Marco Lurati, Giovanni Profeta

## Marco Lurati

#digitalFabrication

#physicalComputing

#webDevelopment

## Giovanni Profeta

#dataVisualization

#webDesign

#graphicDesign

# Il tempo della Terra e il tempo dell'uomo

Museo cantonale di storia naturale, Lugano

9 ottobre 2015 – 25 giugno 2016

# L’idea

# Raccolta dati

# Il progetto

Lorem ipsum dolor sit amet, consectetur adipiscing

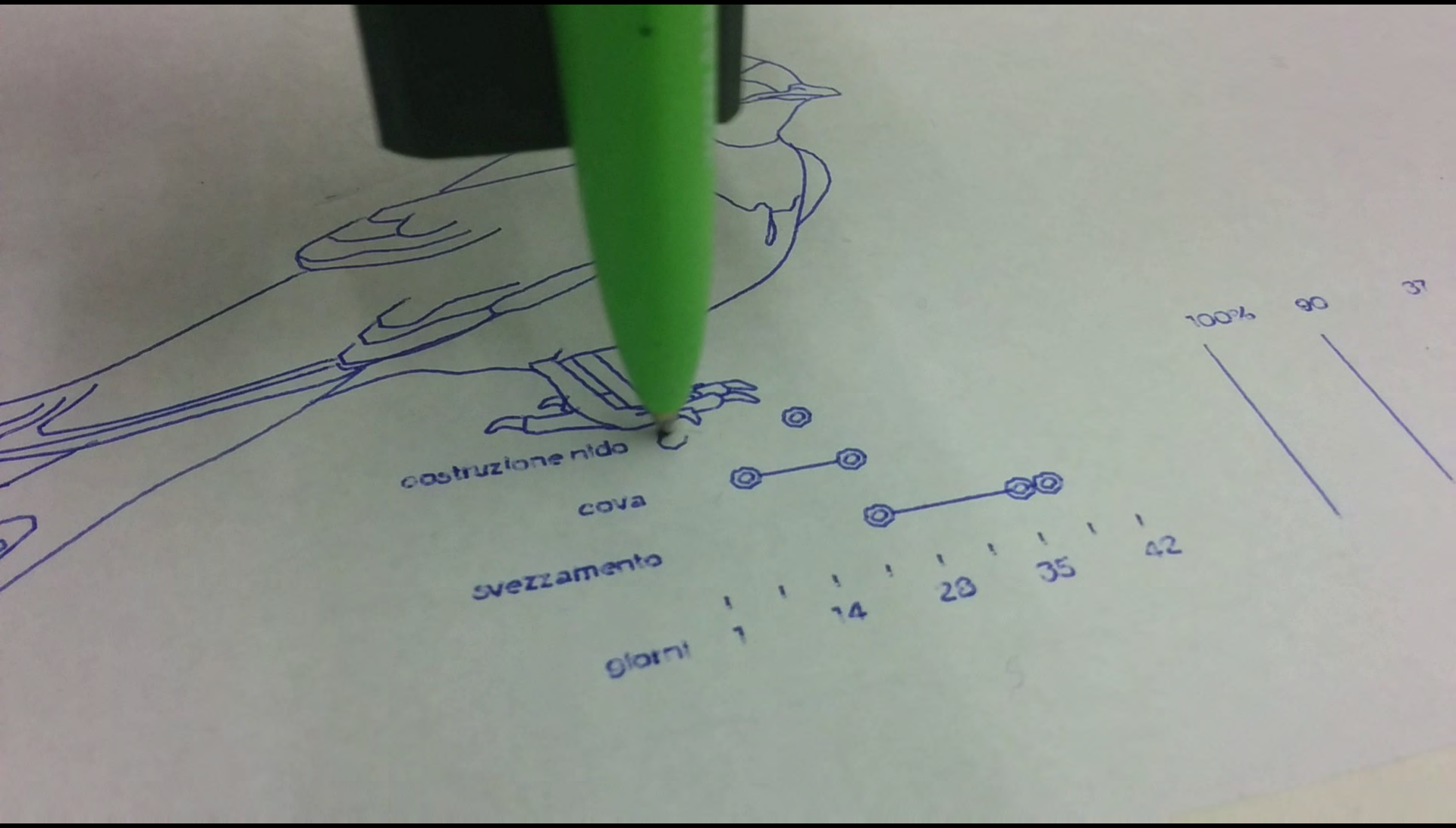
# Dall'Africa e ritorno

## La rondine del Piano di Magadino

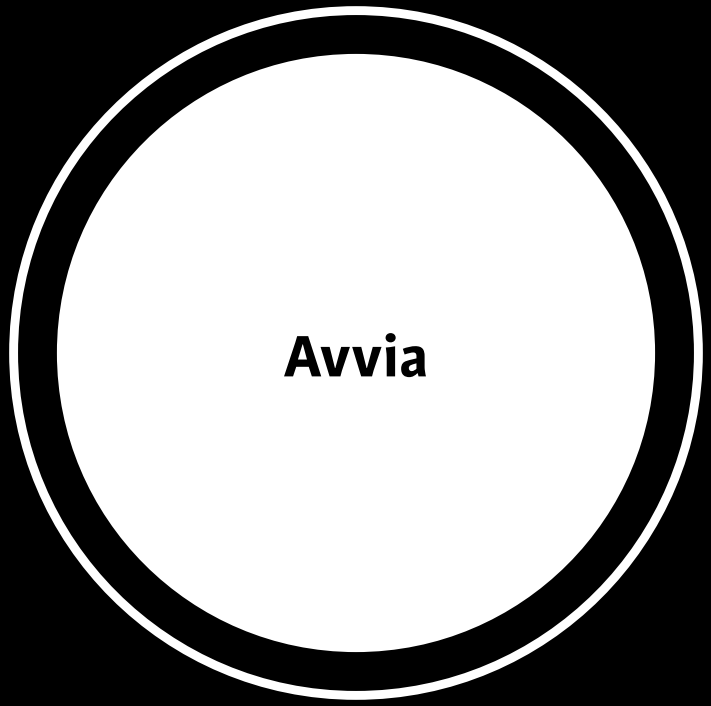

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis quam ex, tincidunt eget lobortis et, lobortis ac lectus. Mauris ultricies sapien vitae vulputate mattis. Fusce maximus ornare feugiat. Ut porttitor justo id faucibus placerat. Nam mollis

adipiscing elit. Duis quam ex, tincidunt eget lobortis et, lobortis ac lectus. Mauris ultricies sapien vitae vulputate mattis. Fusce maximus ornare feugiat. Ut porttitor justo id faucibus placerat. Nam mollis commodo tellus, eget hendrerit libero tincidunt d

Area interessata dalla nidificazione in Europa
Migrazione autunnale
Migrazione primaverile


costruzione nido
cova
svezzamento
giorni
1
14
28
35
42
100%
80

# Plotter


Avvia


Prendi il poster
L'identikit della rondine
Curiosità sulla rondine
La migrazione primaverile
La migrazione autunnale
Prendi il poster

# L’identikit della rondine

La rondine è un migratore diurno e nidificante regolare, presente in Svizzera principalmente tra metà marzo e metà ottobre, soprattutto al di sotto dei 1000 m di quota. Si nutre di insetti che caccia in volo.

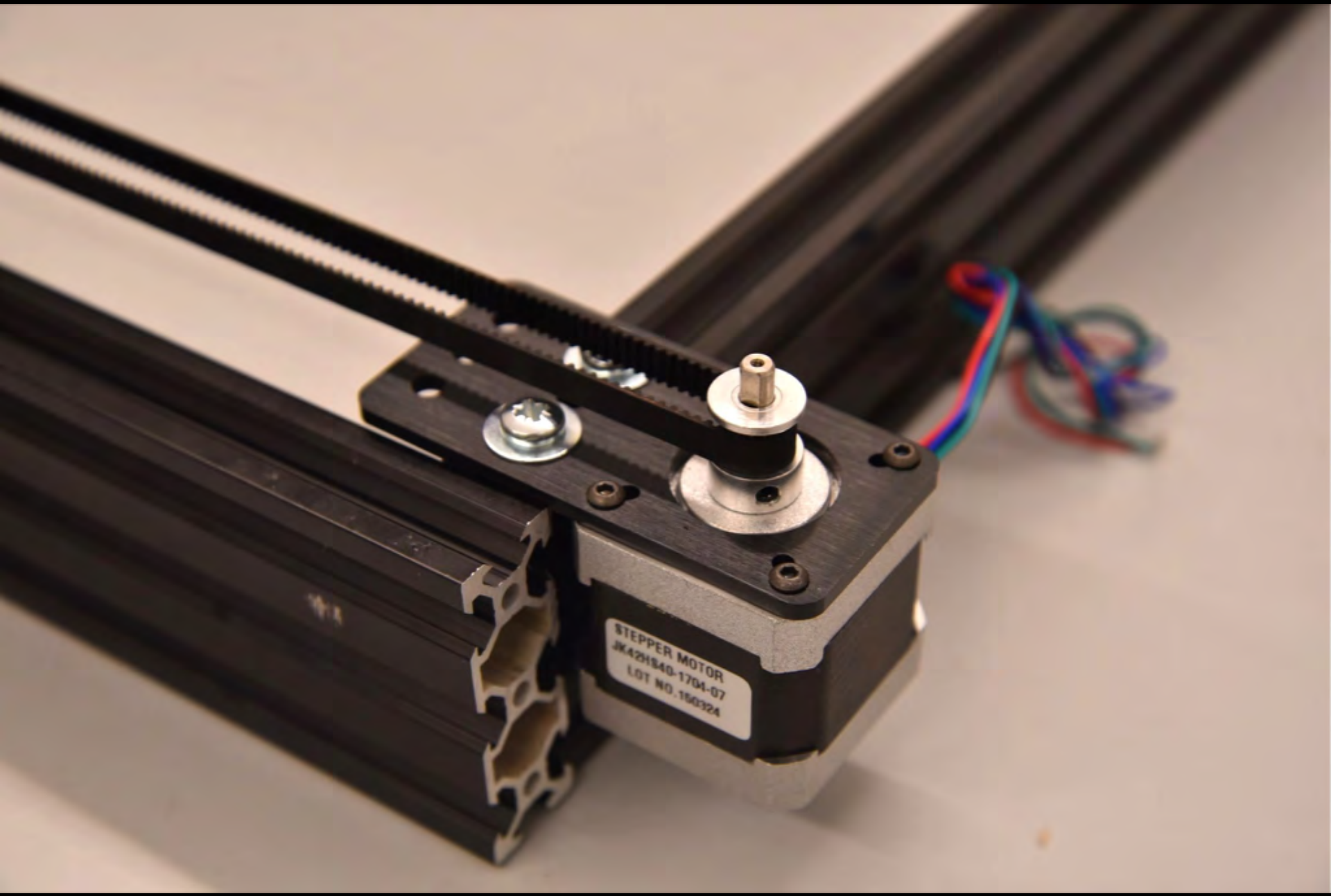
| | |
|---|---|
| Nome comune | Rondine<br>Rauchschwalbe<br>Randulina stgira<br>Hirondelle rustique |
| Nome scientifico | Hirundo rustica |

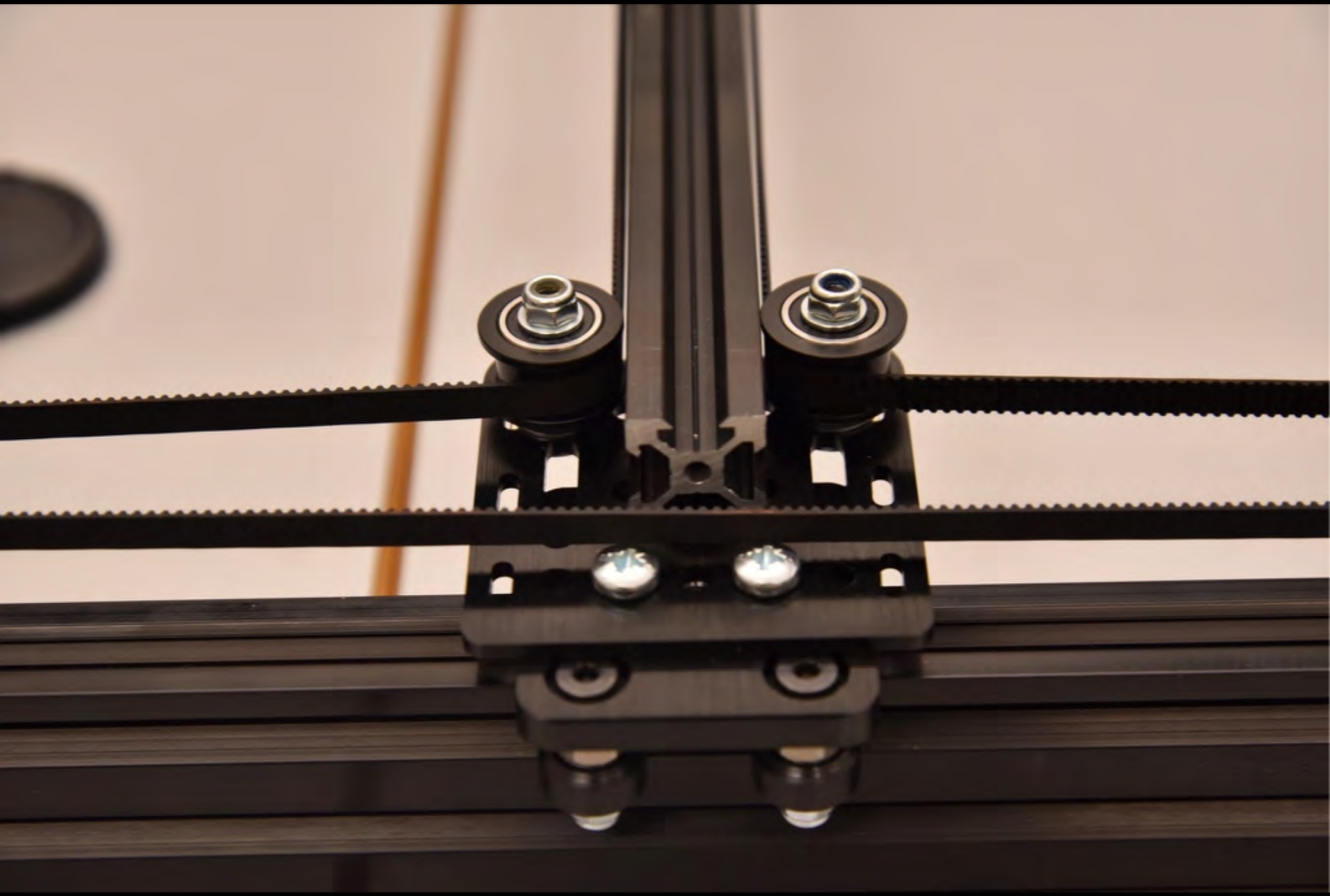
-1' 30"

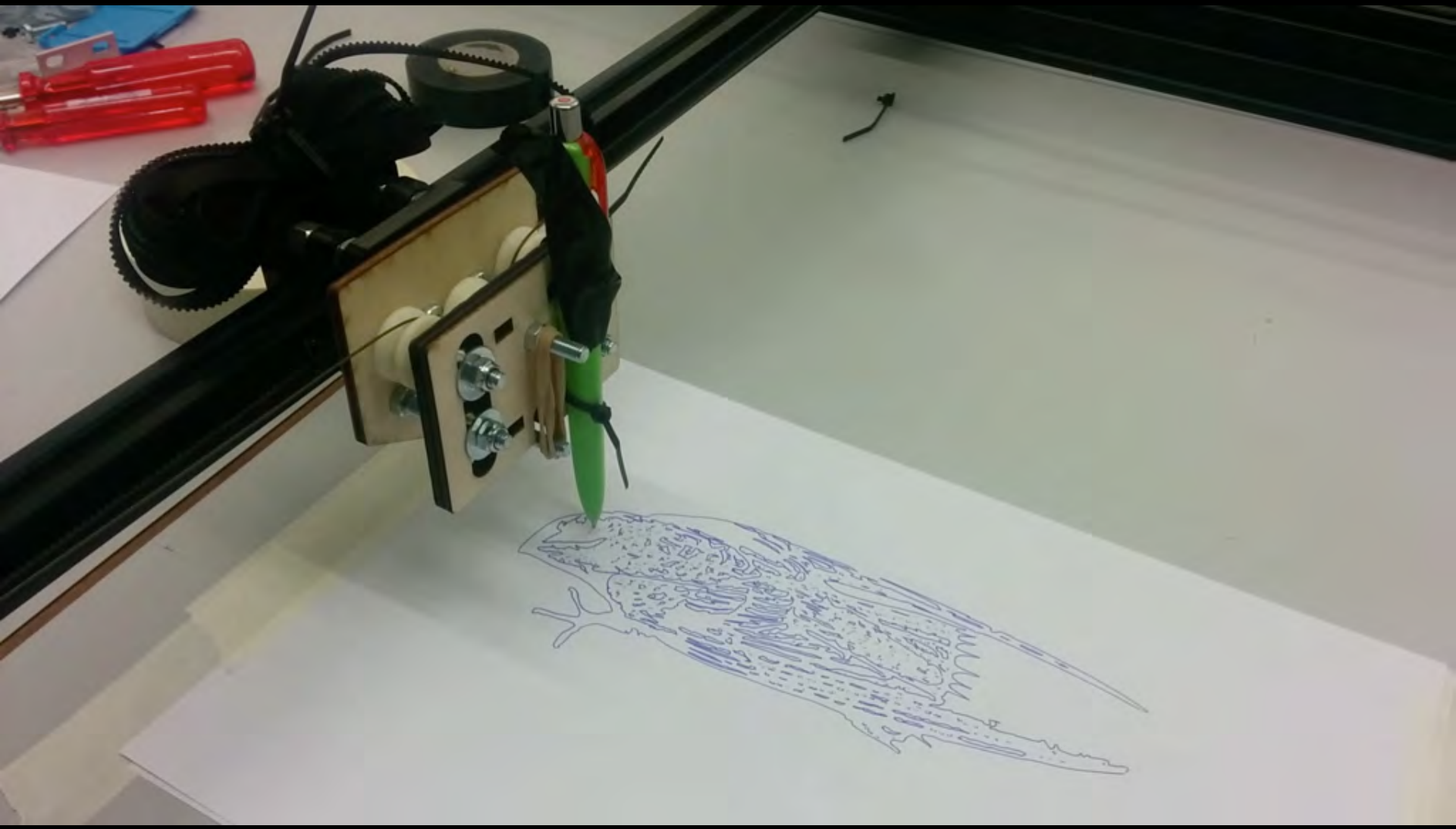

From Africa and back
interactive installation

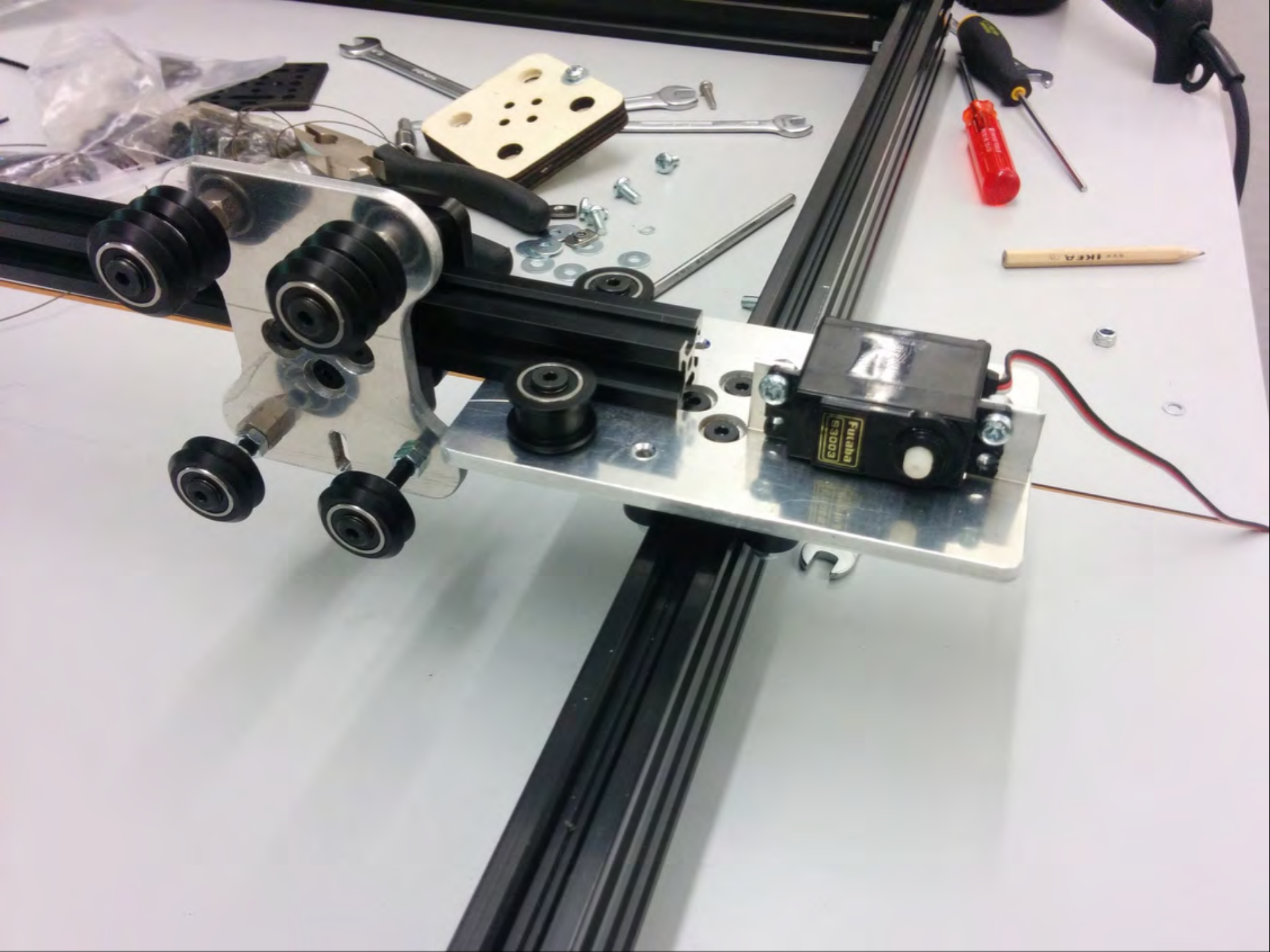
# La realizzazione

# Meccanica

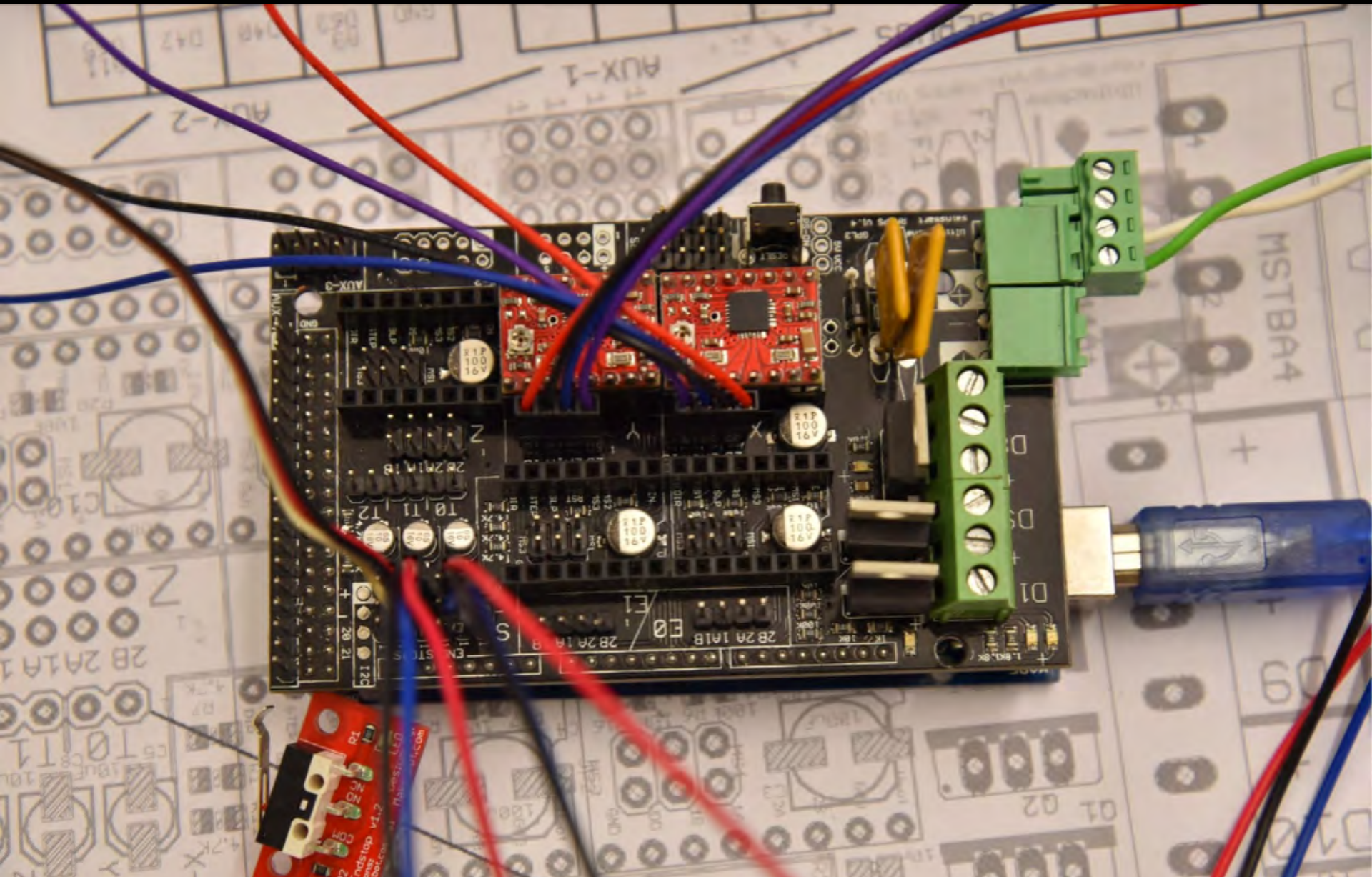

STEPPER MOTOR
JK42HS40-1704-07
LOT NO.160324

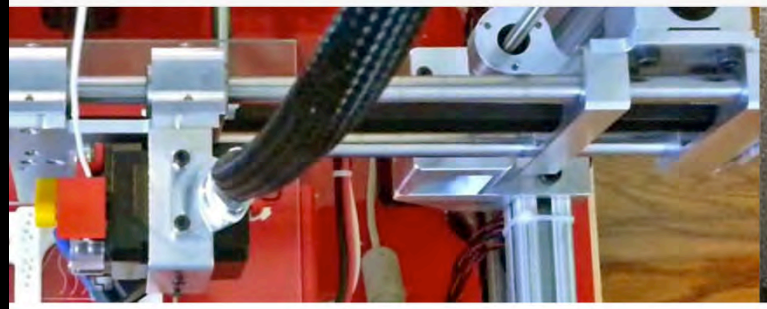





Futaba
S3003

# Elettronica





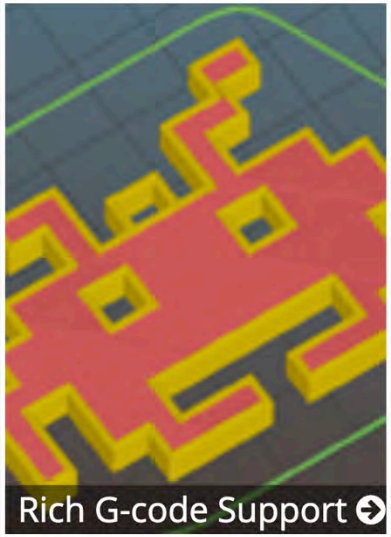
# Open Source 3D Printer Firmware

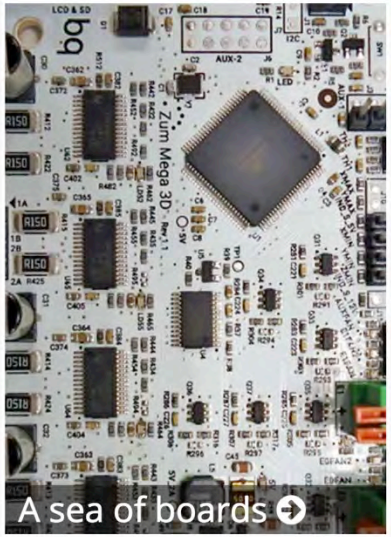
First created in 2011 for RepRap and Ultimaker, today Marlin drives most of the world's 3D printers. Reliable and precise, it delivers outstanding print quality while keeping you in full control of the process. As an open source project hosted on Github, Marlin is owned and maintained by the maker community.

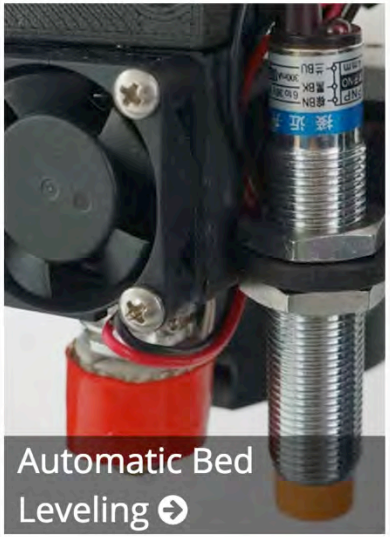
Learn how you can contribute!

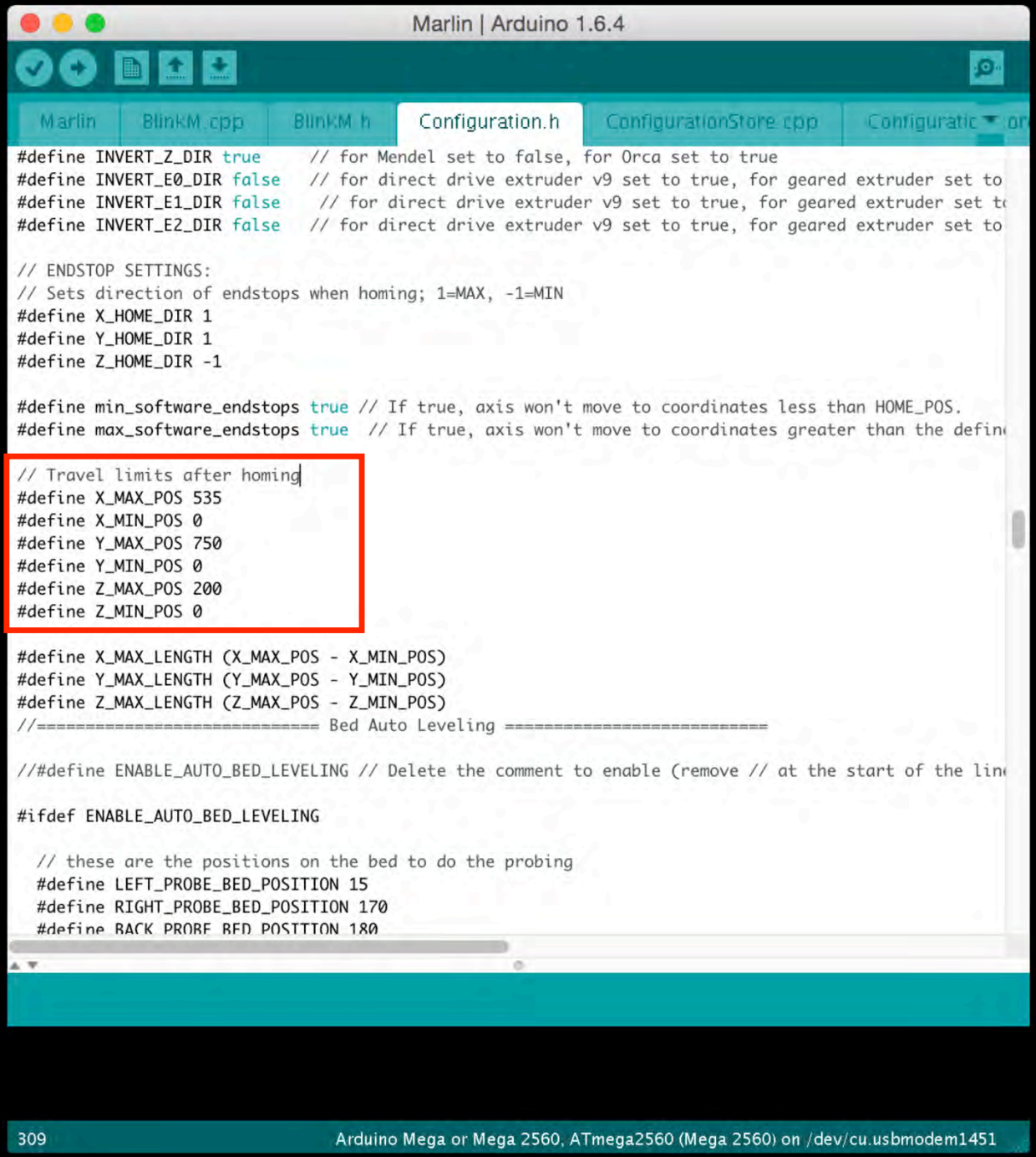
Learn more

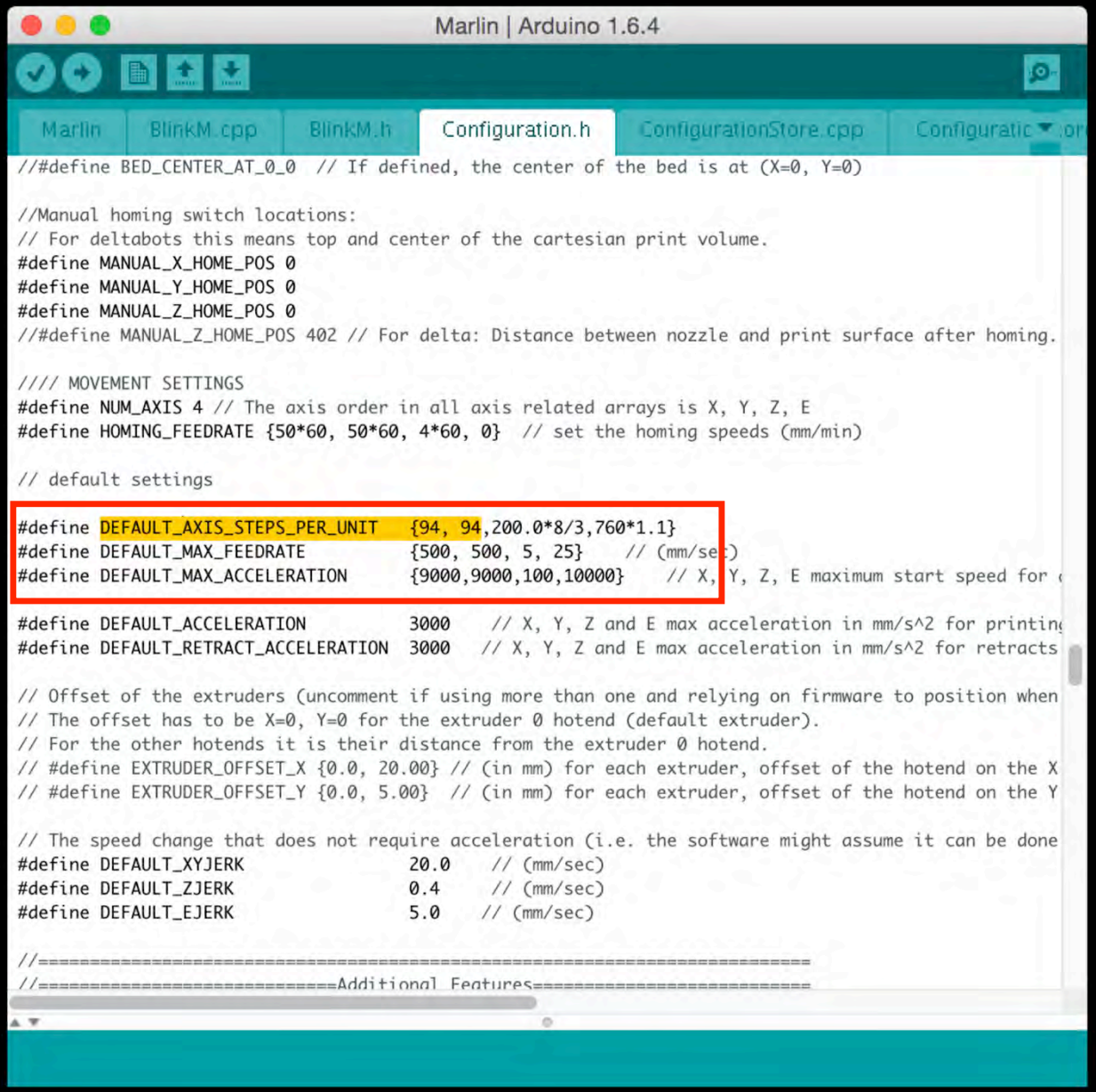
Download

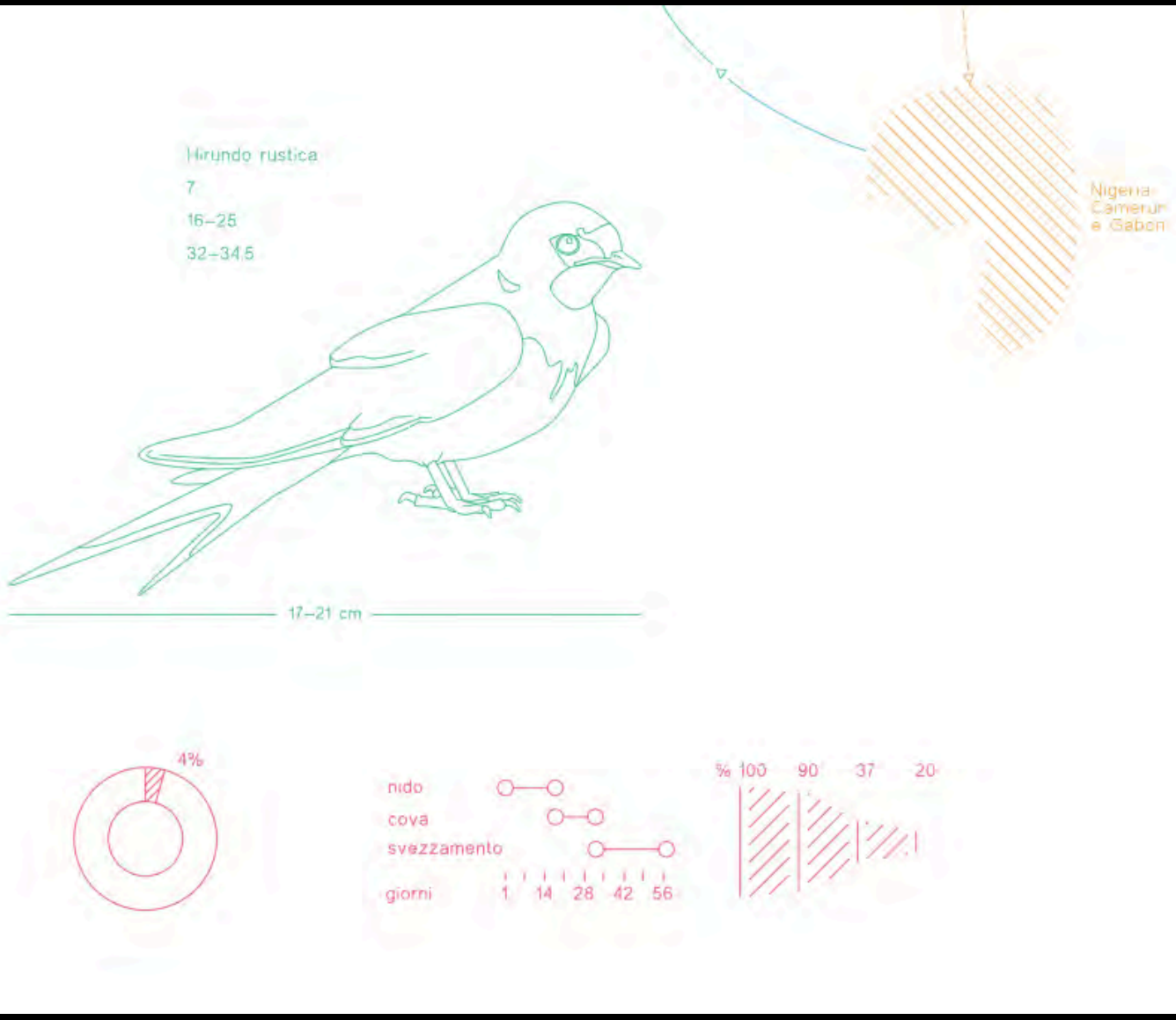



Marlin | Arduino 1.6.4
Marlin
BlinkM.cpp
BlinkM.h
Configuration.h
ConfigurationStore.cpp
#define INVERT_Z_DIR true // for Mendel set to false, for Orca set to true
#define INVERT_E0_DIR false // for direct drive extruder v9 set to true, for geared extruder set to
#define INVERT_E1_DIR false // for direct drive extruder v9 set to true, for geared extruder set to
#define INVERT_E2_DIR false // for direct drive extruder v9 set to true, for geared extruder set to
// ENDSTOP SETTINGS:
// Sets direction of endstops when homing; 1=MAX, -1=MIN
#define X_HOME_DIR 1
#define Y_HOME_DIR 1
#define Z_HOME_DIR -1
#define min_software_endstops true // If true, axis won't move to coordinates less than HOME_POS.
#define max_software_endstops true // If true, axis won't move to coordinates greater than the defin
// Travel limits after homing
#define X_MAX_POS 535
#define X_MIN_POS 0
#define Y_MAX_POS 750
#define Y_MIN_POS 0
#define Z_MAX_POS 200
#define Z_MIN_POS 0
#define X_MAX_LENGTH (X_MAX_POS - X_MIN_POS)
#define Y_MAX_LENGTH (Y_MAX_POS - Y_MIN_POS)
#define Z_MAX_LENGTH (Z_MAX_POS - Z_MIN_POS)
//============================ Bed Auto Leveling ============================
//#define ENABLE_AUTO_BED_LEVELING // Delete the comment to enable (remove // at the start of the lin
#ifdef ENABLE_AUTO_BED_LEVELING
// these are the positions on the bed to do the probing
#define LEFT_PROBE_BED_POSITION 15
#define RIGHT_PROBE_BED_POSITION 170
#define BACK_PROBE_BED_POSITION 180
309
Arduino Mega or Mega 2560, ATmega2560 (Mega 2560) on /dev/cu.usbmodem1451


Marlin | Arduino 1.6.4
Marlin
BlinkM.cpp
BlinkM.h
Configuration.h
ConfigurationStore.cpp
//#define BED_CENTER_AT_0_0 // If defined, the center of the bed is at (X=0, Y=0)
//Manual homing switch locations:
// For deltabots this means top and center of the cartesian print volume.
#define MANUAL_X_HOME_POS 0
#define MANUAL_Y_HOME_POS 0
#define MANUAL_Z_HOME_POS 0
//#define MANUAL_Z_HOME_POS 402 // For delta: Distance between nozzle and print surface after homing.
//// MOVEMENT SETTINGS
#define NUM_AXIS 4 // The axis order in all axis related arrays is X, Y, Z, E
#define HOMING_FEEDRATE {50*60, 50*60, 4*60, 0} // set the homing speeds (mm/min)
// default settings
#define DEFAULT_AXIS_STEPS_PER_UNIT {94, 94,200.0*8/3,760*1.1}
#define DEFAULT_MAX_FEEDRATE {500, 500, 5, 25} // (mm/sec)
#define DEFAULT_MAX_ACCELERATION {9000,9000,100,10000} // X, Y, Z, E maximum start speed for
#define DEFAULT_ACCELERATION 3000 // X, Y, Z and E max acceleration in mm/s^2 for printing
#define DEFAULT_RETRACT_ACCELERATION 3000 // X, Y, Z and E max acceleration in mm/s^2 for retracts
// Offset of the extruders (uncomment if using more than one and relying on firmware to position when
// The offset has to be X=0, Y=0 for the extruder 0 hotend (default extruder).
// For the other hotends it is their distance from the extruder 0 hotend.
// #define EXTRUDER_OFFSET_X {0.0, 20.00} // (in mm) for each extruder, offset of the hotend on the X
// #define EXTRUDER_OFFSET_Y {0.0, 5.00} // (in mm) for each extruder, offset of the hotend on the Y
// The speed change that does not require acceleration (i.e. the software might assume it can be done
#define DEFAULT_XYJERK 20.0 // (mm/sec)
#define DEFAULT_ZJERK 0.4 // (mm/sec)
#define DEFAULT_EJERK 5.0 // (mm/sec)
//=========
//=========Additional Features=========
390
Arduino Mega or Mega 2560, ATmega2560 (Mega 2560) on /dev/cu.usbmodem1451

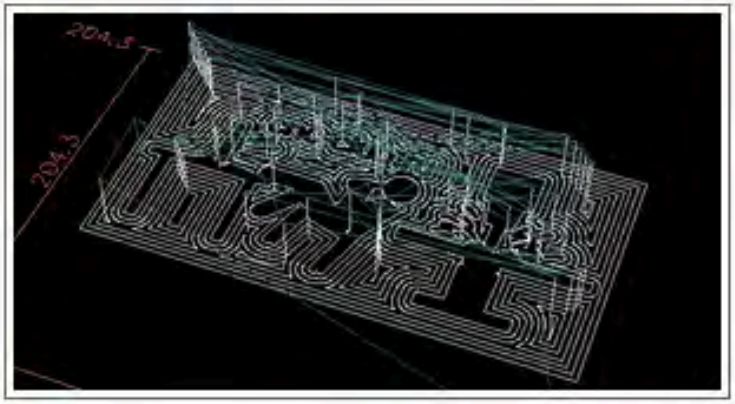



Color
Color Guide
Swatches
Brushes
Symbols
Stroke
Gradient
Transparency
Appearance
Graphic Styles
Asset Export
Layers
Artboards
disegno
g34...
g4353
layer1
Titolo
1 Layer

#1 Nick » 10 дек 2009, 10:28

# Gcodetools

Gcodetools is a plug-in for Inkscape. It prepares and converts paths from Inkscape to Gcode, using biarc interpolation.




*Generated Gcode in EMC2*

| | |
|---|---|
| **Type** | Extension of vector graphics editor Inkscape |
| **Developer** | Gcodetools develop team |
| **Written in** | Python |
| **OS** | Cross-Platform (Windows, Linux, MacOS) |
| **Version** | 1.6.03 |
| **License** | GNU GPL |
| **Downloads** | 7800+ |

**This article is unfinished. You can help cnc-club expanding it.**
Screenshots and photos are needed. Please post them at this thread.

**Nick**
Мастер

Сообщения: 22330
Зарегистрирован: 23 ноя 2009, 16:45
Откуда: Gatchina, Saint-Petersburg distr., Russia
Репутация: 1335
Заслуга: Developer
Медальки:

ЛС

```
M280 P 0 S gcode_pen_up
G04 P gcode_delay_end
G01 X 329.8363 Y 526.0787
G04 P gcode_delay_begin
M280 P 0 S gcode_pen_down
G04 P gcode_delay_end
G02 X 329.2403 Y 524.6399 Z -0.1250 I -2.0348 J 0.0000 F gcode_F_speed
G02 X 327.8015 Y 524.0439 Z -0.1250 I -1.4388 J 1.4388
G02 X 326.3627 Y 524.6399 Z -0.1250 I -0.0000 J 2.0348
G02 X 325.7667 Y 526.0787 Z -0.1250 I 1.4388 J 1.4388
G02 X 326.3627 Y 527.5176 Z -0.1250 I 2.0348 J 0.0000
G02 X 327.8015 Y 528.1135 Z -0.1250 I 1.4388 J -1.4388
G02 X 329.2403 Y 527.5176 Z -0.1250 I -0.0000 J -2.0348
G02 X 329.8363 Y 526.0787 Z -0.1250 I -1.4388 J -1.4388
G01 X 329.8363 Y 526.0787 Z -0.1250
G04 P gcode_delay_begin
M280 P 0 S gcode_pen_up
G04 P gcode_delay_end
G01 X 333.5555 Y 523.9791
G04 P gcode_delay_begin
M280 P 0 S gcode_pen_down
G04 P gcode_delay_end
G03 X 333.6233 Y 523.7712 Z -0.1250 I 1.1043 J 0.2451 F gcode_F_speed
G03 X 333.7247 Y 523.5930 Z -0.1250 I 0.8910 J 0.3894
G03 X 333.8590 Y 523.4367 Z -0.1250 I 0.9469 J 0.6776
G03 X 334.0208 Y 523.3047 Z -0.1250 I 0.8288 J 0.8506
G03 X 334.2026 Y 523.2011 Z -0.1250 I 0.7155 J 1.0447
G03 X 334.4118 Y 523.1224 Z -0.1250 I 0.6271 J 1.3492
G03 X 334.6309 Y 523.0752 Z -0.1250 I 0.4360 J 1.4895
G03 X 334.8665 Y 523.0586 Z -0.1250 I 0.2356 J 1.6701
G03 X 335.0871 Y 523.0727 Z -0.1250 I 0.0000 J 1.7362
G03 X 335.3023 Y 523.1143 Z -0.1250 I -0.2185 J 1.7061
G03 X 335.5094 Y 523.1858 Z -0.1250 I -0.3374 J 1.3141
G03 X 335.6890 Y 523.2832 Z -0.1250 I -0.4891 J 1.1161
G03 X 335.8459 Y 523.4111 Z -0.1250 I -0.5958 J 0.8910
G03 X 335.9745 Y 523.5663 Z -0.1250 I -0.7093 J 0.7189
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G03 X 336.1145 Y 523.9629 Z -0.1250 I -0.9508 J 0.3351
G03 X 336.0864 Y 524.1182 Z -0.1250 I -0.9533 J -0.0921
G03 X 336.0348 Y 524.2618 Z -0.1250 I -0.8840 J -0.2365
G03 X 335.9612 Y 524.3951 Z -0.1250 I -0.9134 J -0.4171
G03 X 335.8709 Y 524.5103 Z -0.1250 I -0.7215 J -0.4728
G03 X 335.7630 Y 524.6095 Z -0.1250 I -0.6898 J -0.6427
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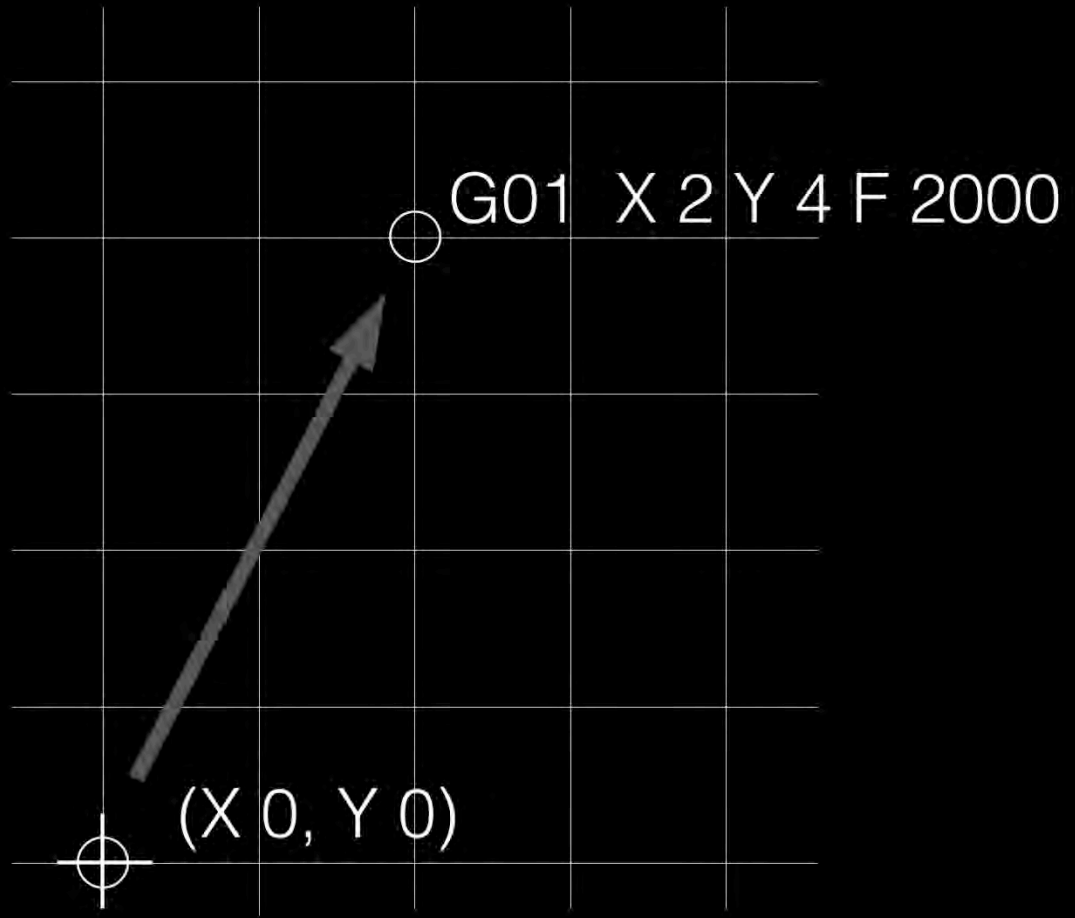
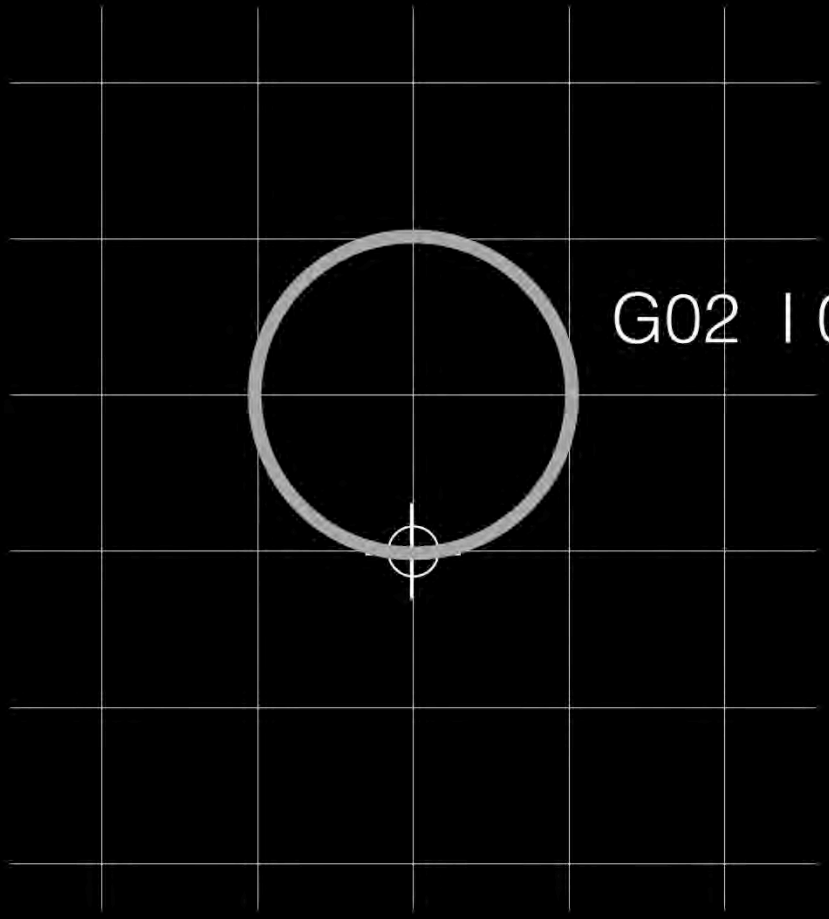
# CNC

Computer Numerical Control



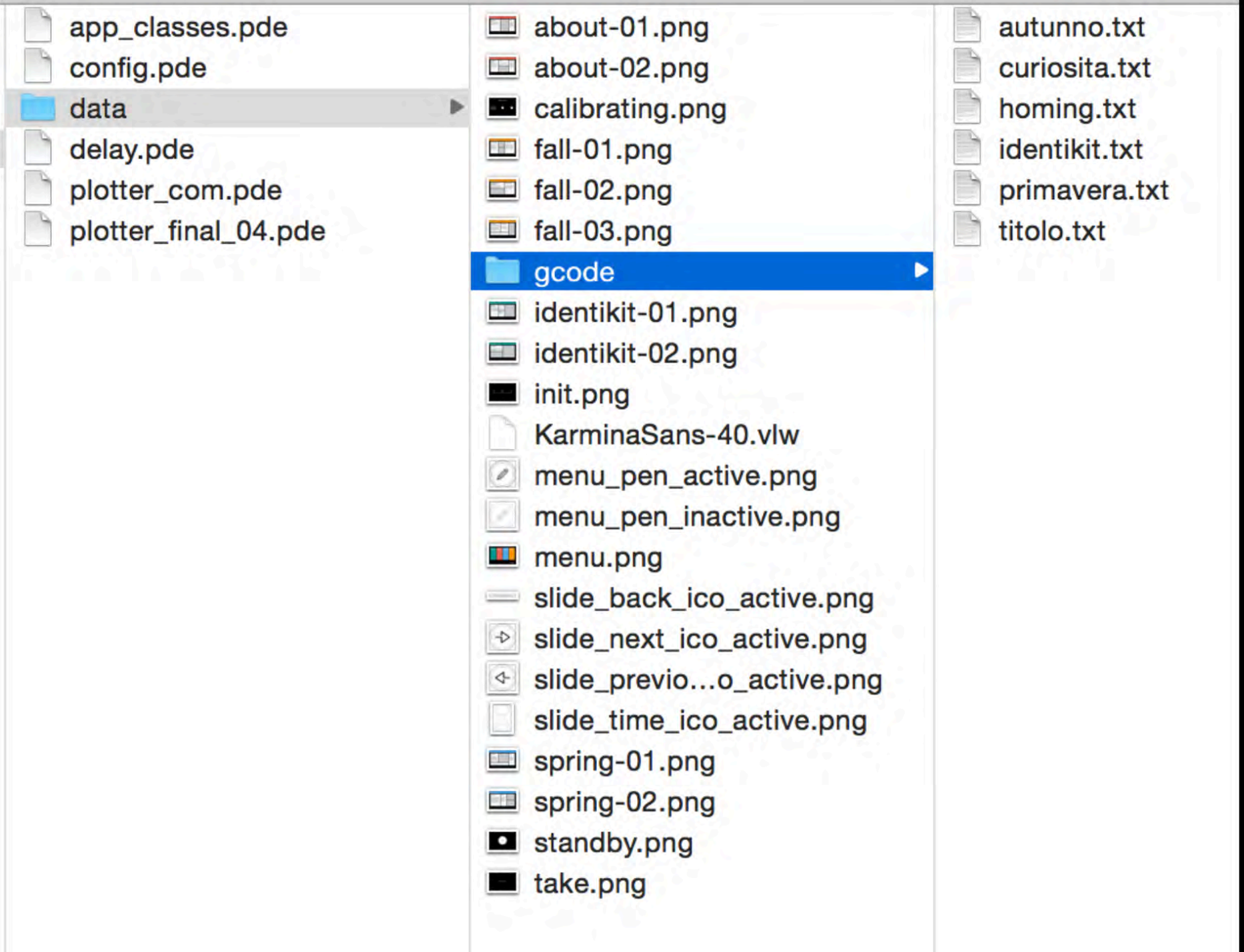
# CNC

Computer Numerical Control



G02 I 0 J 1 F 1500

I (x), J (y)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data
delay.pde
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about-02.png
calibrating.png
fall-01.png
fall-02.png
fall-03.png
gcode
identikit-01.png
identikit-02.png
init.png
KarminaSans-40.vlw
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menu_pen_inactive.png
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slide_back_ico_active.png
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slide_previo…o_active.png
slide_time_ico_active.png
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spring-02.png
standby.png
take.png
autunno.txt
curiosita.txt
homing.txt
identikit.txt
primavera.txt
titolo.txt


Dall'Africa
e ritorno
Premi Avvia
Seleziona i 4 temi
Aspetto che il disegno sia completo
Prendi il poster
L'identikit della rondine
Curiosità sulla rondine
La migrazione primaverile
La migrazione autunnale