



Introduction to Robotics

Manipulation and Programming

Unit 2: Kinematics

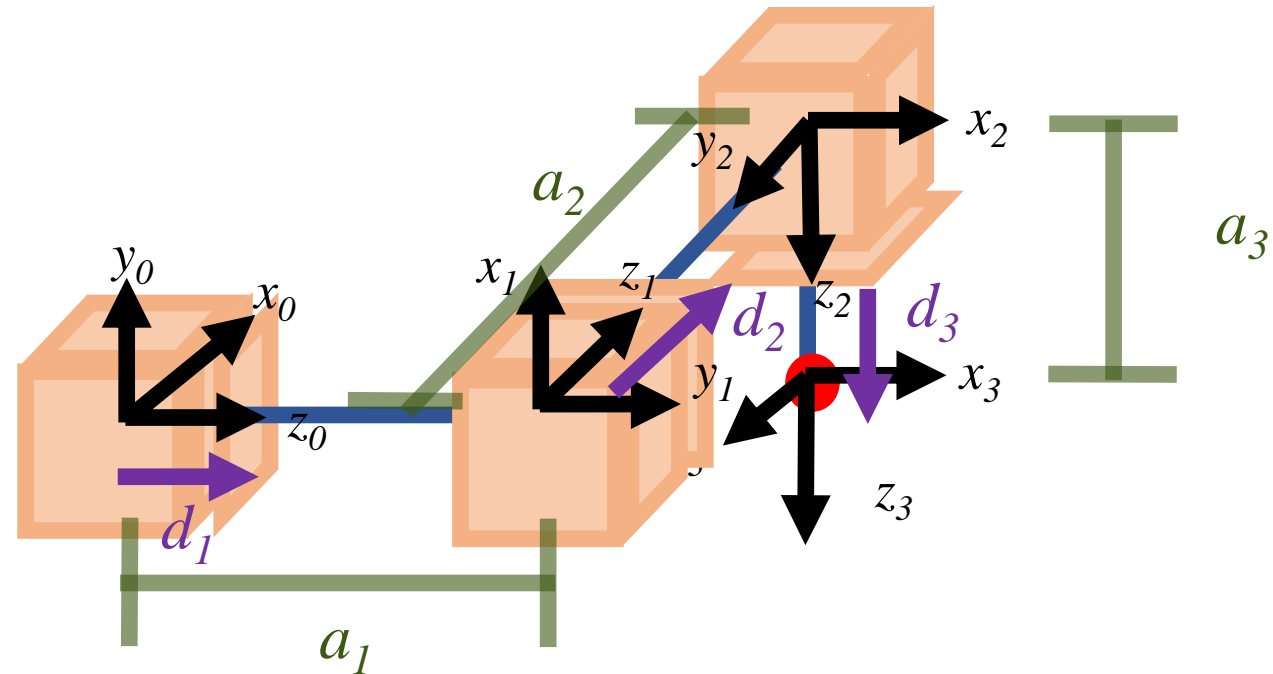
PYTHON LAB PROJECT: ALL PRISMATIC MANIPULATOR

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All Prismatic Manipulator





Problem:

- 1) All prismatic manipulator is a simple manipulator. You can read its Jacobian matrix by inspecting the coordinates. Please derivate the Inverse Jacobian Matrix for this manipulator and write them down on paper and submit it by image file or word .docx, or .pdf files. Showing all equations for the derivative functions \dot{d}_1 , \dot{d}_2 , \dot{d}_3 . Given the path equations.
- 2) Write a Python program to calculate numerical result for this prismatic manipulator. All a_1 , a_2 , a_3 can assume to be 1.
submit .py or .zip file