Lucas-Kanade Registration Algorithm

• Definition of registration
  (not just for translation)

• Status of Lucas-Kanade among other algorithms
  One of the best optical flow computation methods
  Gradient-based method

• Merits of the original Lucas-Kanade
  Speed (original intension, not referred to now)
  Weighted confidence of disparity

• Framework for general problems
  For handling various transformations, illumination changes.
Questions

• What unique or novel characteristics does Lucas-Kanade have?

• Originally Lucas-Kanade was proposed as a registration method. Now many literatures site Lucas-Kanade as a method for optical flow computation, too.

  How registration is related to optical flow computation and to motion detection?

• How do you extend Lucas-Kanade to compute optical flow?

• What problems do you find in the paper?