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two sections. The base arm section containing joints 1, 2 and 3 and the wrist containing joints 4, 5 and 6. The coordinate frames of the robot are fixed at the base of the robot with the X-axis, the y-axis is perpendicular the robot arms and the z-axis is vertical, towards the sky.Robot arm kinematics - haidynmcleod projectsThis paper presents a kinematic model for a six degree-of-freedom (DOF) robotic arm. Both of forward and inverse kinematic models are established and their solutions are attained based on Denavit-Hartenberg (D-H) parameters and Particle Swarm Algorithm (PSO), respectively. 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In this article, our objective is to give industrialist an optimum design of an industrial robot arm, using inverse kinematic analysis which is be done by using RoboAnalyzer software, which gives the optimized position and orientation of the arm i-e the length of links, the way different links are made their joints, according to their specific operations.

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