

Mechanical Design Project

Design a robotic dog for 3D printing.



For group 1:

Design the leg joint and decide how the wiring will be done for the motors.

For group 2:

Design the body of the robot which will act as the battery and arduino enclosure of the dog.

For group 3:

- Design the gait (the walking mechanism).
- Decide the lengths of the leg and the angles between the legs.
- Evaluate the path of the motion of the legs (may want to use MATLAB or geogebra)
- Calculate the reachable workspace.

Servo Motor datasheet and website:

https://www.electronicoscaldas.com/datasheet/MG995_Tower-Pro.pdf

https://www.banggood.com/MG995-High-Torgue-Mental-Gear-Analog-Servo-p-73885.html?cur_warehouse=CN