

HW07: Image representation

Hand in via moodle at: <https://moodle.umass.edu/course/view.php?id=33024>. Remember that only PDF submissions are accepted. We encourage using L^AT_EX to produce your writeups. See `hw00.tex` for an example of how to do so. You can make a `.pdf` out of the `.tex` by running “`pdflatex hw00.tex`”.

1. How does the SIFT descriptor achieve invariance to (a) small deformations, and (b) changes in illumination?
2. How does one obtain a dictionary in a bag-of-words representation of images?
3. Give two examples each of categories that can be best described by their shape, and by their texture.