jessi



Cinemática de robot 8-B Ing. Mecatrónica.

Práctica 2

Lozada Canizal Jessica Nayeli

9.- (3,-9) (-8,5) (-4,-1)

L1 = 30

L2 = 45

(3,-9)

L1 = 30

L2 = 45

𝑞2=atan((3)2+(−9)2−(30)2−(45)22(30)(45))= −28352700 = −1.05𝑞2=atan(−1.05)𝑞2=−46.397𝑞2=atan(−93)−atan(45 𝑠𝑒𝑛(−46.397)30+45cos(−46.397))= −32.58661.034 = 0.533𝑞1=atan(−3)−atan(−0.533) = −43.50[𝑥𝑦]=[−30𝑠𝑒𝑛(−43.50)−45𝑠𝑒𝑛(−43.50)+(−46.397)−45𝑠𝑒𝑛(−43.50)+(−46.397)30𝑐𝑜𝑠(−43.50)+45𝑐𝑜𝑠(−43.50)+(−46.397)+45𝑐𝑜𝑠(−43.50)+(−46.397)][𝑞1𝑞2]

(-8,5)

L1 = 30

L2 = 45

𝑞2=atan((−8)2+(5)2−(30)2−(45)22(30)(45))= −28362700 = −1.05𝑞2=atan(−1.05)𝑞2=−46.397𝑞2=atan(5−8)−atan(45 𝑠𝑒𝑛(−46.397)30+45cos(−46.397))= −32.58661.034 = 0.533𝑞1=atan(−0.625)−atan(−0.533) = −3.94[𝑥𝑦]=[−30𝑠𝑒𝑛(−3.94)−45𝑠𝑒𝑛(−3.94)+(−46.397)−45𝑠𝑒𝑛(−3.94)+(−46.397)30𝑐𝑜𝑠(−3.94)+45𝑐𝑜𝑠(−3.94)+(−46.397)+45𝑐𝑜𝑠(−3.94)+(−46.397)][𝑞1𝑞2]

(-4,-1)

L1 = 30

L2 = 45

𝑞2=atan((−4)2+(−1)2−(30)2−(45)22(30)(45))= −29082700 = −1.077𝑞2=atan(−1.077)𝑞2=−47.123𝑞2=atan(−1−4)−atan(45 𝑠𝑒𝑛(−47.123)30+45cos(−47.123))= −32.9760.61 = −0.543𝑞1=atan(0.250)−atan(−0.543) = 42.53[𝑥𝑦]=[−30𝑠𝑒𝑛(42.53)−45𝑠𝑒𝑛(42.53)+(−47.123)−45𝑠𝑒𝑛(42.53)+(−47.123)30𝑐𝑜𝑠(42.53)+45𝑐𝑜𝑠(42.53)+(−47.123)+45𝑐𝑜𝑠(42.53)+(−47.123)][𝑞1𝑞2]