

GCodeMagics

September 2, 2017

1 GCode Magics.

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In [ ]: import GCode
        import GRBL
        import numpy as np
        from utils import picture
        cnc = GRBL.GRBL(port="/dev/cnc_3018")

In [13]: print("Laser Mode: {}".format(cnc.laser_mode))

Laser Mode: 1.0

In [14]: if cnc.laser_mode:
        cnc.laser_mode = False

ok

In [15]: cnc.laser_mode

Out[15]: 1.0

In [16]: if cnc.laser_mode:
        cnc.laser_mode = 0

ok

In [17]: cnc.laser_mode

Out[17]: 0.0

In [18]: program = GCode.GCode()

In [ ]: program.G0

In [19]: from IPython.core.magic import register_cell_magic
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In [20]: @register_cell_magic
         def cmagic(line, cell):
             "my cell magic"
             return line, cell

In [27]: %%cmagic
         G0
         G1
         G2
         G3

Out[27]: ('', 'G0\nG1\nG2\nG3')

In [28]: @register_cell_magic
         def GCode(_, cell):
             commands = cell.splitlines()
             for command in commands:
                 print(command)
             return None

In [29]: %%GCode
         G0
         G1
         G2
         G3

G0
G1
G2
G3

In [30]: @register_cell_magic
         def CNC(_, cell):
             commands = cell.splitlines()
             cnc.run(commands)
             return None

In [31]: %%CNC
         G0 X-1

In [32]: %%CNC
         G0 X150 Y90

In [33]: %%CNC
         G0 Y-90

In [34]: %%CNC
         G91
         G21

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In [44]: %%CNC  
        M3 S1000
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In [48]: %%CNC  
        G0 Y-25
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In [50]: %%CNC  
        M3 S0
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