**Homework – Object Tracking**

In lecture, the (50x10) image and (10x10) template (see below) were introduced. The notes showed the sliding process to comprehend why matchTemplate yielded a (20, 0) location result.



1. Use Pixelformer to create your own 50x10 and 10x10 pixel map and corresponding PNG files. For example, replace the L-shaped figure above with say, an X-shaped one.
2. Annotate your pixel map (e.g. cut-and-paste the figure in PPT or DOC) with relevant pixel locations (5-points)
3. Export your pixel maps to greyscale (256-color 8 bit per pixel) PNG files. Include these PNG files with your homework (5-points)
4. Provide a series of sliding figures that demonstrate the predicted match result (10-points)
5. Write a SSD program to calculate the match result. Include a screenshot of your SCE program, or cut-and-paste your SCE code into a text file and include in your PDF homework. Also, include a screen shot of the match result. The actual SCE file is not needed. Contrast this match result with “C” above (10-points)