



# Introduction to Robotics

Manipulation and Programming

## Unit 2: Kinematics

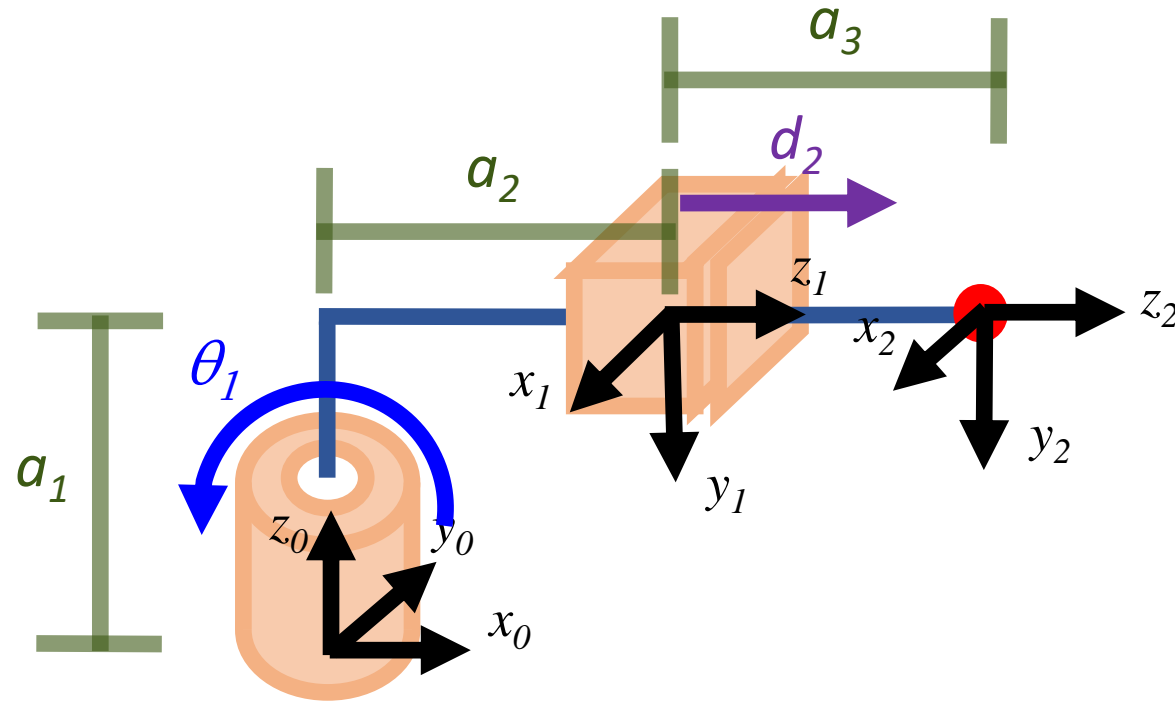
PYTHON LAB PROJECT: (2 DOF) CYLINDRICAL MANIPULATOR

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# 2 DOF Cylindrical Manipulator





# Problem:

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- 1) This Cylindrical Manipulator seems to be very familiar to us. Yes, you should have seen it in the Quiz 6. It is the same manipulator. If you have done the Quiz 6, you should have the hand-calculated formulas for it.
- 2) Now, write a Python program to calculate this cylindrical manipulator's Jacobian Matrix.

submit .py or .zip file