

Soil Testing Prediction System

Yash Bhardwaj

Student, Department of Computer Science and Information Technology
Dronacharya College of Engineering, Gurugram, India

Abstract: *Soil Testing Prediction aims to forecast the functional qualities of a soil sample (calcium, phosphorus, pH, sand, and soil organic carbon). Soil Testing Prediction is used in agriculture, farming, and research. It can aid in cost-effective crop management and increased agricultural output. We investigated how old soil testing methods could be substituted with modern Machine Learning approaches, resulting in more cost-effective, time-efficient ways with little to no environmental impact. It tries to bring the labs to the user rather than the user going to the labs, and it trains to lower the technical expertise required at the user's end. Instead of taking the user to the lab, it tries to bring the lab to the user.*

Keywords: Linear Regression, Feature Selection, Soil Functional Properties, Extraction Methods for Mehlich-3

REFERENCES

- [1]. "Cergele Nduwamungu , Noura Ziadi , Leon-Etienne , Gaetan F. Tremblay , and Laurent Thurié's (2009) Opportunities for, and limitations of, near infrared reflectance spectroscopy applications in soil analysis: A review" `sklearn.linear_model.LinearRegression`
- [2]. "Soil Analysis using Mehlich 3 Extractant Technique for Sample Preparation . ÚKZUZ (Ústřední kontrolní a zkušební ústav zemědělský) Central Institute for Supervising and Testing in Agriculture Hroznová 2, CZ-65606 Brno, Czech Republic L. Vlk, M. Horová, R. Krejča; R. Špejra Chromservis S.R.O., Jakobiho 327, CZ-10900 Praha-10, Petrovice, Czech Republic