

Smart Pet Monitoring and Feeder using IOT

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Abstract: *The Internet of Things (IOT) expands the network of objects that routinely exchange data as the world becomes more connected. IOT expands the capabilities of the internet to include everyday household items like light bulbs, locks, smart microwaves, and other technologies in addition to smart phones and computers. Consumers that appreciate having all of their electronics connected for the sake of greater convenience, comfort, energy efficiency, and most significantly, personalization, which is one of the project's focus areas, are growing more and more interested in smart home gadgets and devices. This helps in solving the starvation of small pets such as dogs and cats in absence of their owners. Through this proposed design, the user can adjust the feed time, the time between consecutive feeds, and the amount of feed served. The user can modify the feed time, the gap between successive feeds, and the quantity of feed served using this proposed design. This paper develops the automation of pet feeders using the Internet of Things (IOT). Over 55% of dogs and cats are overweight, which poses serious health risks like heart and lung issues, kidney illness, and diabetes. This problem will be resolved by the proposed device, which helps with weight management by giving pets the portioned meals they need. The project's main elements include an Arduino Uno for the smart automatic pet feeder, an RTC module for timing and managing feeding schedules, a distance sensor for checking food levels, and a servo motor SG90 with a wide-angle servo (0°-180°) for controlling the flow of the food dispersed.*

Keywords: IOT, Pet feeder, Data, Arduino Uno

REFERENCES

- [1] C. Own, H. Shin and C. Teng, "The Study and Application of the IoT in Pet Systems," *Advances in Internet of Things*, Vol. 3 No. 1, 2013, pp. 1-8. doi: 10.4236/ait.2013.31001.
- [2] "Intelligent Food Dispenser (IFD)" Hari N. Khatavkar, Rahul S. Kini, Suyash K. Pandey, Vaibhav V. Gijare, 2019
- [3] Ma and N. Guo, "Design of Remote Pet Feeding System Based on ARM", 2020 Chinese Automation Congress (CAC), 2020, pp.1702-1704, doi:10.1109/CAC51589.2020.9326679.
- [4] N. Naik, "Choice of effective messaging protocols for IoT systems: MQTT, CoAP, AMQP and HTTP," 2017 IEEE International Systems Engineering Symposium (ISSE), 2017, pp. 1-7, doi: