Master : ISCG
Part 1 : Matlab Application

(Version 1.0)

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Matlab Application 1

Write a script ISCG_App1.m

a) Header

b) Plot reference frame
   - Xaxis blue arrow
   - Yaxis red arrow
   - Zaxis green arrow

c) Plot P1=(5,6,10) and P2=(9,8,3)

d) Draw line between P1 and P2

e) Compute distance between P1 and P2

f) Write the distance inside the plot above the line P1P2

Matlab Application 2

Continue the previous script :

f) Define the vector V as P_1P_2

g) Define norm of vector V

h) Define the unit vector based on V

Matlab Application 3

Let define P3=(2,2,7)

i) Define the reference frame (x1, y1, z1)

-x1 as unit vector of P1P2

- z1 perpendicular of the plane P1P2P3

j) Draw the reference frame (P1,x1,y1,z1)