

Due: 11:59pm, 22th November, 2022

You want to plan a joint space LSPB trajectory for a 2R robot for one motion segment. The starting point of the segment is $\theta_1(0) = -10^\circ$, $\theta_2(0) = 25^\circ$, and the end point is $\theta_1(t_f) = 20^\circ$, $\theta_2(t_f) = 100^\circ$. If the magnitude of $\ddot{\theta}_{d1}$ equals $20^\circ/s^2$, the magnitude of $\ddot{\theta}_{d2}$ equals $80^\circ/s^2$ and $t_f = 2.5$ s, determine:

- t_b and $\dot{\theta}_{\max}$ for each joint
- θ for each joint when $t = 1.5$ s.