National Yang Ming Chiao Tung University Department of Electrical Engineering

Robotics: Homework 5, 2024

Due 12/19/24 Fall 2024

1. Derive the dynamic equations to compute the torque at each joint utilizing the Newton-Euler formulation for the two-link robot manipulator example in the class with the center of the mass moved to the middle in each link and with a load m held at the tip of the second link. Can the effect of the load m to the manipulator be replaced by an external force mg with the gravity g in the y direction? Please discuss it.