

T-61.5070 COMPUTER VISION, Exercise 10/08

Motivation

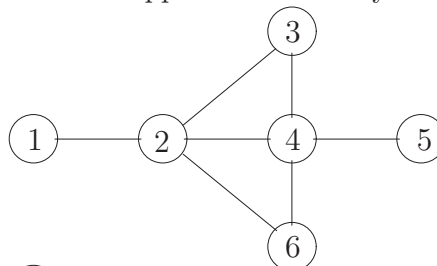
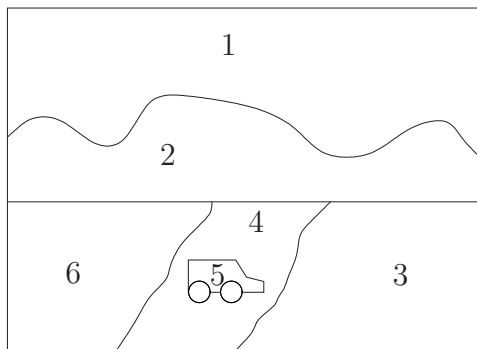
The purpose of this exercise is to be acquainted with both image understanding and some applications on image analysis.

1. One searches similarities between the relation graphs A and B based on cliques in the association graph.

A : objects u, v, w, x, y, z ,
relations $P(u), P(w), P(y), R(v), R(x), R(z), F(u, v), F(v, w), F(w, x), F(x, y), F(y, z), F(z, u)$

B : objects a, b, c, d, e, f
relations $P(a), P(b), P(d), Q(e), Q(f), R(c), F(b, c), F(c, d), F(d, e), F(e, f), F(f, a)$

- (a) Construct the graphs corresponding to the relation structures A and B . Identify the nodes and the arcs.
 - (b) Construct the association graph corresponding to the relation structures A ja B .
 - (c) Search the largest cliques in the association graph visually. (There are only three of them.)
2. (a) Draw a graph representing a telephone equipped with a telephone dial.
(b) Introduce into your graph a telephone equipped with both a dial and keys.
(c) Introduce the telephone into an office.
 3. Consider the given segmented image and the adjacency graph. Do a scene labelling by using the discrete relaxation method. Consider the application of unary constraints.



① Highest

⑤ Moving