

How would you continue project development if given time?

For continued development, we would like to:

- Add option to upload and run a G-Code file
- Use image processing to scan an image that is either uploaded or drawn in the GUI, then create G-Code and redraw the image.

What lessons did you learn from the project?

- Time management and project management skills. We made a GANTT chart at the beginning of the project, but learned that it was not very helpful when we had no experience with this type of project so we could not accurately estimate how much time different stages would take. A flowchart would have been more helpful at organizing the project phases.

What would you do differently if you could do it over?

- Improve the physical designed to handle torque better. We placed the motors close to the base to help with this, but some titling or bending of the arm still occurred. This could be improved by adding multiple support rods at the base, this would help with the first arm segment but maybe not so much with the second arm segment.

What was the biggest challenge, and how did you approach it?

- WIP

What is the most impressive thing about your project?

- We developed everything (mostly) from scratch, e.g. the GUI code, Arduino code, and mechanical design we're not copies or modifications of other existing designs. We did of course use tutorials and examples, e.g. to learn how to create a GUI in Python.