Def. Taylor expansion

Def. homography (aka “projectivity” in “Multiple View Geometry” p. 32)

^for that, need to define point, homogeneous point, Theorem about 2 points intersecting, line as homogeneous vector, etc.

Def. point

Def. homogeneous point

Theorem. Let p\_1 and p\_2 be two points in P^2 in homogeneous form. Then p\_1xp\_2 = intersection.

Def. line

Def. homogeneous representation of a line as a vector

Def. Least squaresq

Ransac

Corner detection

Cite papers

Acm/ieee database for citing (download bibtex citation)

Background:

An anamorphosis (or anamorphic projection/image) is an image that is intentionally distorted so that the original image can be recovered only when looked at from a certain point of view or using a special device, for example a mirror. Origins of anamorphosis can be traced back to the 16th century art where artists, mathematicians and philosophers, fascinated by the idea of perspective, experimented with the notions of illusion, truth and reality. Some of the notable examples of anamorphosis included Jean'Francois Niceron's methods for geometrical construction that generated multiple types of anamorphic transforms which involved both exact and approximate methods.

Examples (paintings etc):

Def. perspective anamorphosis

Let $S$ be a surface and $V$ be a viewer at some distance $d$ looking directly at the surface $S$ at some angle $\theta$. Let $I$ be some two-dimensional image. $I’$ is an anamorphic projection of $I$ on the surface $S$ for the viewer $V$ if the viewer

Def. homography (aka “projectivity” in “Multiple View Geometry” p. 32, def 2.11 p. 33, section 2.4.4 p. 41, table on p.44) -> PROOF

^for that, need to define point, homogeneous point, Theorem about 2 lines intersecting, line as homogeneous vector, etc.

Notation:

2D point

Def. homogeneous point

Theorem. Let p\_1 and p\_2 be two points in P^2 in homogeneous form. Then p\_1xp\_2 = intersection. <Line???>

Def. line

Def. homogeneous representation of a point/line as a vector (Multiple View Geom., p.26)

//Lemma?Def intersection of point (p. 27)

Def. degrees of freedom

Def. Least squares

Ransac

Corner detection