CMP/CMPN 446 -Image Processing and Computer Vision

Project 2: Image Features

The goal of this project is to practice working with images detect image features. These features can then be used in image matching and object recognition.

Given the three set of images (set1: mummy00 and mummy01, set2: dinosaur00 and
dinosaur01, set3: scene, box, book, basmati) apply the following algorithms;

1. Canny edge detector
2. Hough transform for line detections
3. Harris corner detection
4. SIFT detector

For each set of images, show the original image, the detected edge points, lines,
corners, and SIFT points. All detected features should be shown superimposed on the
original images. The SIFT point should be shown as an arrow originated at the point
and directed toward its dominant direction and in another image as a circle with its
center as ‘+’ sign at the feature location and a radius equal to the feature scale.

Comment on the detected features.

Deliverables

A printed copy of your report where it shows comments on the results.