

SUSTAINABLE MIXED CROPPING THROUGH ADVANCED PREDICTIVE MODELLING

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This groundbreaking project at the intersection of agriculture and machine learning represents a significant leap forward in optimizing mixed crop prediction. Departing from traditional single-crop approaches, our methodology employs a sophisticated ensemble of cutting-edge machine learning algorithms, including deep neural networks and decision trees. Through the analysis of diverse datasets encompassing soil characteristics, climate conditions, and historical crop performance, the system achieves a holistic understanding of complex interdependencies between different plant species. By seamlessly integrating these variables, our model delivers precise predictions for mixed crop yields. The user-friendly interface not only facilitates intuitive interaction but also empowers farmers with actionable insights, allowing them to visualize predictions and receive tailored recommendations for optimal crop production. This project aspires to redefine precision agriculture by not only optimizing resource utilization but also fostering sustainable practices, thereby minimizing environmental impact and elevating overall crop productivity to new heights.