Welcome! If you are looking to make your own custom force plate for terrestrial or aquatic locomotion here is a quick setup overview.

Overview:

1. Parts needed
2. Programs needed

Parts needed

**Electronics:**

Custom circuit boards

INA 125P

Rechargeable 9V batteries

Battery links

Resistors 10- 1,000 ohm

Trim pots 1M-2M

Strain Gauges

Screw Terminals

Multimeter

Heat shrink 3-5mm

Nidaq USB-6002

**3D printed parts**

STL file from GitHub

Access to Form lab2/3 , Isopropyl, UV cure

Resin tough 2000

Filers and sandpaper

**MISC**

FP substrate

Aquarium Silicone

Small screwdriver

80-20 T-slot beams

80-20 screws

Programs needed

**Part editing and printing**

Fusion 360- to edit load cell thicknes

Preform- to print out 3D parts with formlab

EAGLE CAD- edit circuit board

**Gather Data**

Signal analyzer -in matlab

NIDAQmx tool box – in matlab

National instruments Package manager – National instruments (NI)

Nidaq-mx – using NI package manager

Image processing toolbox- For calibraitons getpts function- Matlab