

# Soft Robotics Actuator

David Camparmo

Department of Physics, Kwantlen Polytechnic University



## What is soft Robotics

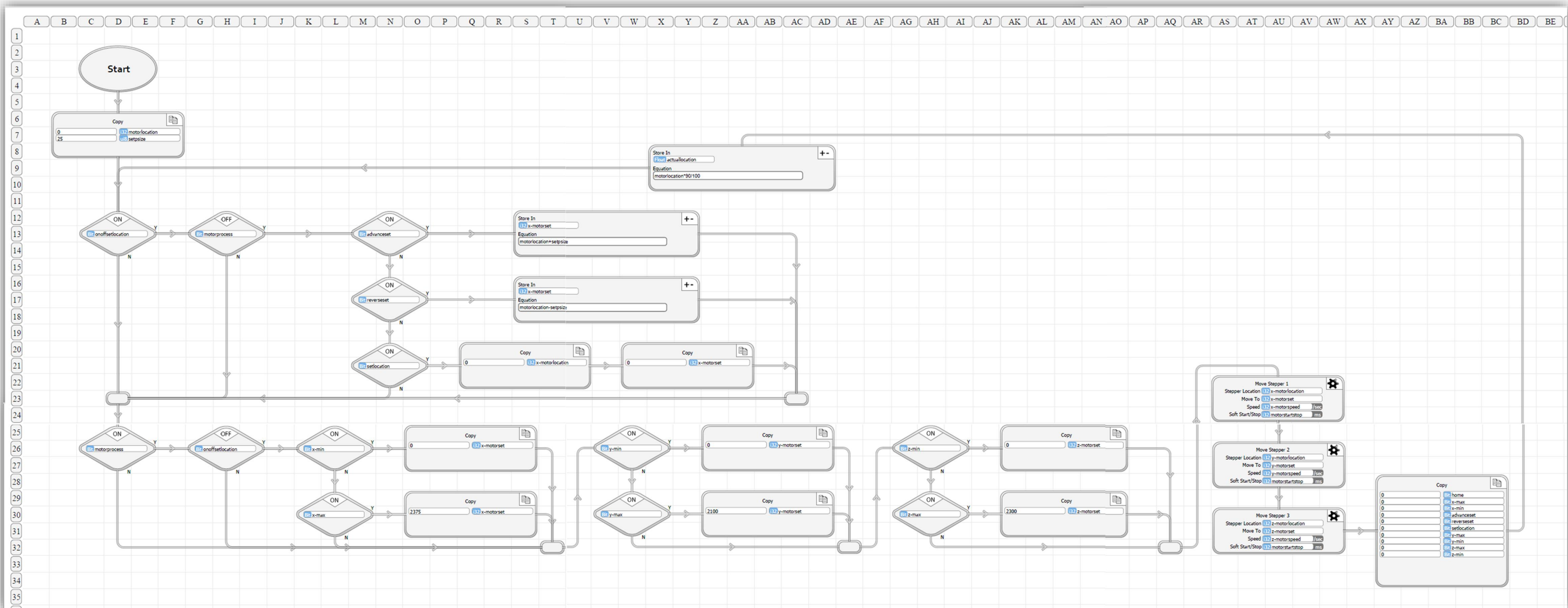
A field of robotics that constructs components of robots out of soft and flexible material



## Flow Based Code



Made using vBuilder



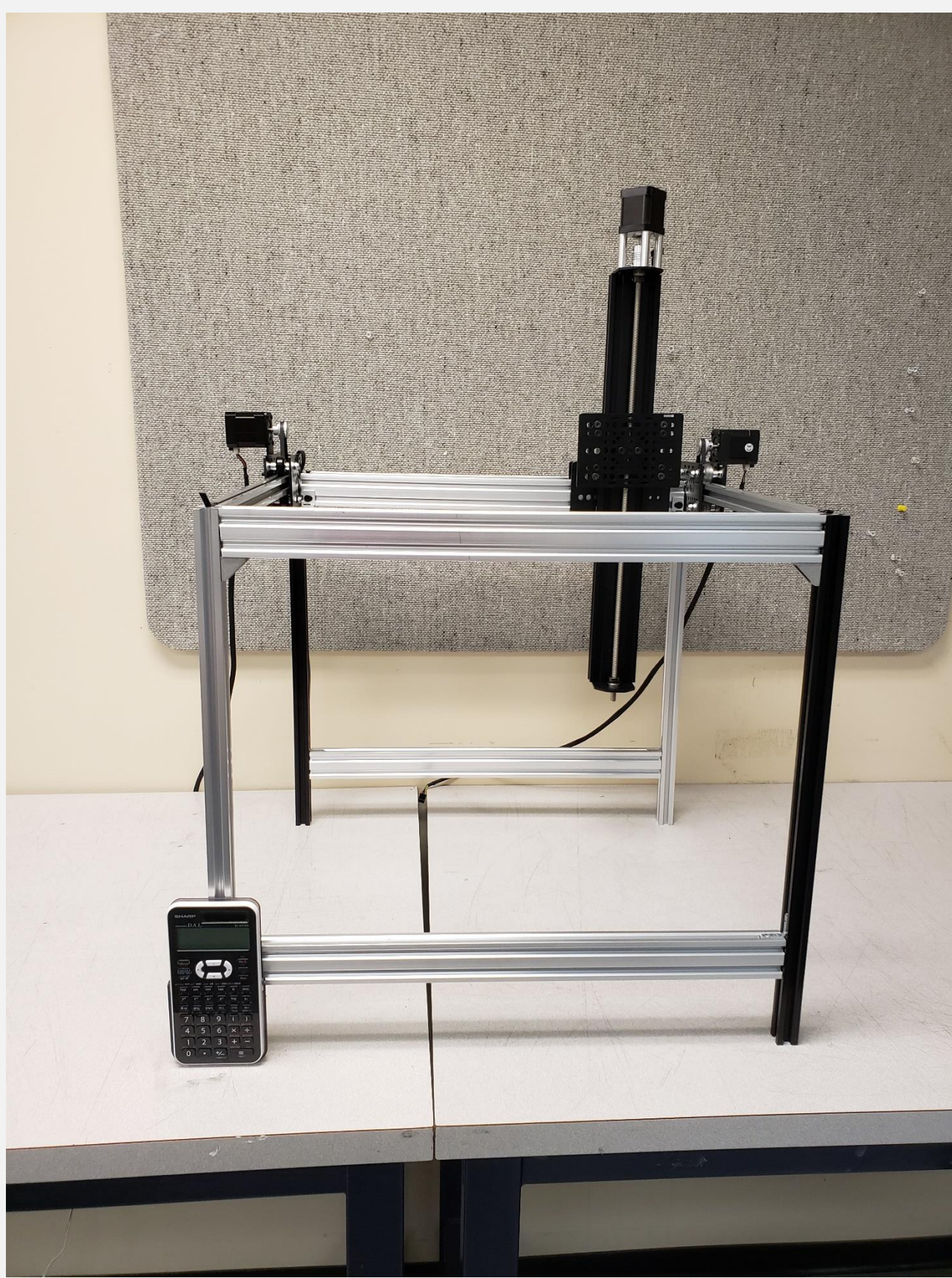
## Why Soft Robotics

The soft bodies of these types of robots have many applications

- Surgical assistance
- Food preparation industry
- Bio mimicry
- Exosuits

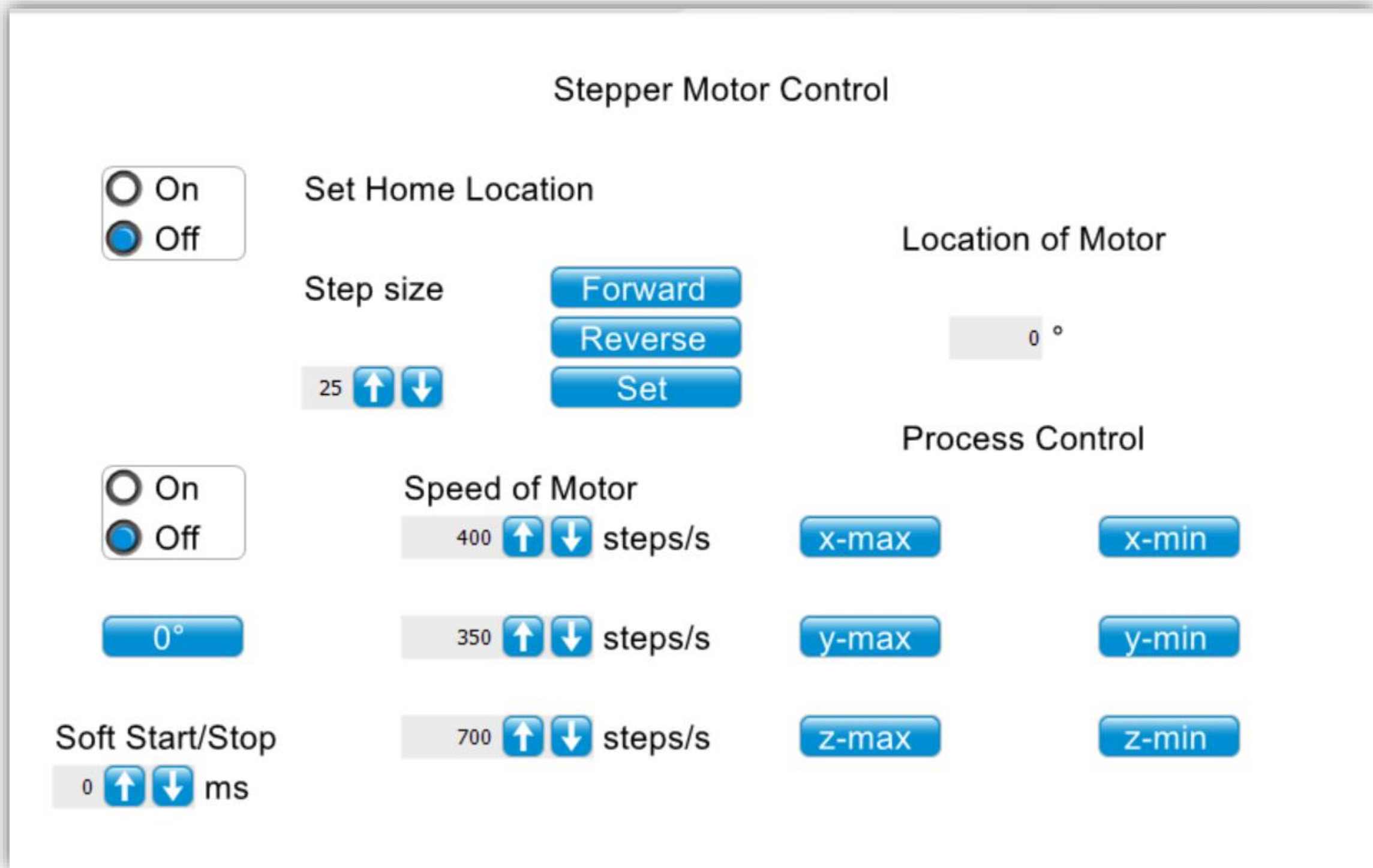
## Term Objective

To construct the a Cartesian robot that a soft pneumatic actuator can be mounted to



## User interface

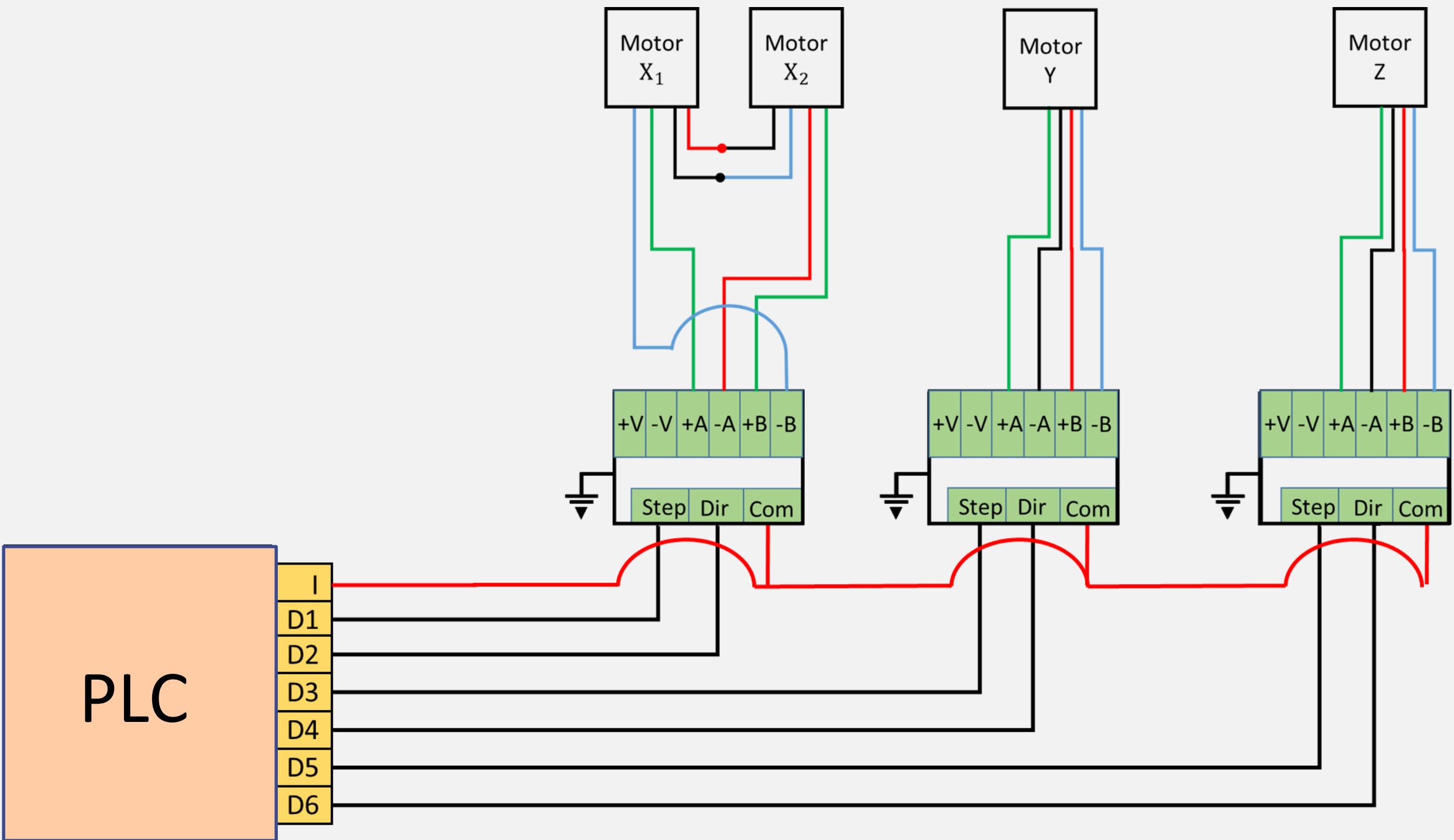
A screen shot of the user interface that allows the user to control the axes independently



Made using vFactory

## Circuit Diagram

Diagram of the how the motors are wired to the PLC



## Next Term Objective

Design and test multiple soft actuators using solid works to design molds for the silicone actuator