

Use your method of choice to find the Jacobian for the following manipulators (or parts of manipulators) where details (diagrams, DH Frames, and DH Tables) for each were provided in a handout.

1. Adept Cobra s800 SCARA
2. First three links of Stanford Arm to wrist's center, i.e., the Jacobian that maps  $[\dot{\theta}_1, \dot{\theta}_2, \dot{d}_3]^T$  to  $[\dot{\sigma}_3^0, \dot{\omega}_{0,3}^0]^T$
3. Last three links (spherical wrist) of Stanford Arm, i.e., the Jacobian that maps  $[\dot{\theta}_4, \dot{\theta}_5, \dot{\theta}_6]^T$  to  $[\dot{\sigma}_6^3, \dot{\omega}_{3,6}^3]^T$