## **IJARSCT**



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 3, April 2023

## Bluetooth Controlled Data Logger Robot for Soil Testing.

Gaikawad Gopal Ganpat<sup>1</sup>, Gavali Bhushan Yuvraj<sup>2</sup>, Sheral Aditya Prakash<sup>3</sup>, Ambre Abhishek Bhausaheb<sup>4</sup>, Prof. Kanawade M. V.<sup>5</sup>

Students, Department of Electronics and Telecommunication<sup>1,2,3,4</sup>
Professor, Department of Electronics and Telecommunication<sup>5</sup>
Amrutvahini Polytechnic, Sangamner, Maharashtra, India

Abstract: Land based drone technology has considerable potential for usage in different areas of agriculture. Here a novel robotic soil sampling device is being introduced. Unmanned mobile technology implementation for soil sampling automation is significantly increasing the efficiency of the process. This automated and remotely controlled technology is enabling more frequent sample collection than traditional human operated manual methods. In this publication universal mobile robotic platform is adapted and modified to collect and store soil samples from fields and measure soil parameters simultaneously. The platform navigates and operates autonomously with dedicated software and remote server connection. Mechanical design of the soil sampling device and control software is introduced and discussed.

Keywords: Data Logger Robot

## REFERENCES

- [1]. Bechar, A. & Vigneault, C. 2017. Agricultural robots for field operations. Part 2: Operations and systems. Biosystems Engineering 153, 110 128.
- [2]. Deusdado, P., Pinto, E., Guedes, M., Marques, F., Rodrigues, P., Louren, A., Mendon, R., Silva, A., Santana, P., Corisco, J., Almeida, M., Portugal, L., Caldeira, R., Barata, J. & Flores, L. 2016.
- [3]. An Aerial-Ground Robotic Team for Systematic Soil and Biota Sampling in Estuarine Mudflats. In: Robot 2015: Second Iberian Robotics Conference. Advances in Intelligent Systems and Computing.

DOI: 10.48175/568

