

Title: AI assistance to find accurate conditions for agriculture incubators

Problem: Even in this advanced world, agricultural scientists need to spend (literally waste) their time in figuring out the optimal conditions for growth of a plant in incubators. (Solve using AI)

Need of good food is same to whole humankind but the food resources are not same for all, for example: few rare fruits of nutritious plants grow in specific regions on earth whose fruits generally costs low in local areas but importing expenses make them expensive in other parts of the world. Researchers had come up with incubators to cultivate any plant in any country but still the struggle of scientists to figure out optimum conditions for growth of plants in incubators kills their time, this is a long-standing problem so, my **idea** is to solve using AI. Many installed smart incubators use machine learning to help farmers to detect any faults but we can use the deep reinforcement learning to predict the optimum conditions for the growth of a specific plant on its own experience. We can use the sensors that can track the health of plant along with sensors that keeps track of physical conditions in incubator and use these readings from all sensors to work out our deep reinforcement neural network. We train the neural net to figure out the best conditions of incubator using readings from sensors that checks the health of plant which acts as reward functions to judge the performance of deep reinforcement neural net algorithm that helps to optimize better through every epoch (propagation). Base model for deep reinforcement learning i.e., prototype is ready.

Keywords: Deep Reinforcement Learning (Artificial Intelligence), Agriculture, Good Health, save time, Help scientists