

- ⑧ Derive the forward and inverse kinematic maps for a 4-dof scara-type robot. These are the arms of choice for vertical insertion tasks, such as placing electrical components on printed circuit boards.
- ⑨ Solve the inverse kinematics problem for a 2R-planar manipulator so that the x -coordinate and the orientation of the target pose is achieved, by the y -coordinate is ignored. (see section 7.3.3)