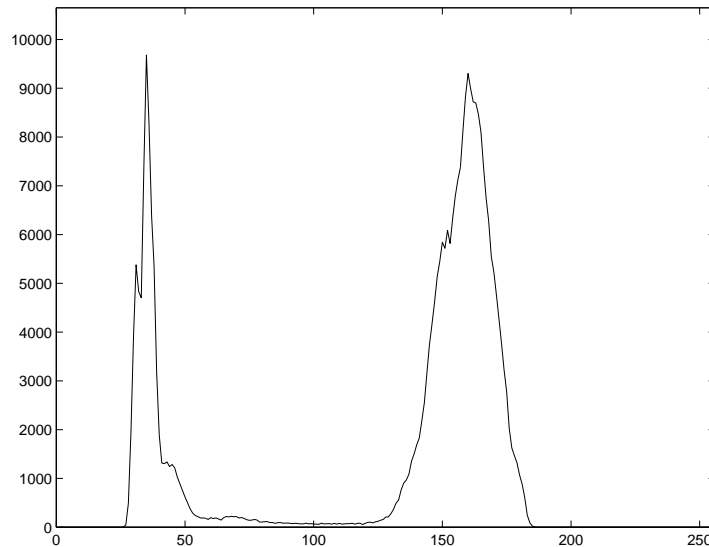


Threshold Problem Answer

Why is the peak near value 35 a little spread out and not actually at 0?



ANSWER:

The peak summarises the pixels from the dark object region. It is not at zero because of at least 2 factors. 1)

Cameras do not always report the value 0 even if no photons are received - it depends on the gain and offset settings. 2) No objects are perfectly black, so they will still reflect some light. The peak can be blurred for a variety of reasons: noise in the measurement, different distance of the shape from the light source and thus different amounts of light illuminating the object, slight variations in the black paint, etc.