

Upper 4 DOF of each arm.

Sensed joint torque

$$\tau = \{\tau_0, \tau_1, \tau_2, \tau_3\}$$

Sensed joint angle

$$q = \{q_0, q_1, q_2, q_3\}$$

Jacobian relates hand forces to joint torques

$$\tau = J^T f_h$$

Simplified mass model

$$m = \{m_0, m_1\}$$

