Images

Tim Boomer

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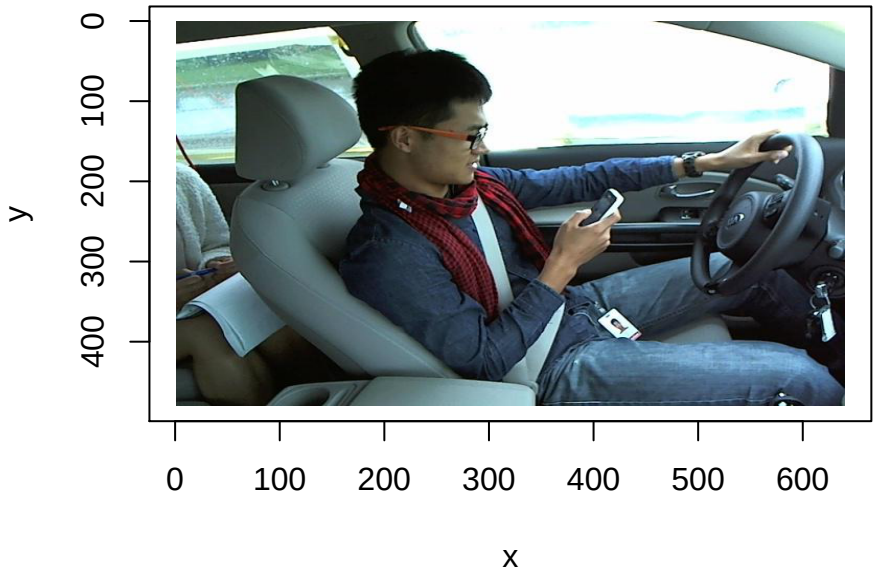
Results Default Image Compression

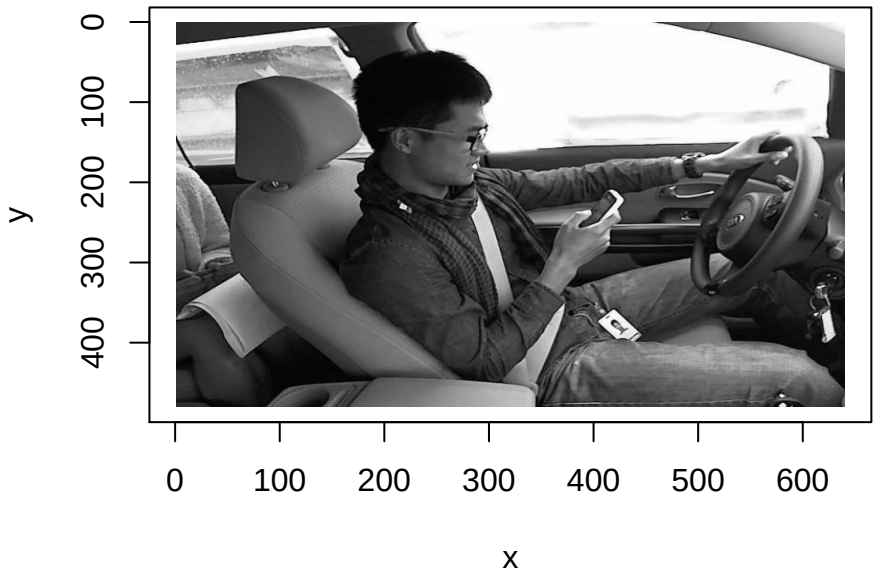
The source images are 640 x 480

```
library(imager)
setwd('C:/Users/tboom_000/Documents/Personal/Projects/Kaggle/StateFarm')
img <- load.image('./input/train/c1/img_928.jpg')
plot(img)
```



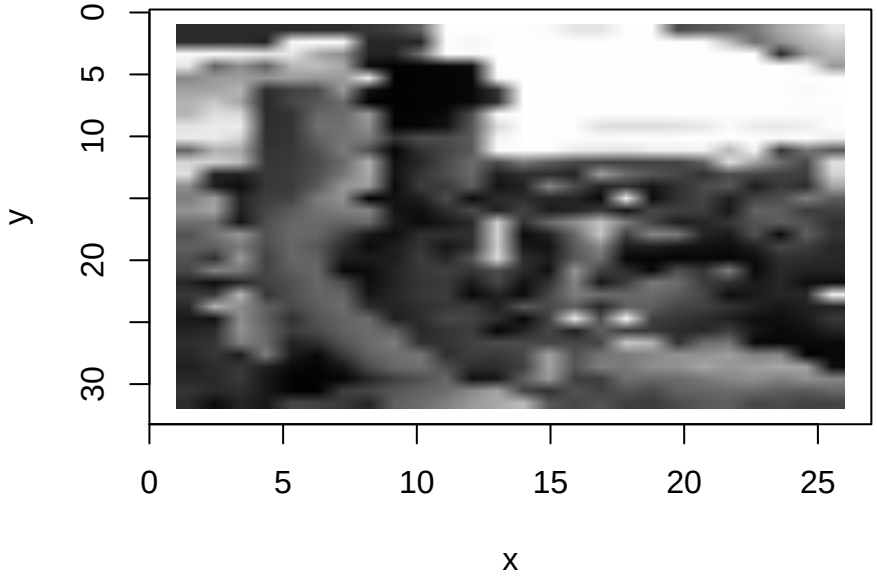
Grayscale reduces the three RGB values per pixel to one.

```
gray <- grayscale(img)
plot(gray)
```



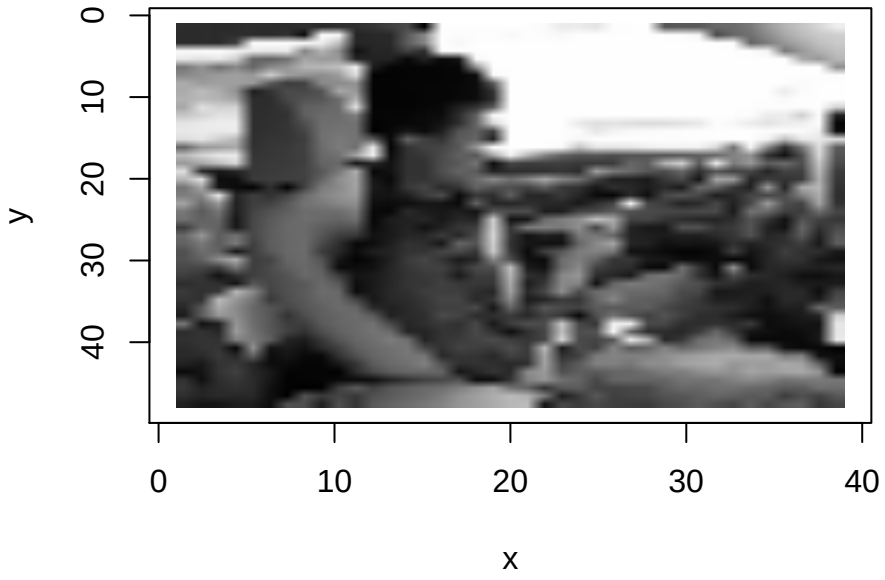
Reducing the image size to 26 x 32 looks like this:

```
plot(resize(gray, 26, 32))
```



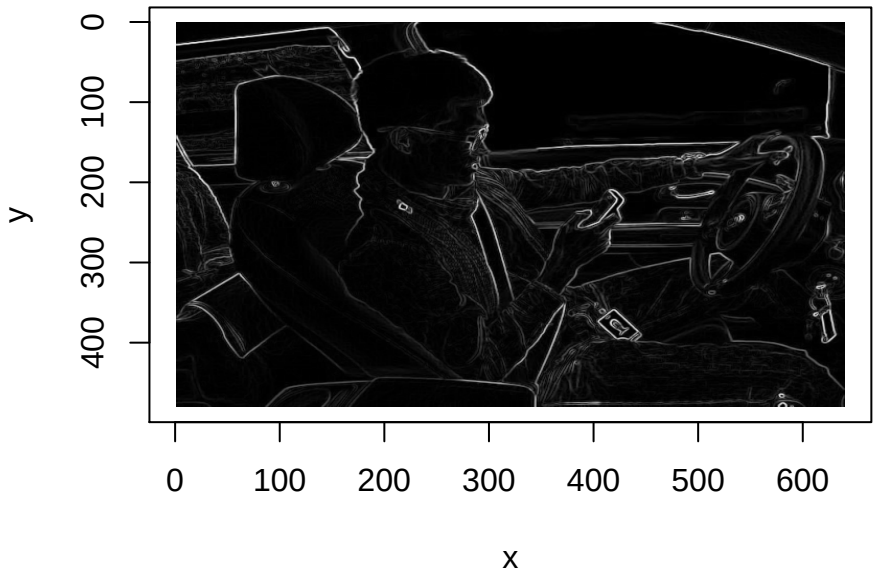
Increasing resolution to 39 x 48 looks like this:

```
plot(resize(gray, 39, 48))
```



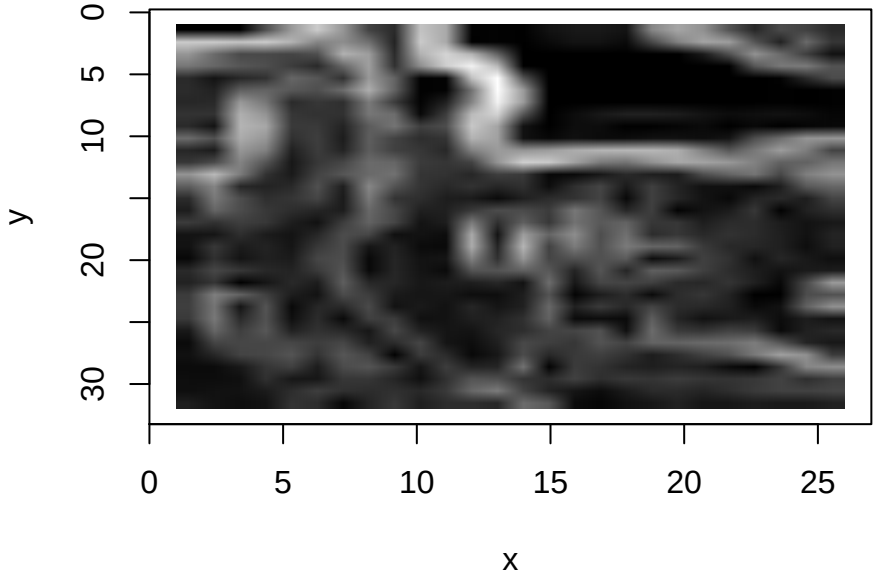
This image shows why I want to experiment with edge detection, which looks at the gradient between pixels.

```
dx <- imgradient(gray, 'x')
dy <- imgradient(gray, 'y')
plot(sqrt(dx^2 + dy^2))
```



It looks like this when resized to 26 X32:

```
small <- resize(gray, 26, 32)
dx <- imgradient(small, 'x')
dy <- imgradient(small, 'y')
plot(sqrt(dx^2 + dy^2))
```


y
0
5
10
20
30
0
5
10
15
20
25
x