

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

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 2, May 2023

Agriculture Intelligence Decision System using Big Data

Prof. Bhanumathi S¹, M Lal Bahudhur², M Praneeth³, Praful Prakash Kulkarni⁴

Assistant Professor¹ and Students^{2,3,4},

S. J. C. Institute of Technology, Chickballapur, Karnataka, India

Abstract: Agriculture is the backbone for India GDP. We know it share more percent of sector. We are facing many problems in India in this domain even farmers are getting suicided due to failure in crop yield and not proper plan and support. We with the Modern Technologies can solve this problem. We can predict how much yield we gone get in particular field on particular plant based on location, temperature, humidity, precipitation and soil type inparticula rseason. We will be getting the dataset from the Kaggle. Then we gone apply multiple machine learning models. Based on which one gives better result we will select the best model and use it with user interface in our case a website. we will combine machine learning model with the website. That works in real time. These technologies will help the former i a proper way to overcome the problems. In this project, we are using your machine learning model to predict the yield and to give an advice to which is the best crop to grow based on some features we are going to use HTML, CSS and JavaScript for frontend. = and for backhend we are going to flash framework .our courses we will build a web page where if you enter the inputs like what is the district, what is the state name, what is the temperature, what is the humidity, what is the soil type, and what is the area and which crop you want to grow. If you feed all these inputs, it will give you what is the yield that you will get in your soil. In the second page of our user interface, we will be giving you if you enter what is the NPK that is nitrogen, potassium and phosphorus or of your soil of your agriculture land we will be giving you which crop you need to go to get better yield .other features temperature humidity and soil type here also for advising the crop. This project you can publish them into IEEE. This will be one of the good IEEE Machine learning project for final year students. So this is one of the best IEEE machine learning project that many students are interested to work with. So we will build it completely and we will help you with the content to publish it into IEEE. we as a smart AI technologies we actually work only on machine learning, AI and data science. we'll be supporting you completely throughout your project. We'll be taking your classes on this particular project, whichever you select, and we'll be giving you the complete code .we'll be setting the software and hardware if required. we will be making you to run the code in your system to solve the problem in your system and also help you to answer the questions that are going to be asked to from your department your lectures. And in the end, we will be giving you the complete content for your report where you can make reports very easily.

Keywords: Big data, farming, agriculture, farmers, crop prediction, student engagement, higher education, data analytics, recommendations, future directions

REFERENCES

- [1]. K. G. Liakos, P. Busato, D. Moshou, and S. Pearson, "Machine learning in agriculture: A review," Sensors, vol. 18, no. 8, p. 2674, 2018, doi: 10.3390/s18082674.
- [2]. A. Sharma, A. Jain, P. Gupta, and V. Chowdary, "Machine learning applications for precision agriculture: A comprehensive review," IEEE Access, vol. 9, pp. 4843–4873 2021
- [3]. M. Keogh and M. Henry, "The implications of digital agriculture and big data for Australian agriculture," Austral. Farm Inst., Sydney, NSW, Australia, Tech. Rep., 2016.
- [4]. S. Ahmed, "Security and privacy in smart cities: Challenges and oppor- tunities," Int. J. Eng. Trends Technol., vol. 68, no. 2, pp. 1–8, Feb. 2020, doi: 10.14445/22315381/IJETT-V68I2P201.

Copyright to IJARSCT www.ijarsct.co.in DOI: 10.48175/IJARSCT-9734



182

IJARSCT



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

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 2, May 2023

- [5]. L. K. Mehra, C. Cowger, K. Gross, and P. S. Ojiambo, "Predicting pre- planting risk of stagonospora nodorum blotch in winter wheat using machine learning models," Frontiers Plant Sci., vol. 7, pp. 390–404, Mar. 2016, doi: 10.3389/fpls.2016.00390.
- [6]. A. Nigam, S. Garg, A. Agrawal and P. Agrawal, "Crop Yield Prediction Using Machine Learning Algorithms," 2019 Fifth International Conference on Image Information Processing (ICIIP), 2019.
- [7]. P. S. Nishant, P. Sai Venkat, B. L. Avinash and B. Jabber, "Crop Yield Prediction based on Indian Agriculture using Machine Learning," 2020 International Conference for Emerging Technology (INCET), 2020.

