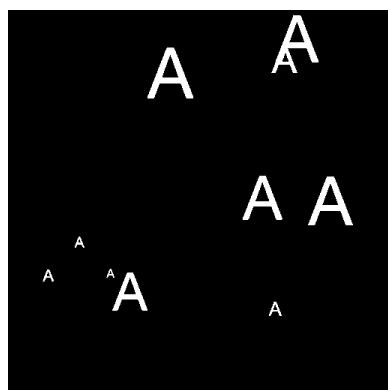
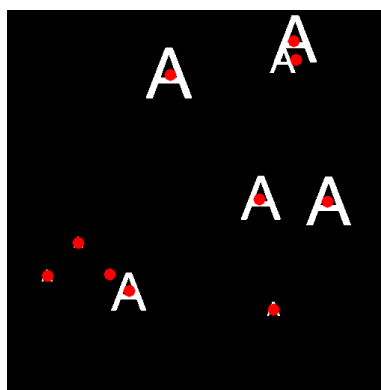


Problem (c)

A reasonable threshold is $\tau = 0.65$. Using this value, we arrive at the detections in the figure below.



(a) Original



(b) Detections

Figure 5: Detecting letters in an image

Problem (f)

This detection method, comparing a template of the feature to every image window, may fail in the following scenarios:

- Overlapping features (as seen)
- Features in various orientations (as we only considered a single orientation for the template)
- Features with similar shape but varying color (easily solved using the grayscale image/template)
- Background dominating the window, obscuring the feature