Installation of GPOPS-II

Below are a few steps to install the GPOPS-II package within MATLAB.

1) have a valid MATLAB software installed,
https://www.mathworks.com/campaigns/products/trials.html
2) download and unzip GPOPS-II software
https://gpops2.cartloom.com/download/link/636d592269e45e33ef235f9a2928fc23
3) download and unzip **adigator** package into GPOPS folder
http://sourceforge.net/projects/adigator/
4) setup path of adigator and GPOPS within MATLAB by run separately
    startupadigator.m in **adigator** folder
    gpopsMatlabPathSetup.m in GPOPS folder
5) download the following license file (gpops2License.p) into the **license** subfolder inside GPOPS folder:
http://www.siue.edu/~juliu/cbms18/img/gpops2License.p
6) run **savepath** to save all setup for future use
7) test the installation by run any examples in the examples subfolder in GPOPS folder:

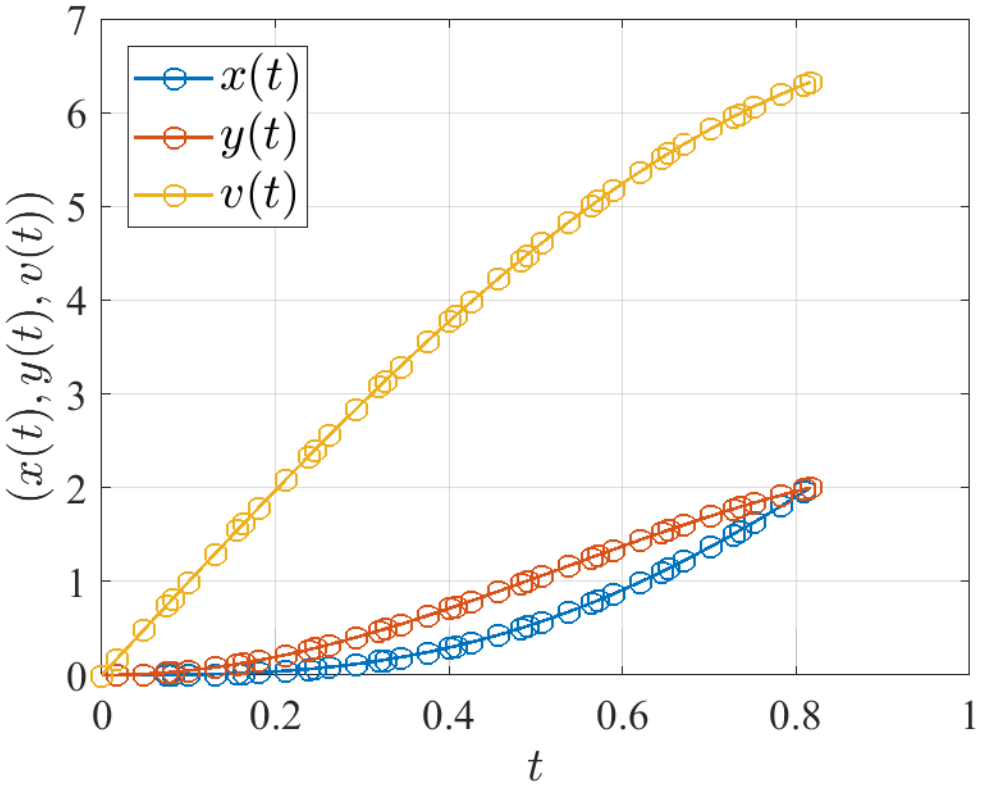
for example, in **brachistochrone** subfolder, run
    brachistochroneMain.m
If works OK, it should output sth like the following:
.....

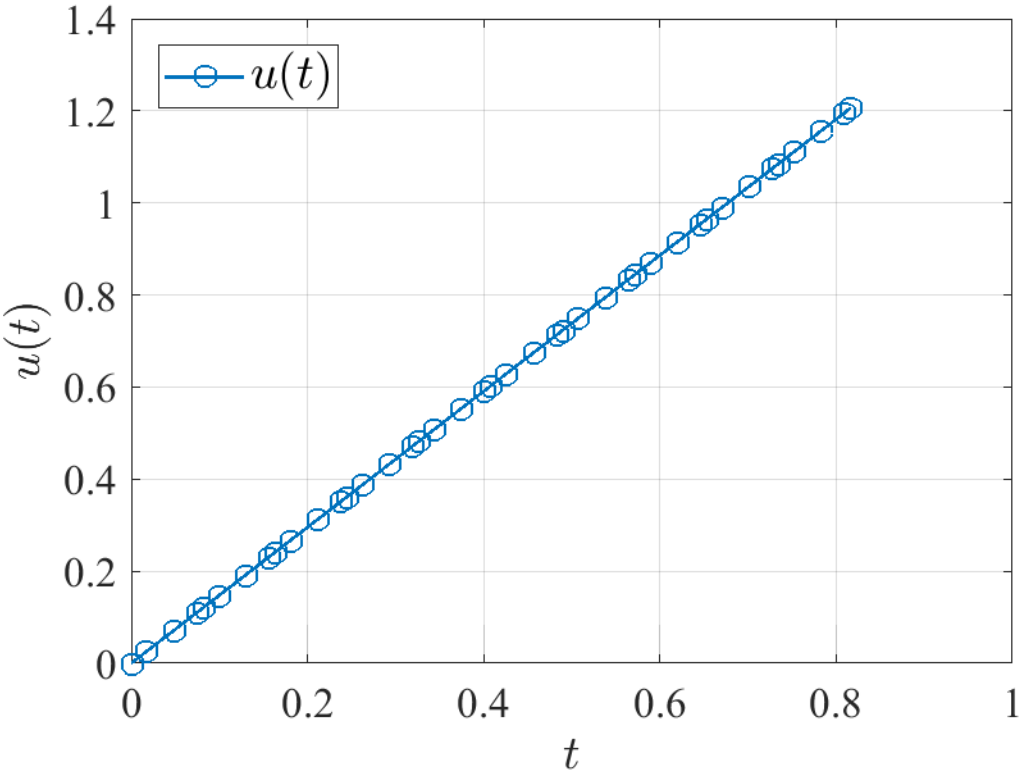
EXIT: Optimal Solution Found.

Analysis of Mesh in Phase 1
Maximum Relative Error on Current Mesh in Phase 1 = 1.5277e-08
Mesh Error Tolerance IS satisfied in Phase 1

and then run
    brachistochronePlot.m

it should produce two figures with curves, as shown in the following page


$x(t)$
$y(t)$
$v(t)$
$(x(t), y(t), v(t))$
t
0
1
2
3
4
5
6
7
0
0.2
0.4
0.6
0.8
1


$u(t)$
$u(t)$
t
0
0.2
0.4
0.6
0.8
1
1.2
1.4
0
0.2
0.4
0.6
0.8
1