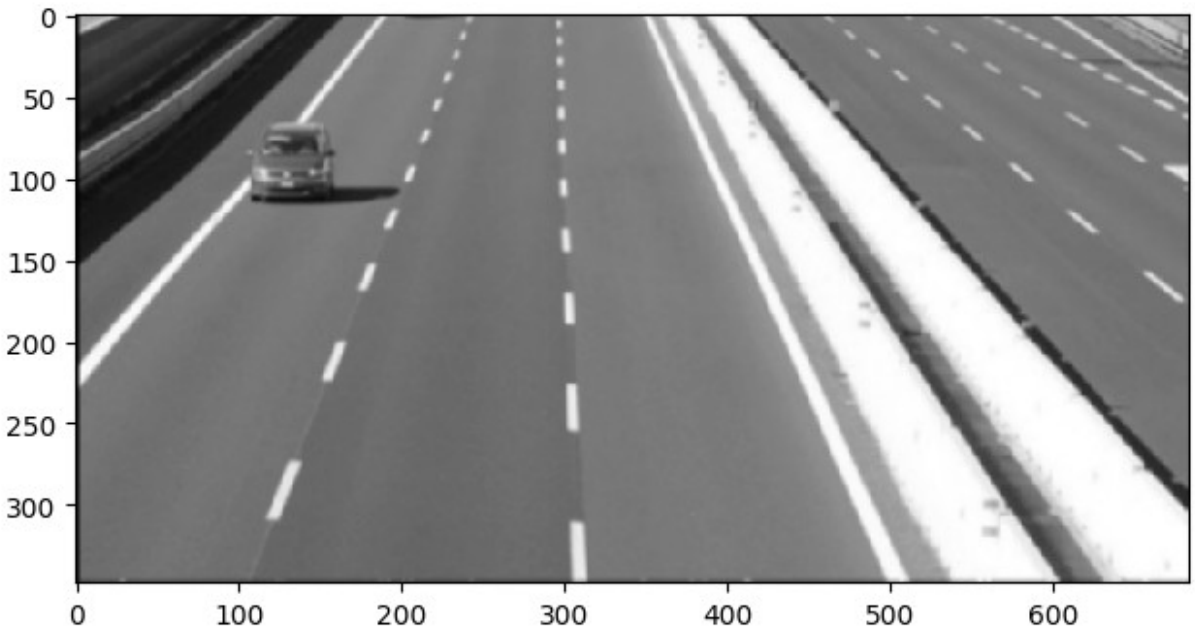

```
lanes_bw = cv2.cvtColor(lanes, cv2.COLOR_RGB2GRAY)
skimage.io.imshow(lanes_bw)
```

```
<matplotlib.image.AxesImage at 0x78c04d2dbd00>
```



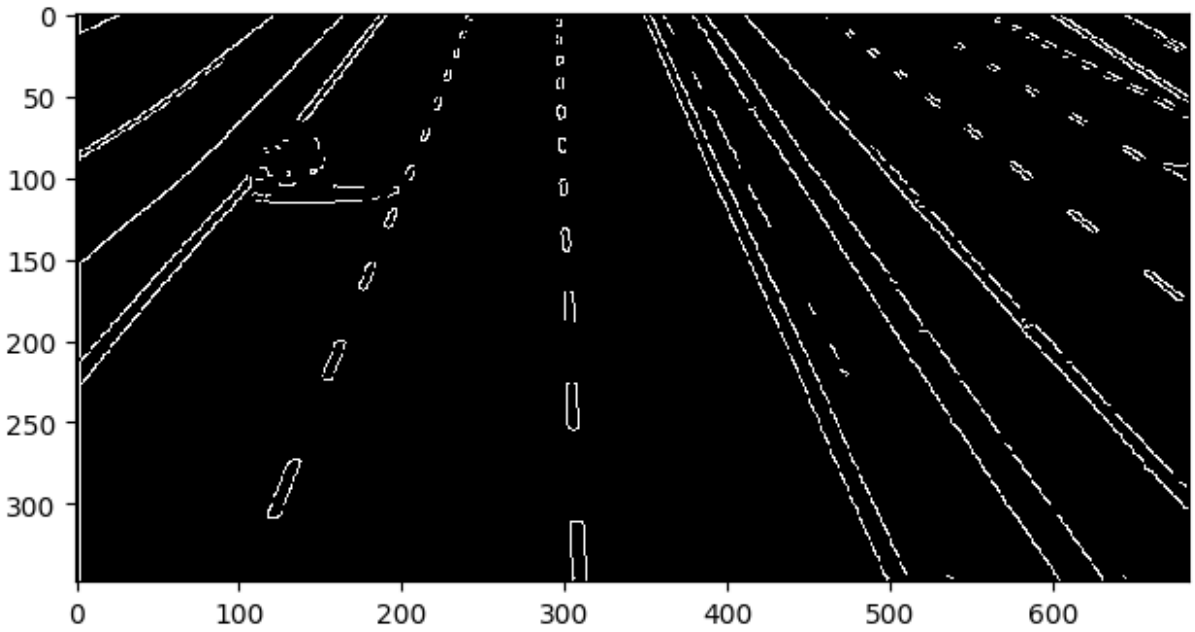

```
blurred_lanes = cv2.GaussianBlur(lanes_bw, (5, 5), 0)
skimage.io.imshow(blurred_lanes)
```

```
<matplotlib.image.AxesImage at 0x78c04cd62500>
```




```
canny_lanes = cv2.Canny(blurred_lanes, 225, 255)
skimage.io.imshow(canny_lanes)
```

```
<matplotlib.image.AxesImage at 0x78c04cdf4850>
```




```
lanes_lines = cv2.HoughLinesP(canny_lanes,1,np.pi/180,80)
for line in lanes_lines:
    x1,y1,x2,y2 = line[0]
    cv2.line(lanes_bw,(x1,y1),(x2,y2),128,2)
```

```
skimage.io.imshow(lanes_bw)
```

```
<matplotlib.image.AxesImage at 0x78c04cc5ea70>
```