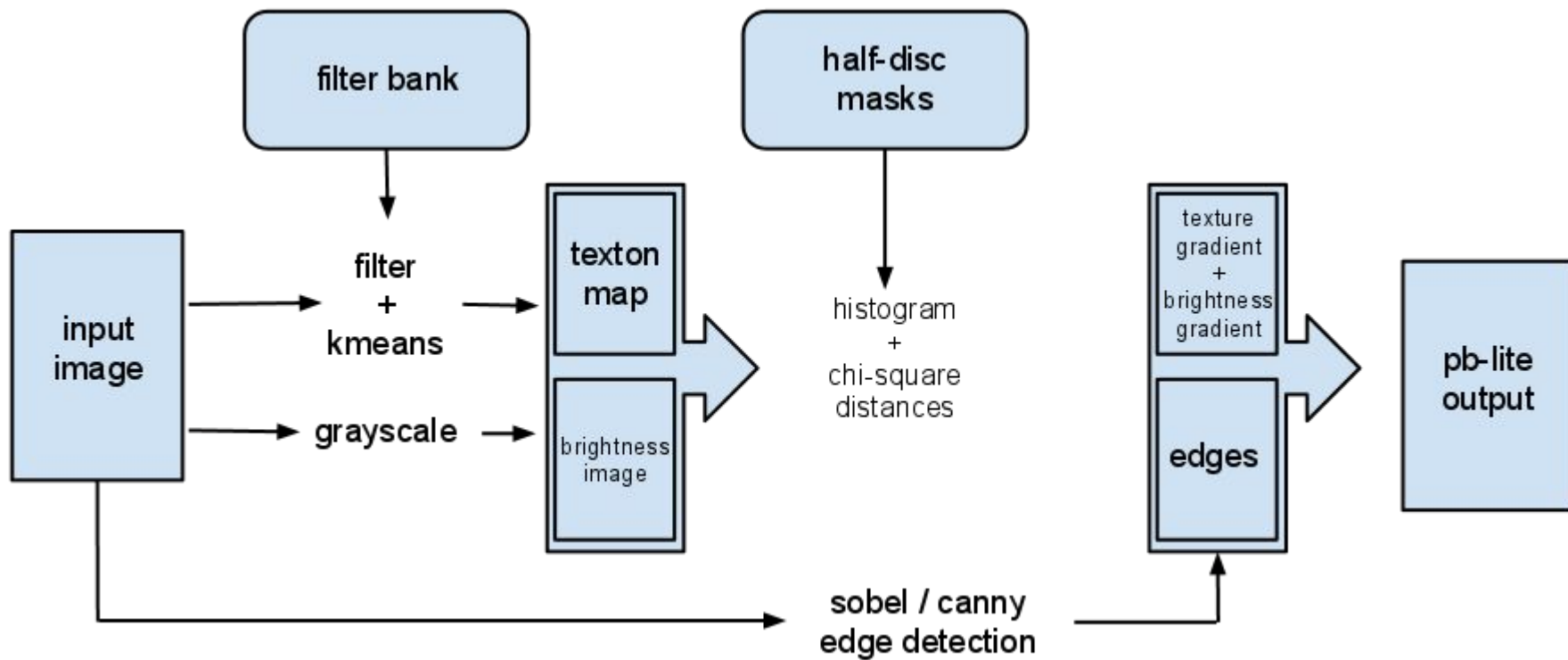


# **Pb-lite boundary detection**



Kiran Y. D. V.

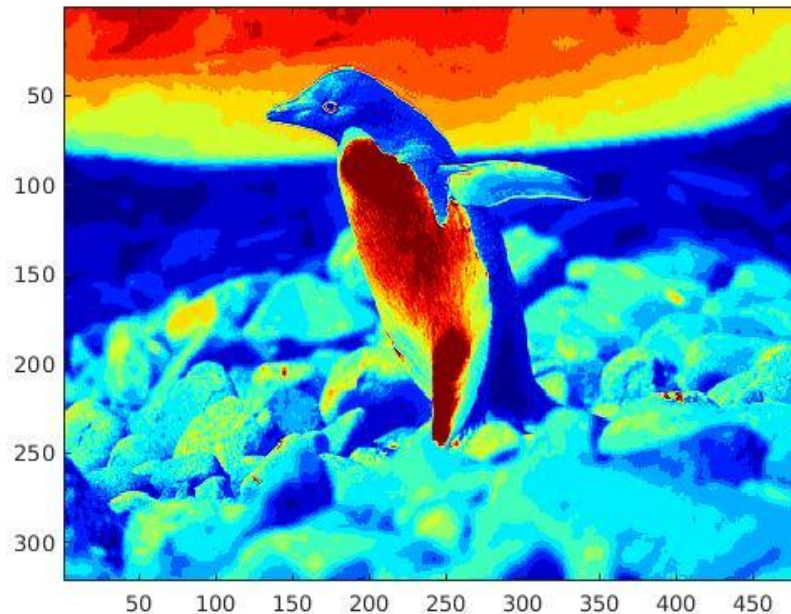
# Overview



# Brightness Gradient



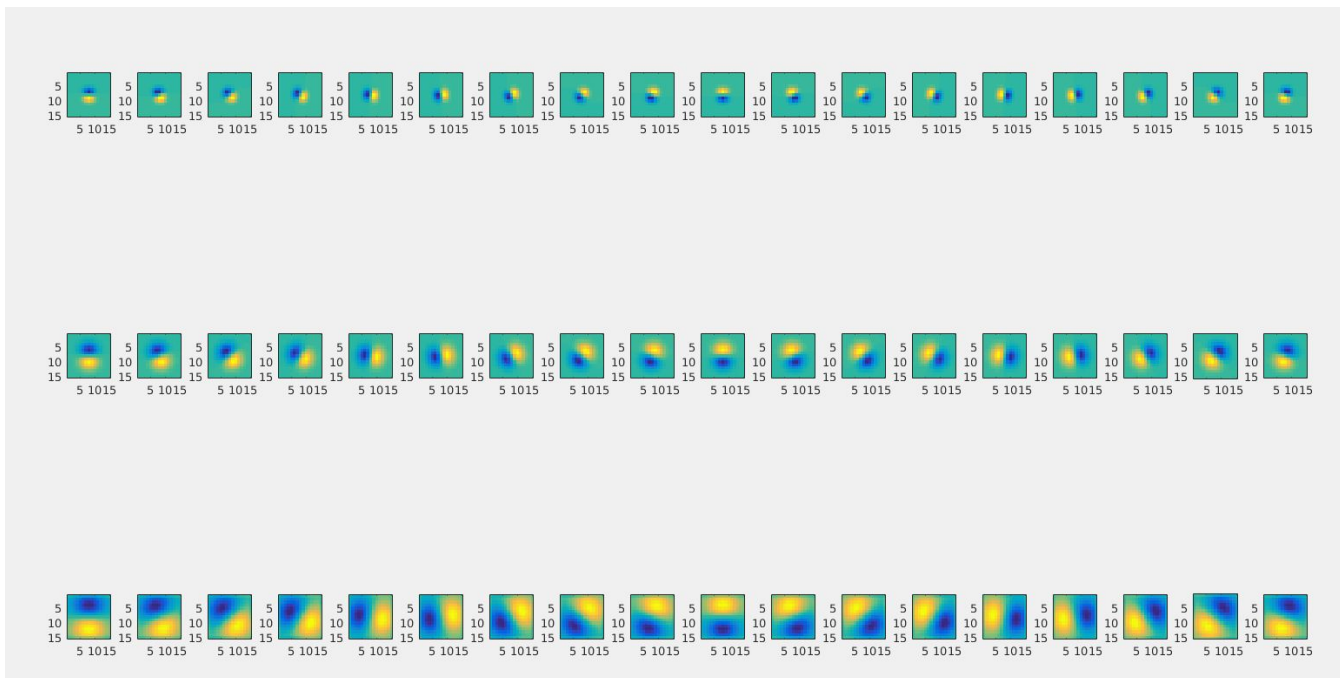
Original Image



Brightness Gradient

# Texture Gradient using Oriented Gaussian Filters

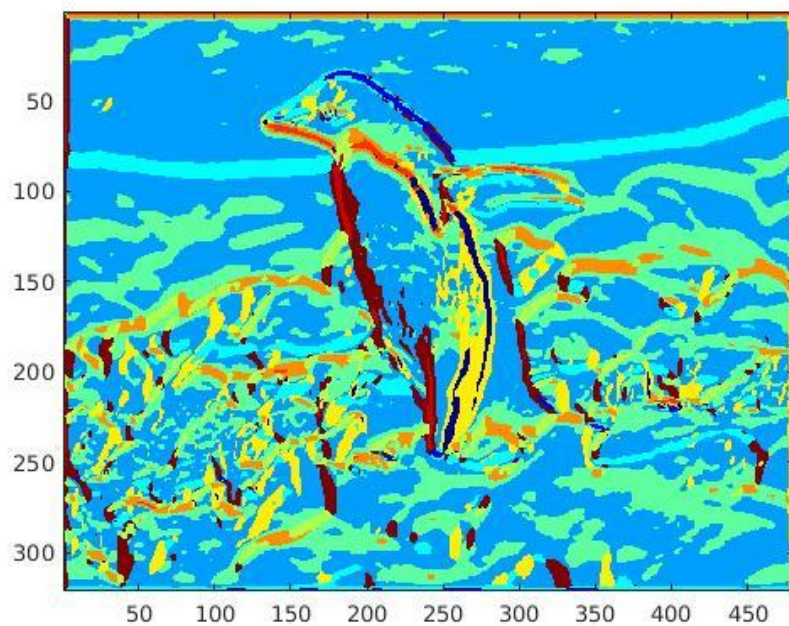
In short these are derivatives of gaussian filter which are steered to different orientations



# Texton Map



Original Image

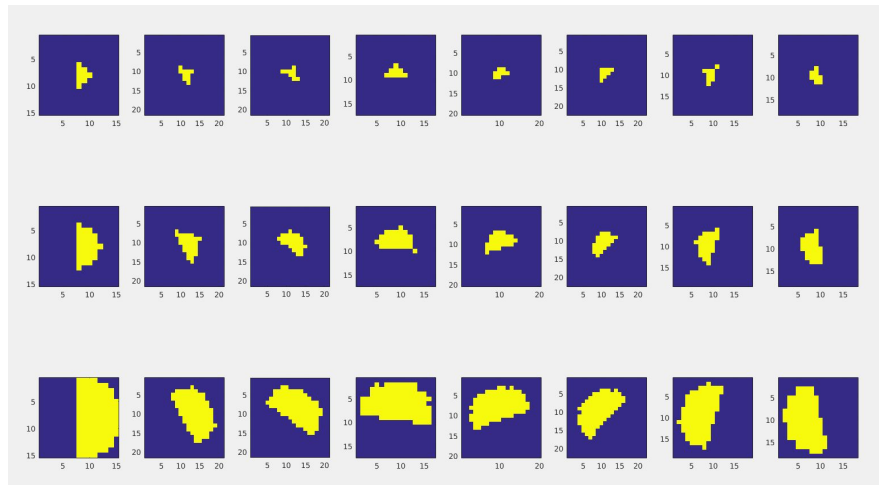


Texton Map

# Half Disc Masks to speed up processing

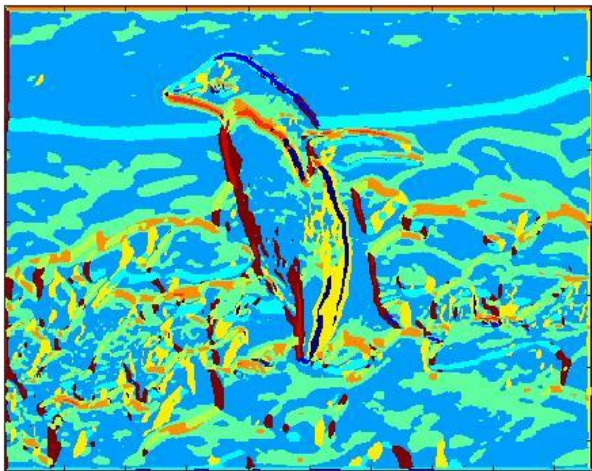


Left - half discs

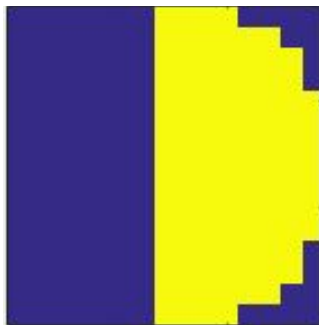
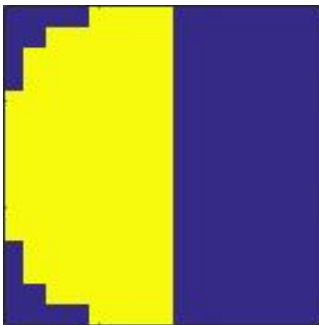


Right - half discs

# Using the half discs



L



( $L=k$ ),  $k$  belongs to  $(1,K)$

Then apply `chi_sqr` formula

**Use Canny score as base and hack your score!**

```
Pb_Edges = (tg+bg).*(Canny_Edges);
```



pb-lite



Original



Sobel



Canny