A suggested project for PR302i, ESIEE 2010 Dror AIGER

Fitting hyperplanes to a set of points in 2D and 3D

Curve fitting is the process of constructing a curve, or mathematical function, that has the best fit to a series of data points, possibly subject to constraints. Here, our goal is to fit a hyperplane (line in 2D or a plane in 3D) to a set of points in a discretre space (image). The problem is, for a given set of points in a grid, to find the digital line (plane) that contains the maximum number of points from the set. The problem is part of an active research and will contain the implementation of new algorithms.



