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 ¹ dataset.

- 1. Read in the templeSR_par.txtg and populate the parameters of K_i R_i and t_i for i = i, 2.
- 2. Compute the camera matrices K_i for i = i, 2.
- 3. Plot the epipolar line corresponding to the point $x = \begin{bmatrix} 130 & 115 & 1 \end{bmatrix}^T$ in image 1.
- 4. Detect and plot the features (e.g., SIFT) and plot the corresponding epipolar lines.

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

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