

(13)

Hakki Ibrahim Ugurku

Consider a dragonfly motion - (2 wings insect)

Case 1: flight ; Case 2 landing on a moving leaf. Türkçe: kız böceği

for each case: 1) Analyze the anatomy of a dragonfly in nature and generate the model of such a system when implemented as a robot.

1) State the assumptions, find the DH parameters, generalized coordinates, individual homogeneous transformations.

2) Develop the kinematic model.

3) Generate the dynamical model of the robotic dragonfly flight and landing

4) Find Jacobian

5) Generate a control strategy for

Case 1: maneuvers during flight

Case 2: landing on a moving leaf.

6) simulate

for these works
case 2 = dragonfly on
moving leaf.