

For my tool, I chose to use Keplar's "Robotic Claw", available from Thingiverse.

The uses I found were not terribly practical; I attached the robotic claw to a Tower brand micro-servo with some difficulty, as the tool did not seem to fully consider the affordances of this widely available micro-servo, nor were there detailed instructions on how to attached the two.

By powering the micro-servo using an Arduino micro-controller, I was able to control the grip of the claw in a multitude of ways, such as using a potentiometer, manually manipulating the claw's gears, and automating it with an Arduino sketch.

Unfortunately, the tool was not able to lift anything. I suspect that the reason is two-fold: firstly, there was no way to properly attach the claw's gears to the micro-servo. Even screwing in one and force-fitting the second, it would not support any sort of weight. Secondly, PLA offers very little traction and the claw's grip suffered as a result. I would perhaps glue a strip of rubber band to either claw to increase this grip. Therefore, the tool did not satisfy its purpose.

It did, however, make a satisfying clicking noise every time it closed, so I found a way to fashion it into a makeshift metronome. Unfortunately, I do not play any instrument, so this was unhelpful to me.