

## EN2550 Exercise 7 on Plotting Epipolar Lines

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The **Middlebury Multi-View Stereo dataset** contains calibrated image. Read the webpage and download the TempleSparseRing <sup>1</sup> dataset.

1. Read in the `templeSR_par.txtg` and populate the parameters of  $K_i$   $R_i$  and  $t_i$  for  $i = 1, 2$ .
2. Compute the camera matrices  $P_1, P_2$  for  $i=1, 2$ .
3. Plot the epipolar line corresponding to the point  $x = [130 \ 115 \ 1]^T$  in image 1.
4. Detect and plot the features (e.g., SIFT) and plot the corresponding epipolar lines.

Upload the pdf generated from the Jupyter notebook as `your_index_ex08.pdf`. The report must include important parts of code, image results, and comparison of results.

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<sup>1</sup><https://vision.middlebury.edu/mview/data/data/templeSparseRing.zip>