

# Automatic Writing Machine

Exploratory Project: Group 36

Yash Mehta

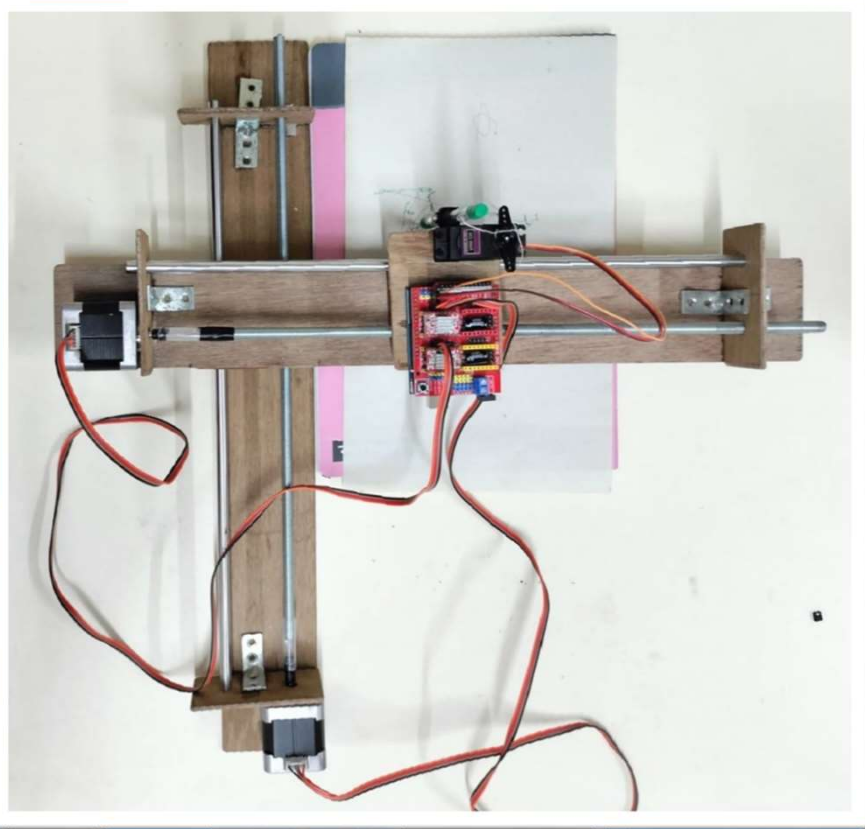
Dharmik Godhani

Pritish Desai

Aarchi Jariwala

Ansh Pandya

Manan Patel

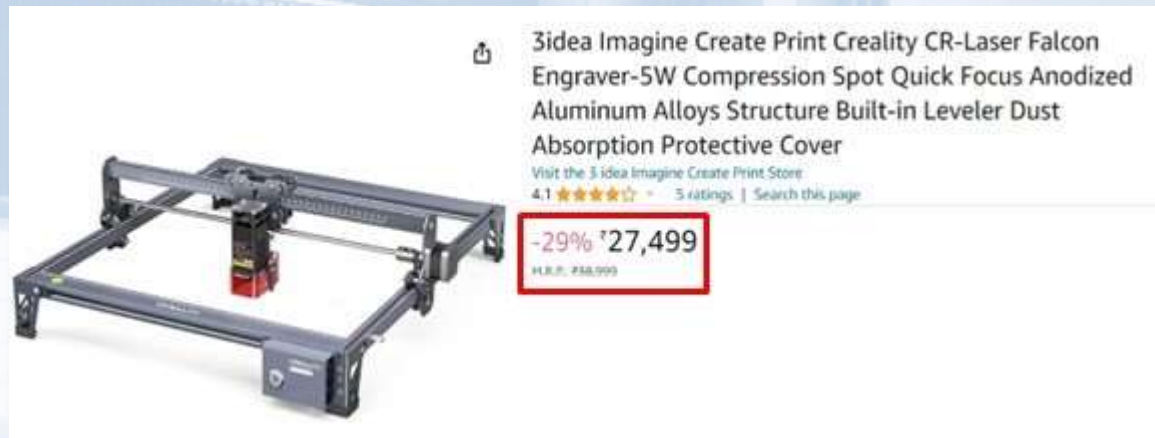


The background image is a faded, blue-tinted photograph of an industrial manufacturing environment. In the foreground, a large, flat metal plate is visible, featuring a prominent circular pattern of concentric rings and radial lines, possibly a laser-cut design or a mold. Above the plate, a robotic arm with a gripper is positioned, ready to move the plate. The background shows the interior of a large factory with high ceilings, structural beams, and windows. The overall scene conveys a sense of precision and industrial scale.

# Overview of our project



# Motivation

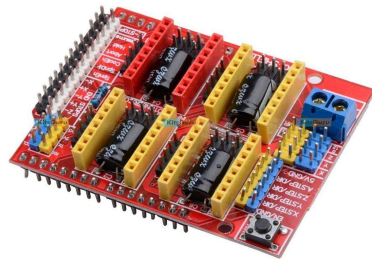


- Scope of cost reduction.
- Multiple practical uses based on the same principles

# Hardware Components



Servo Motor



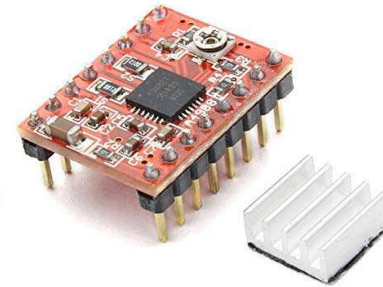
CNC Shield



Rods



NEMA Motor



Motor Driver



Angles



Arduino UNO



Rounder



Nuts



12V Constant Supply



# Software requirements



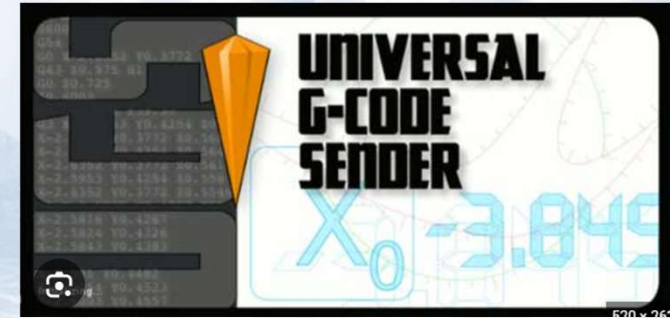
**INKSCAPE**

Draw the image and converting it to G-code.



**ARDUINO IDE**

Maintain the functioning of Arduino.



**UNIVERSAL G-CODE SENDER**

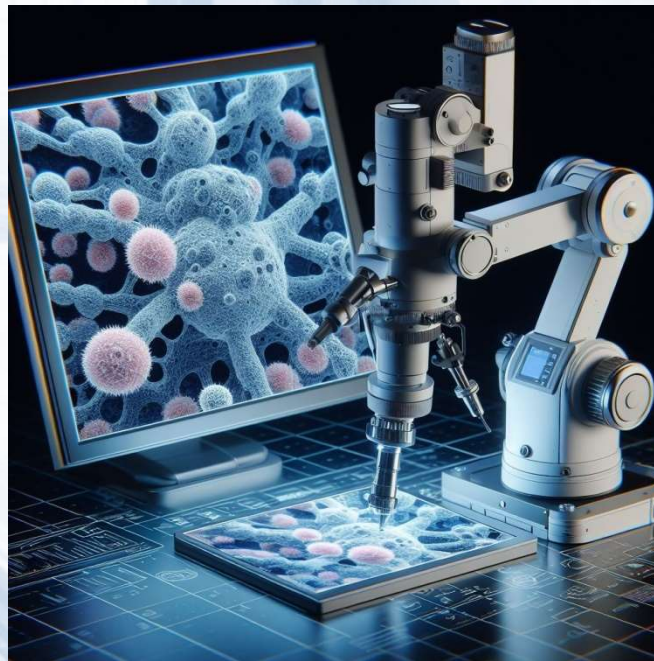
For controlling CNC machine to move along the axes according to the input G-code.

# Design Specification

- Dimensions: 28cm X 28cm.
- Lifts pen by 1cm.
- Model entirely made of wood.
- Angles used to support the wooden frame.
- A wheel used to support the y-axis.
- Power requirement of 12V DC supply.



# Future scope



**TriAxisNanoScope**



**Marble Cutting  
Machine**



# Working of our proje





A blue-tinted photograph of a large industrial robotic arm in a factory setting, positioned over a large metal workpiece. The word "Process" is overlaid in the center in a blue serif font. The background shows a large industrial building with many windows and structural beams.

# Process

## Conceptual Phase

- Go through different ideas, research it and think whether it is practically possible.

## Mentor Brainstorm

- Regular meetings with mentor for guidance on realistic ideas.

## Lab staff Assistance

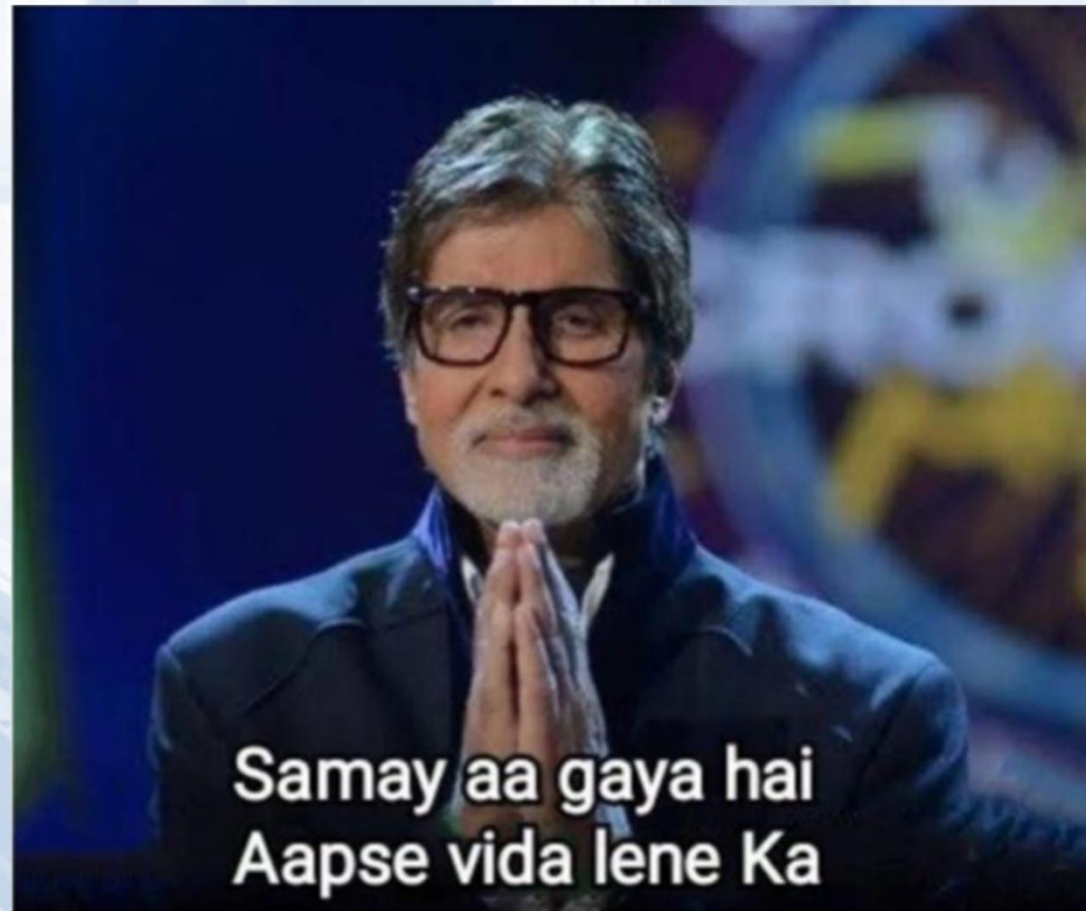
- They can help you with their precise knowledge of devices and their functionality.
- (Like, in our project, lab staff helped us to identify the error in G-Code file)

## Work Experience

- How this coding things just connects with the hardware and how it functions according to the different piece of code



# Thank you



Samay aa gaya hai  
Aapse vida lene Ka