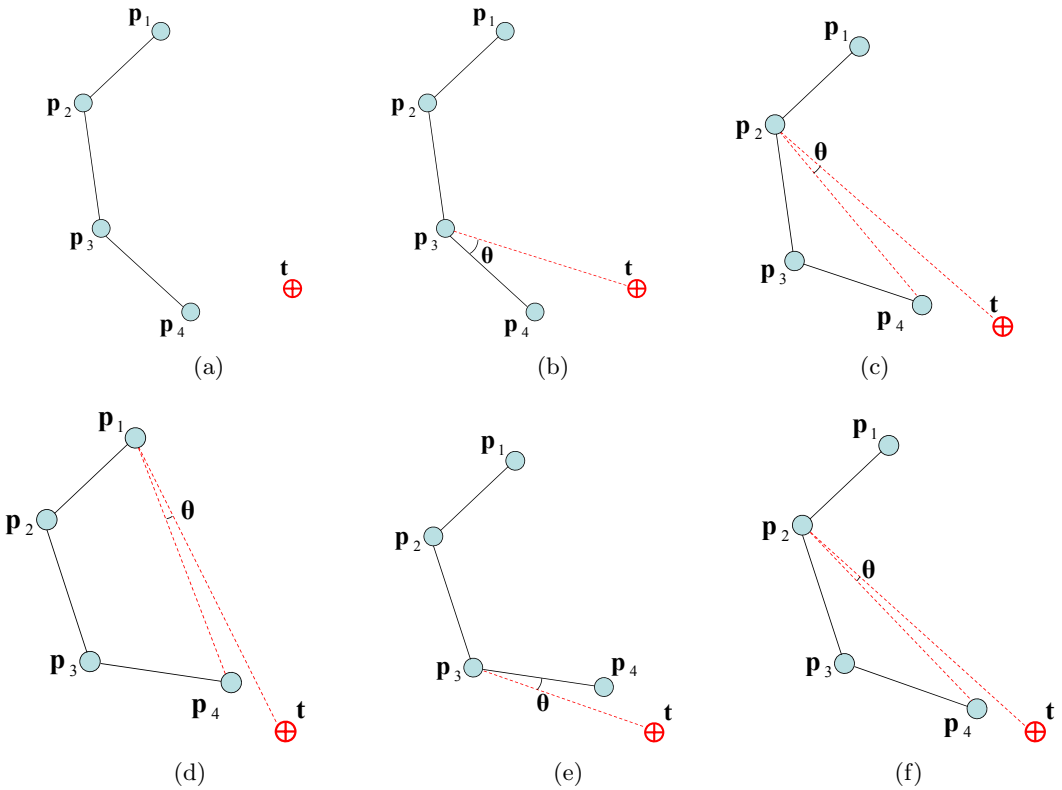

Figure 3.2: *An example of visual solution of the IK problem using the CCD algorithm. (a) The initial position of the manipulator and the target, (b) find the angle θ between the end effector, joint $\mathbf{p}_3$ and the target and rotate the joint $\mathbf{p}_4$ by this angle, (c) find the angle θ between the end effector, joint $\mathbf{p}_2$ and the target and rotate joints $\mathbf{p}_4$ and $\mathbf{p}_3$ by this angle, (d), (e) and (f) repeat the whole process for as many iterations as needed. Stop when the end effector reaches the target or gets sufficiently close.*