

Input image



Feature matching
Specialized for PnP



Feature DB with object ID and annotations

Feature Vector	Obj ID	XYZ	Normal
#1..#1	1	(10,12,13)	(0,0,1)
#1..#2	1	(-1,12,13)	(1,0,1)
#2..#1	2	(10,-8,0)	(0,1,1)
#2..#1	2	(3,12,13)	(0,0,-1)
...
#n..#m	n	(1,4,123)	(1,1,-1)

Pose estimation
Solve PnP



Estimated pose for each object

Detected features

