LIST WITH MPC SOFTWARE (PYTHON) PvK March 2021

CASADI: symbolic package, introduces a script language of its own

<https://web.casadi.org/>

<https://github.com/casadi/casadi>

<https://github.com/casadi/live-python/blob/master/index.ipynb>

MPCPY (Leuven), only works with pyomo and IpOpt.

<https://pypi.org/project/mpcpy/>

<https://github.com/BrechtBa/mpcpy/blob/master/examples/simple_space_heating_mpc.py>

<https://github.com/BrechtBa/mpcpy>

[https://www.kuleuven.be/onderzoek/portaal/ - /projecten/user/U0009689?hl=en&lang=en](https://www.kuleuven.be/onderzoek/portaal/#/projecten/user/U0009689?hl=en&lang=en
)

PYOMO

<http://www.pyomo.org/documentation>

<https://pyomo.readthedocs.io/en/stable/>

<https://pyomo.readthedocs.io/en/stable/installation.html#using-conda>

install instructions for pyomo and ipopt/ glpk. Works! Also for mpcpy

<http://www.pyomo.org/about>

<https://stackoverflow.com/questions/57288193/use-pyomo-or-cvxpy-to-predict-the-power-of-a-building-model-predictive-control>

APMONITOR

<https://apmonitor.com/wiki/index.php/Main/Control>

GEKKO

<https://gekko.readthedocs.io/en/latest/>

<https://www.youtube.com/watch?v=Gh8R4PVg1Zc>

<https://gekko.readthedocs.io/en/latest/examples.html>

PYTHON CONTROL

<https://python-control.readthedocs.io/en/0.8.4/intro.html>

<https://github.com/python-control/python-control/blob/0.8.4/doc/intro.rst>

PYMPC

[https://github.com/TobiaMarcucci/](https://github.com/TobiaMarcucci/pympc)

FASTMPC

<https://web.stanford.edu/~boyd/fast_mpc/>

<https://stanford.edu/~boyd/fast_mpc/>

MPC

<https://pypi.org/project/mpc/>

BERKELEY

<http://www.mpc.berkeley.edu/software>

PYTORCH

<https://github.com/locuslab/mpc.pytorch>

<https://locuslab.github.io/mpc.pytorch/>

=================================================================================

ARDUINO

<https://github.com/pronenewbits/Arduino_Constrained_MPC_Library>

<https://github.com/pronenewbits/Arduino_Unconstrained_MPC_Library>

COURSE

<https://www.mazenalamir.fr/MPC/>

<https://github.com/TRAN-Gia-Quoc-Bao/Course-MPC>

LINNEA

<https://people.kth.se/~laperss/teaching/EL2424/implement-mpc/>

<https://people.kth.se/~laperss/teaching/EL2425/>

<https://people.kth.se/~laperss/teaching/EL2424/implement-mpc/><https://stackoverflow.com/questions/63727310/mpc-with-arx-model-using-gekko>

LOS

<https://www.reddit.com/r/ControlTheory/comments/he197n/designing_an_mpc_controller_in_python/>

<https://medium.datadriveninvestor.com/a-simple-guide-to-creating-predictive-models-in-python-part-1-8e3ddc3d7008>

<https://github.com/Shunichi09/PythonLinearNonlinearControl>