

Practical session: panorama construction

Objective: the user clicks 4 or more corresponding points in left and right images. After a right button click, the program computes the homography and shows the resulting panorama in a new window.

- ▶ Install Imagine++
(<http://imagine.enpc.fr/~monasse/Imagine++/>) on your machine.
- ▶ Let the user click the matching points.
- ▶ Build the linear system to solve $Ax = b$ and find x .
- ▶ Compute the bounding box of the panorama.
- ▶ Stitch the images: on overlapping area, take the average of colors at corresponding pixels in both images.

Useful Imagine++ types/functions: `Matrix`, `Vector`, `Image`, `anyGetMouse`, `linSolve`