



JAGUAR LAND ROVER
AUTONOMOUS CHARGER

Team Name : MODifiers

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Team Introduction

- | | |
|-----------------------------|------------------------------------|
| 1. Kanisk Gupta (L) | MATLAB SIMULATION |
| 2. Trinankur Bera | CAD MODELLING |
| 3. Jayjit Mandal | COMPUTER VISION |
| 4. Manab Tikadar | COMPUTER VISION |
| 5. Maharishi Sonwani | CAD & MATLAB SIMULATION |

Problem Statement

TASK 1 :

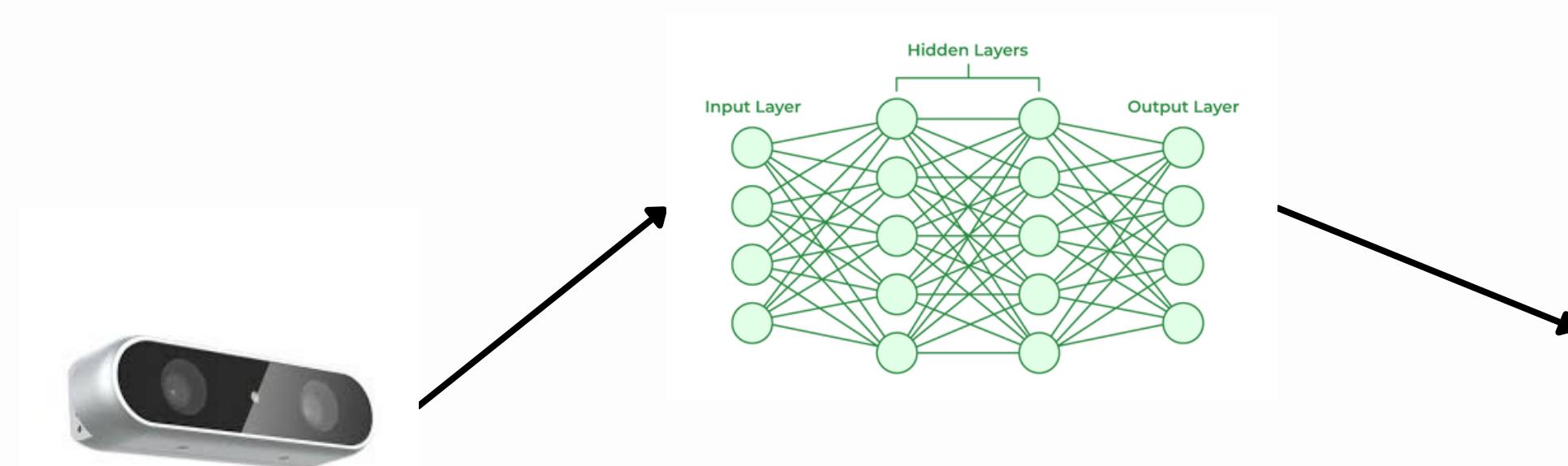
Detect the location of the plug: Use any technology of your choice to accurately detect the position of the plug, which can be deployed on a production vehicle.

TASK 2 :

Your robot's charging end should be able to move and latch/unlatch the charging plug into the socket autonomously and return to its location.



Our Approach



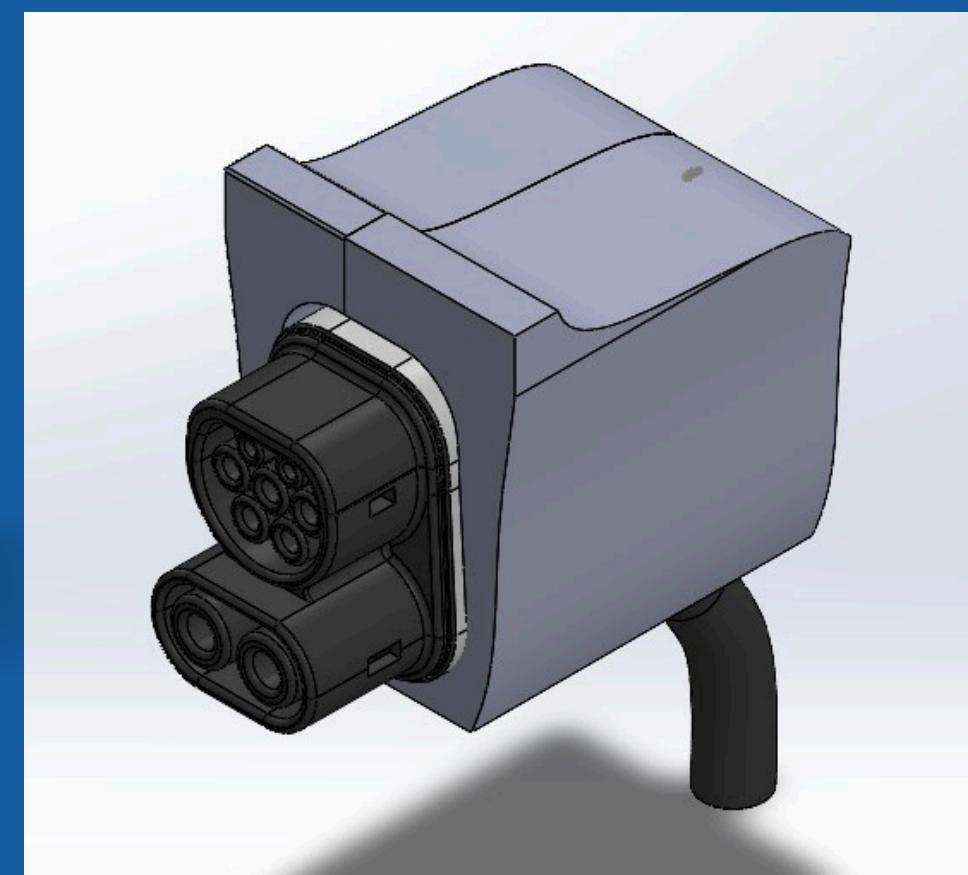
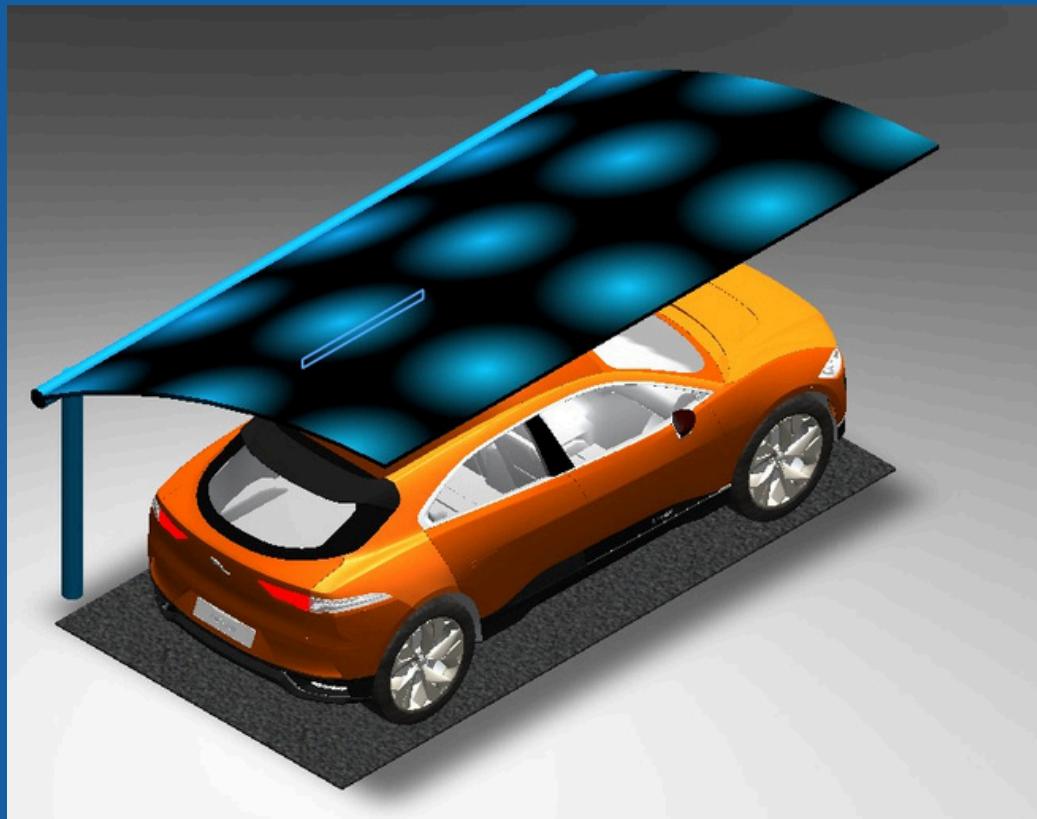
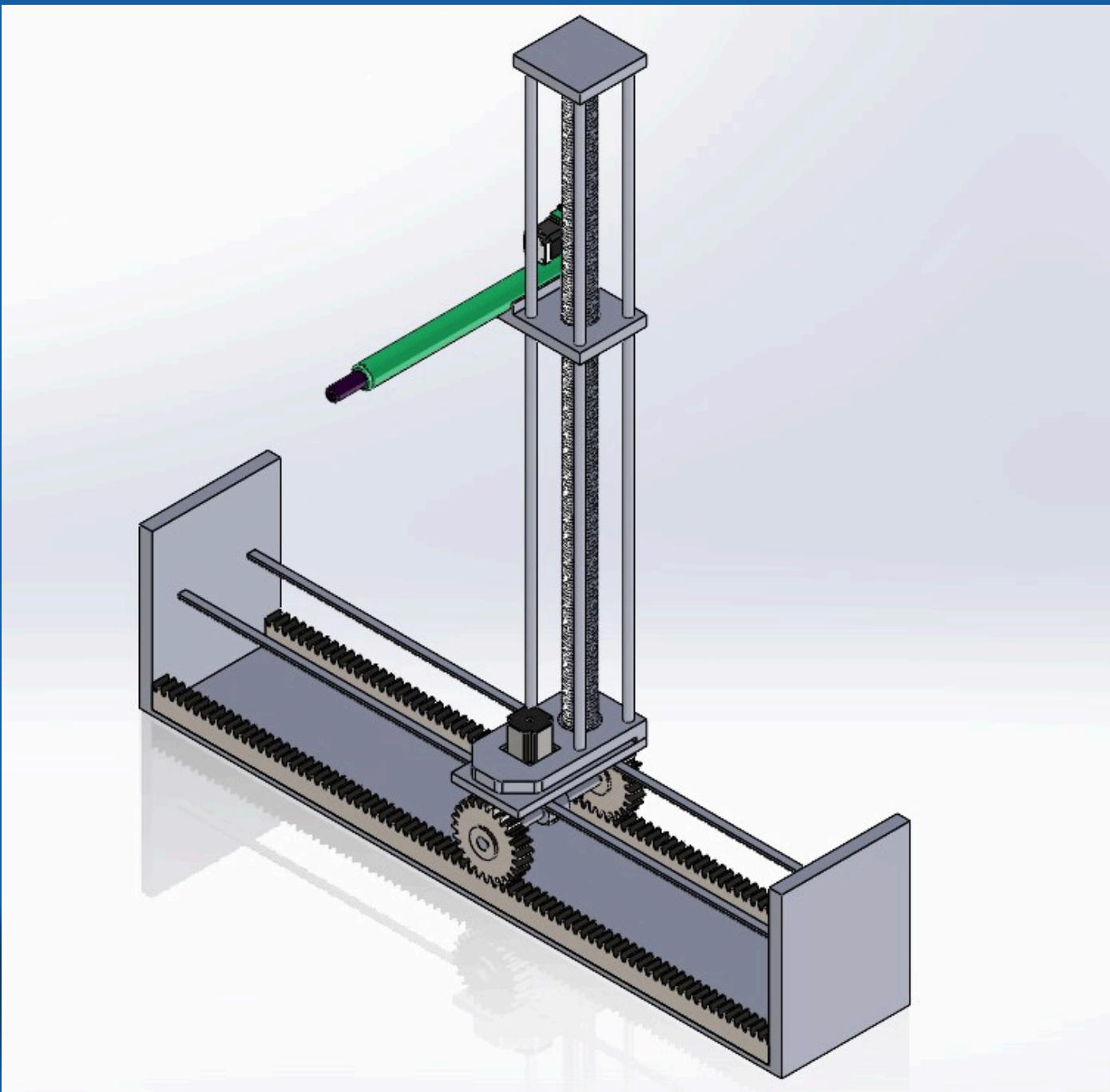
CAMERA

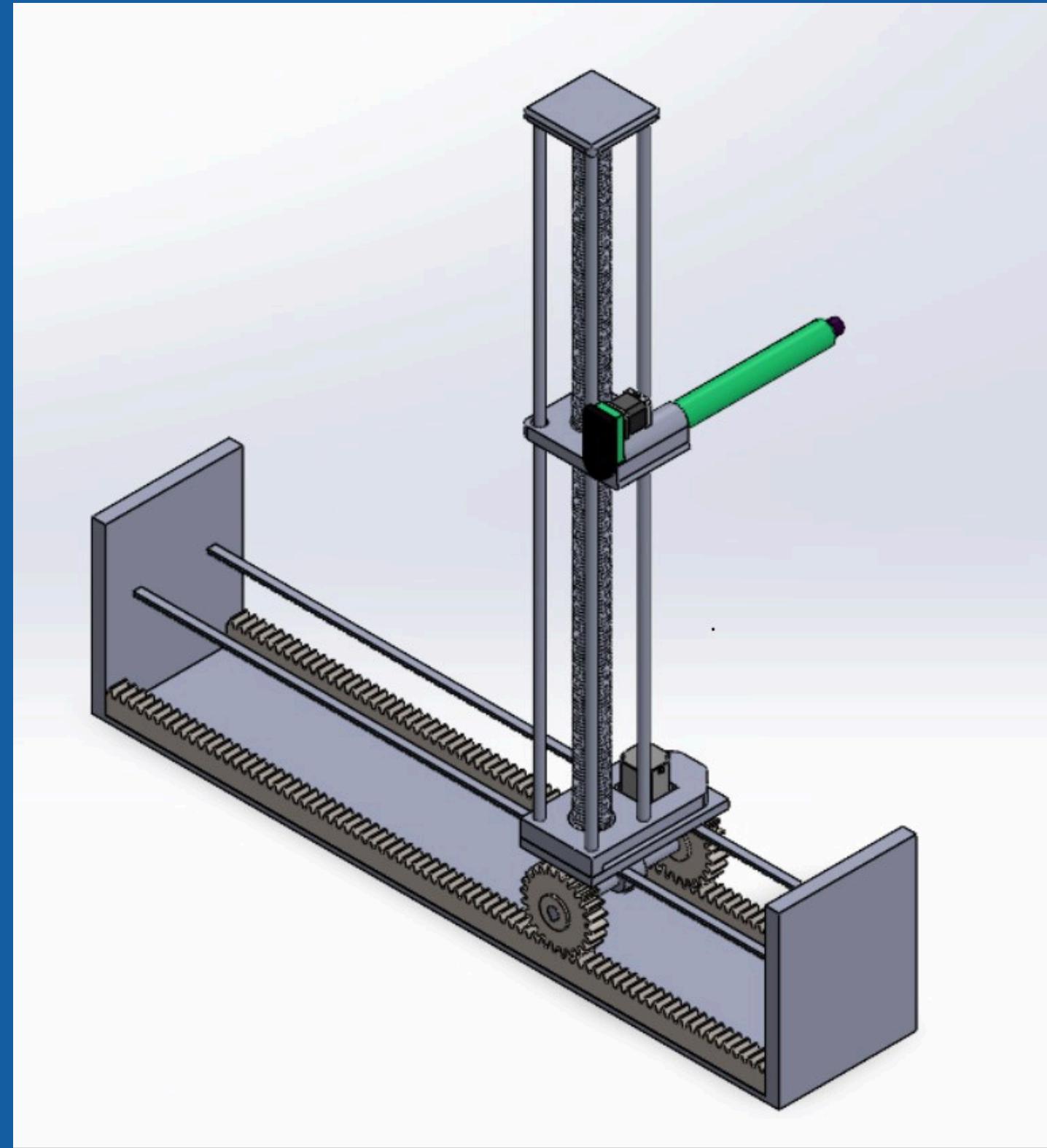
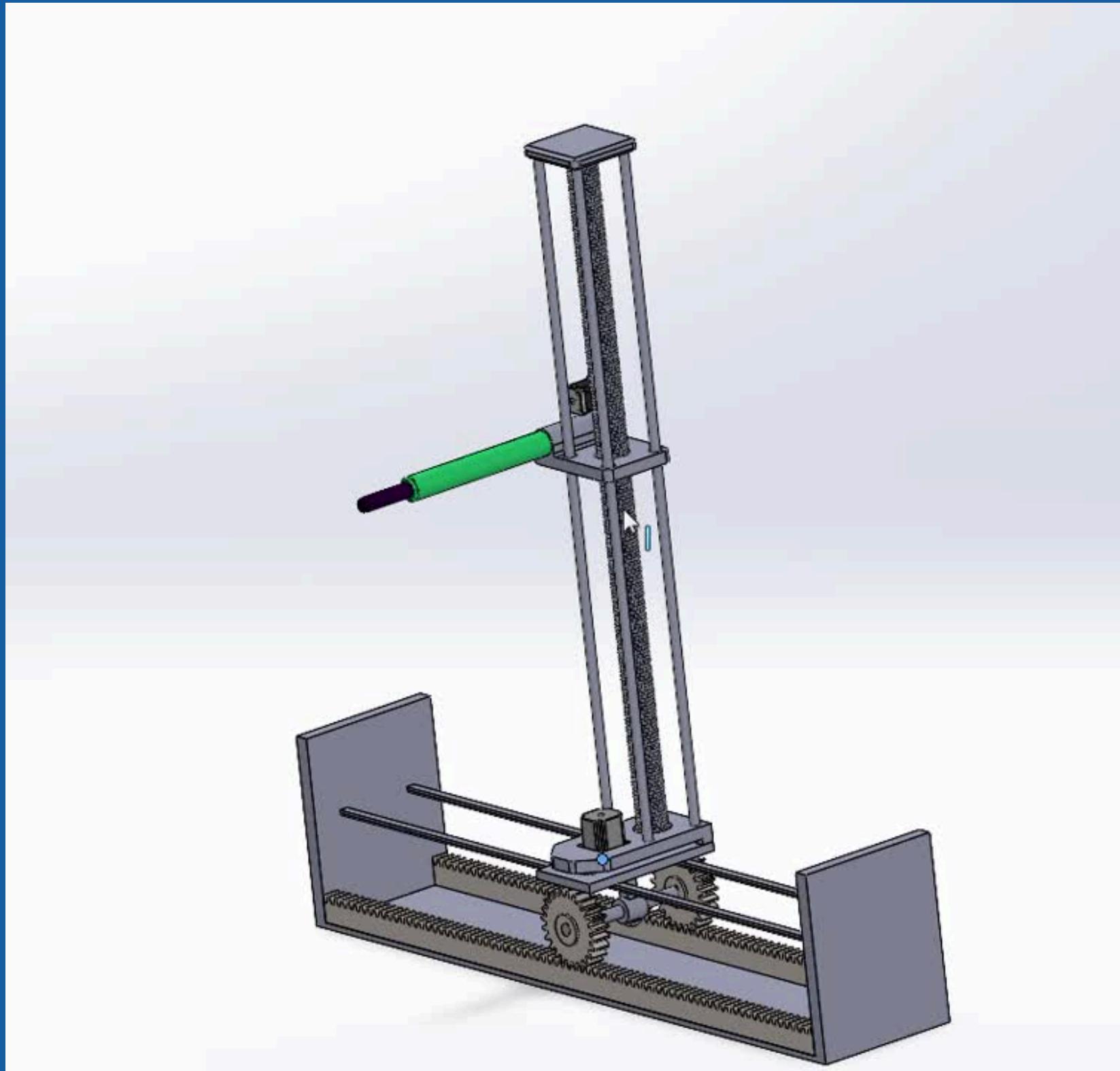
NEURAL NETWORK

CONTROLLER

MANIPULATOR

CAD MODEL



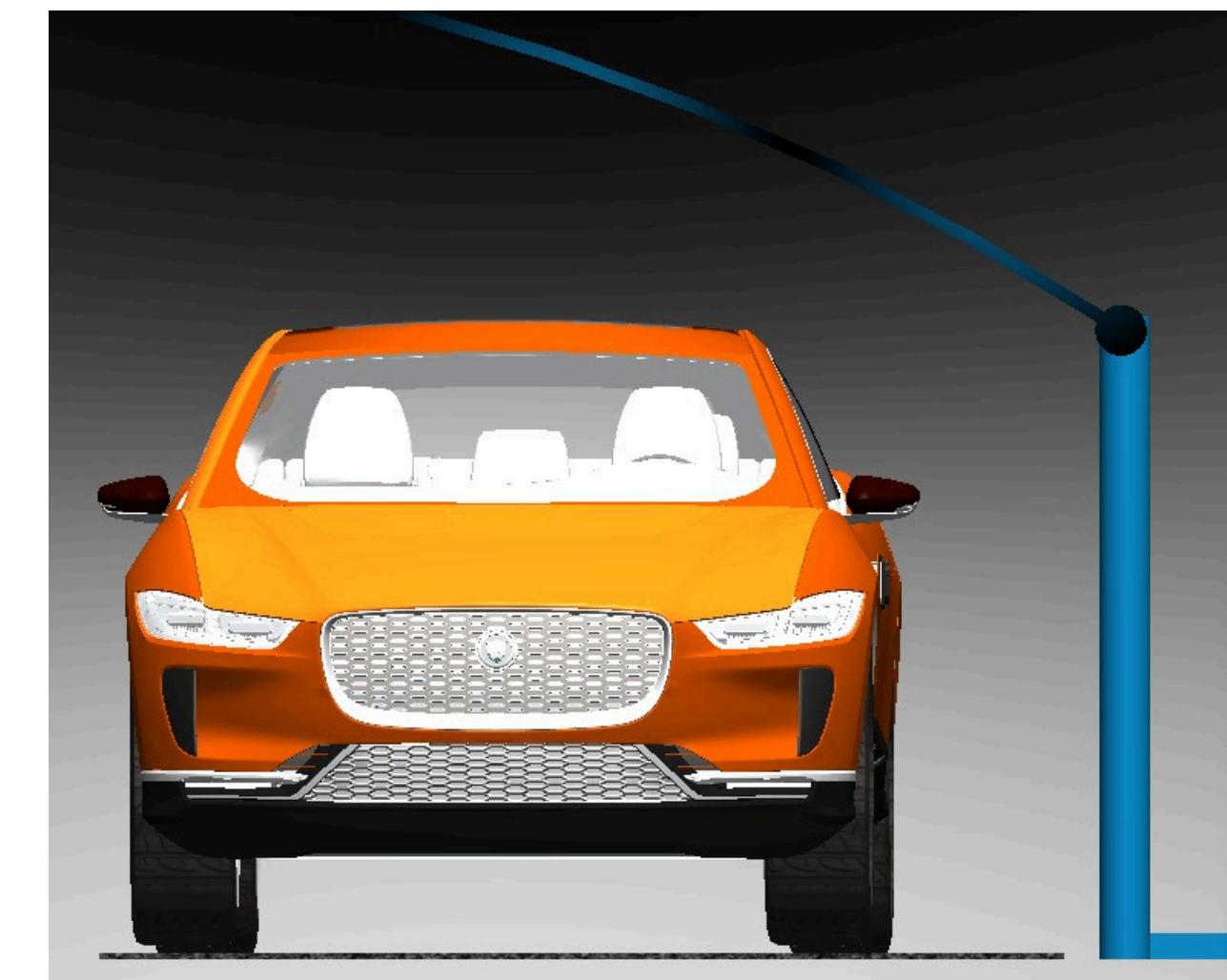
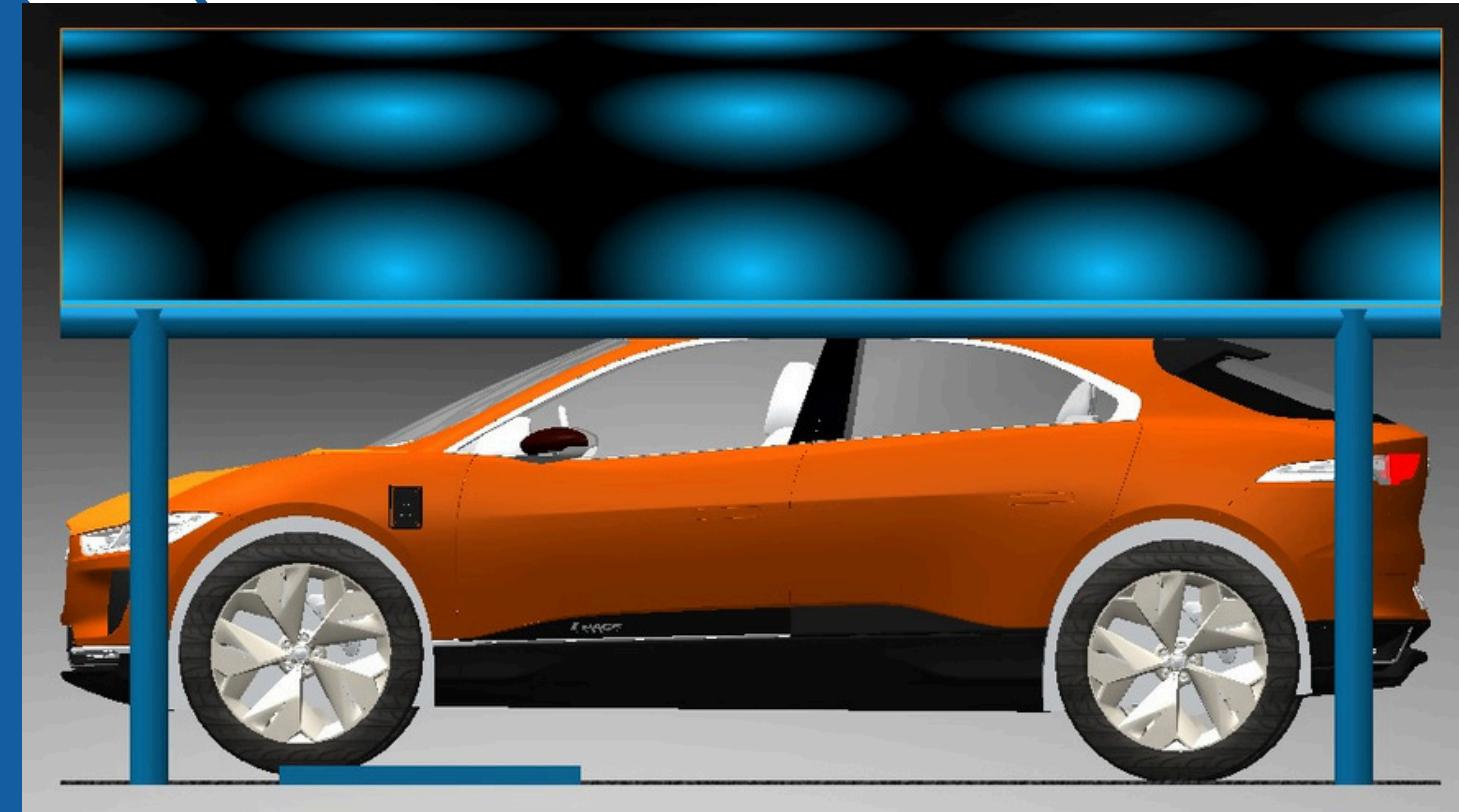


ISOMETRIC VIEW

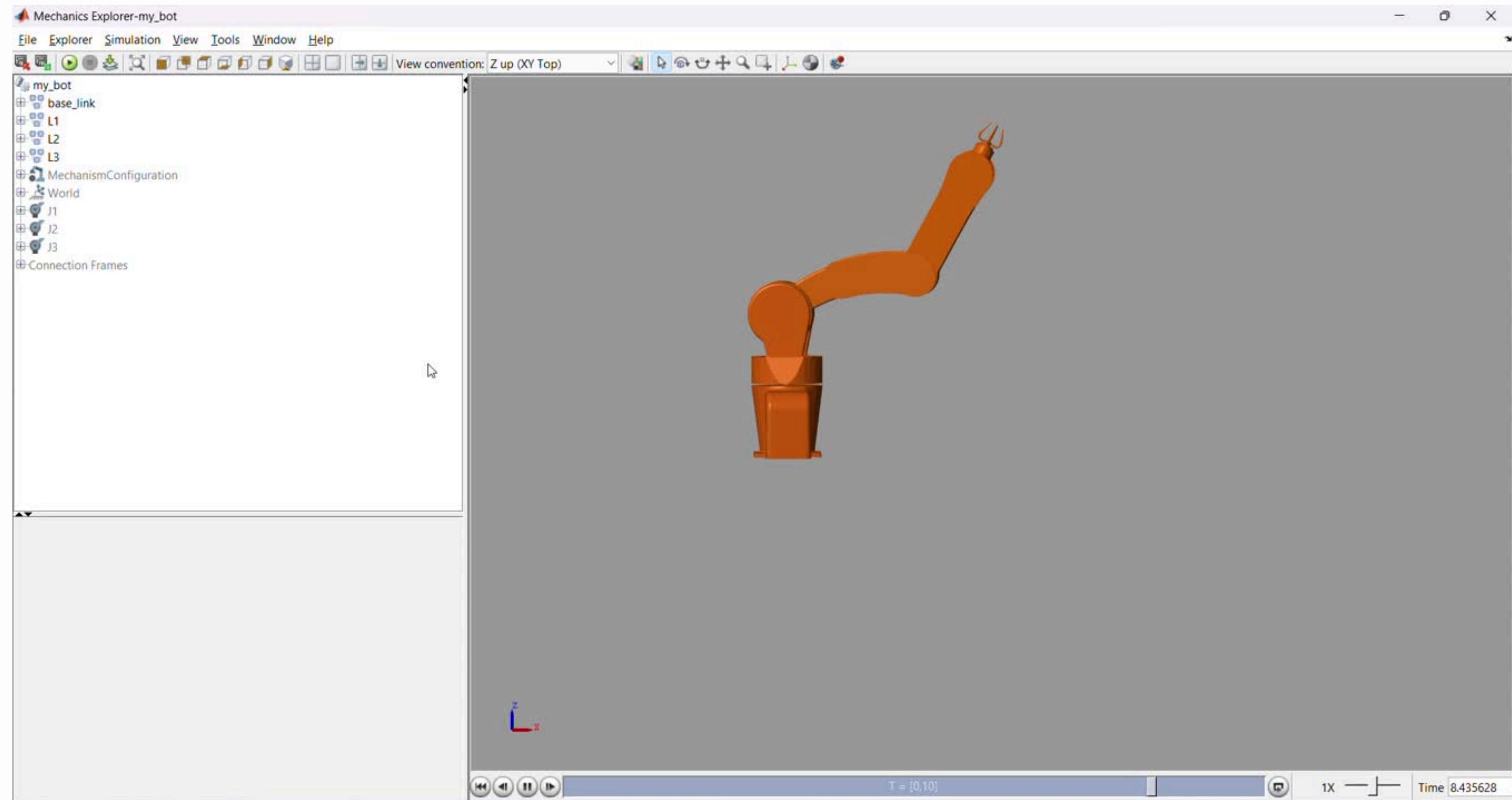
Port Detection



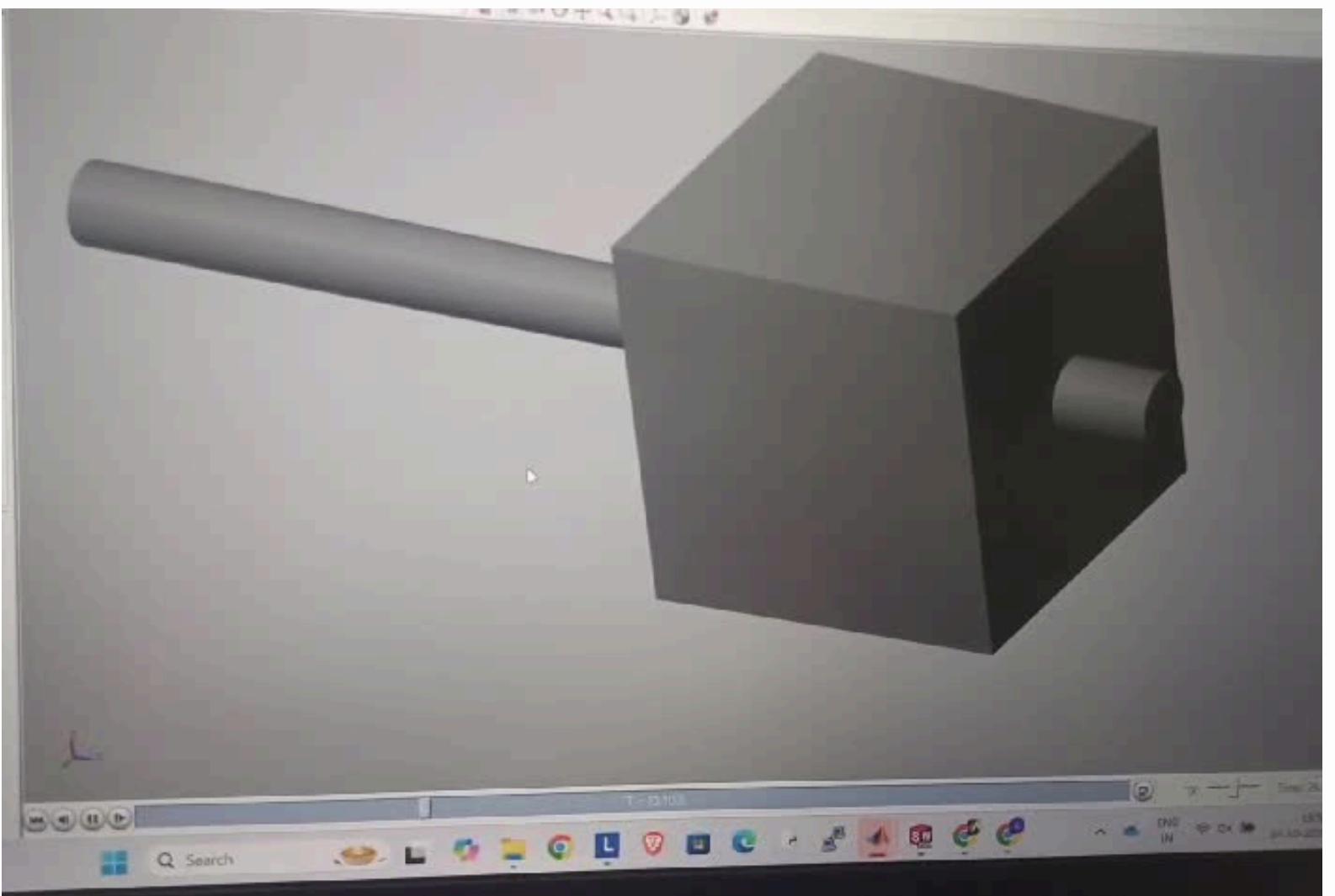
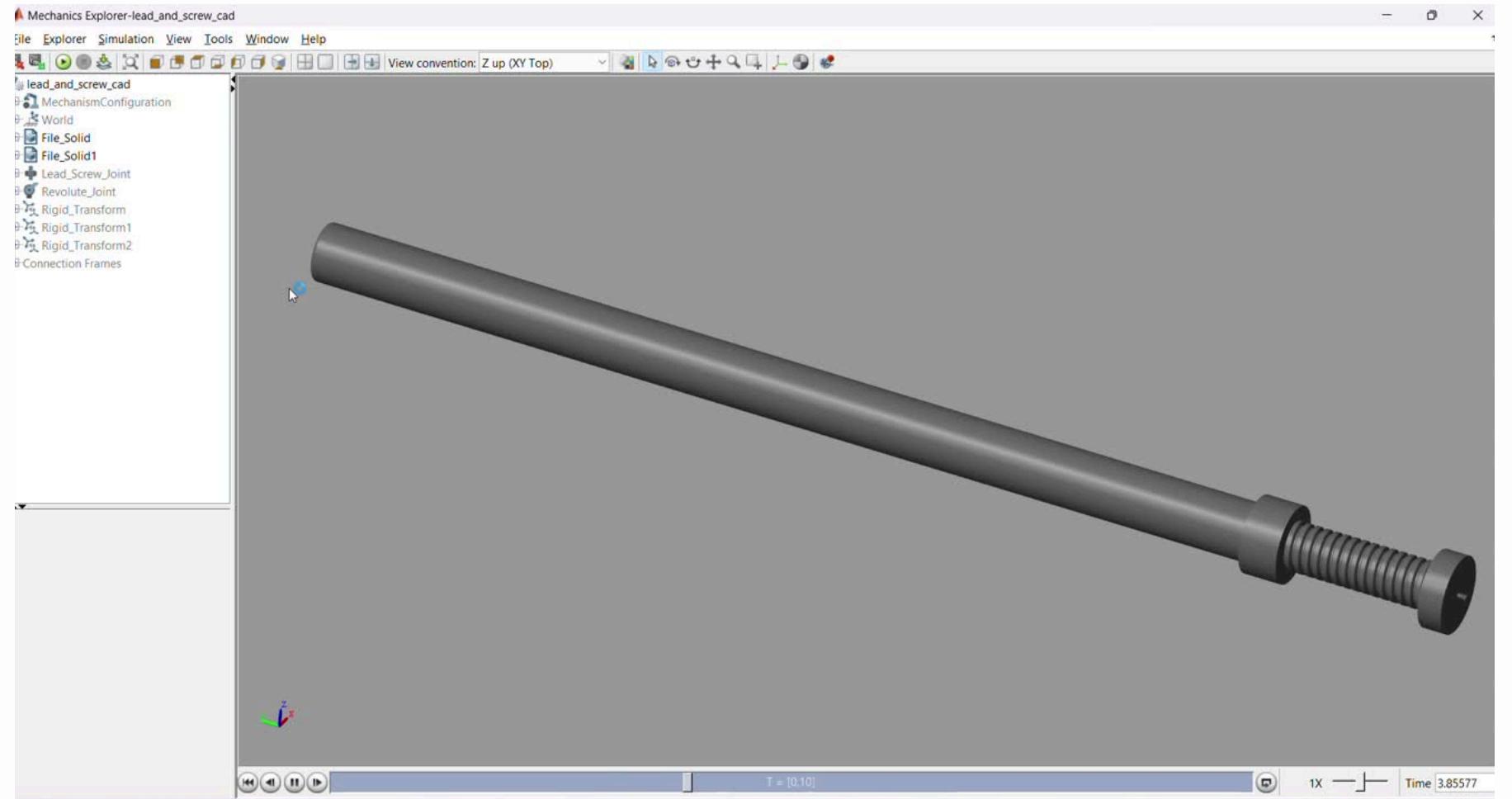
Environment Model



Simulation



Simulation



THANK YOU!