DOGZILLA is a visual AI robot dog with 12 degrees of freedom, mainly composed of 6 servos, aluminum alloy brackets, and a camera. It can flexibly complete a series of bionic actions and achieve omni-directional movement and six dimensional attitude control. DOGZILLA is equipped with IMU and servo angle sensors, which can provide real-time feedback on its own posture and joint angles. Combined with inverse kinematics algorithms, achieves various motion gaits. Raspberry Pi as its main controller, with additional configurations such as lidar and voice module. Through Python programming, based on the Ubuntu 20.04 ROS2 system, many functions such as AI visual recognition, lidar mapping navigation, and voice control can be achieved.

- Can walk and twist like a real dog.
- Equipped with 6 high-precision servo motors, a safe and non-toxic aluminum alloy body, and a wide-angle camera. S2 has added lidar and voice interaction modules.
- Using Raspberry Pi as the controller, we have upgraded the Ubuntu 20.04 ROS2 system to support Python programming and RVIZ simulation.
- Support multiple remote control methods such as APP, handle, web pages, computer keyboards, and APP mapping navigation.
- S1/S2 is easily completed based on ROS2 and OpenCV, with functions such as label recognition, face detection, target tracking, and visual line patrol.
- S2 comes with a lidar and intelligent voice module, which can achieve functions such as mapping navigation, lidar avoiding and following, and voice control.