

Smart Hydroponic farming using Internet of Things

Ratan Lal
Saivivek Reddy Kusukuntla
Jawahar Reddy Nomula
Northwest Missouri State University

Nithin Reddy Kumbham
Abhinav Bellamkonda
Northwest Missouri State University

Vamsidhar Reddy Police
Gopi Krishna Kandimalla
Northwest Missouri State University

Index Terms—

Abstract— [1] [2] In this paper, we consider the problem of avoiding the loss of plants due to natural environment, such as, infertile soil, weeds and darkness. Our approach is based on hydroponic techniques, where we first develop an environment for the plants to grow in the water. Then, we develop a monitoring and controlling system using Internet of Things, where we sense data from the plants. Then, appropriate amount of water, nutrients, lights will be decided by the system. Based on the values returned, we manually supply growing factor to the plants.

I. INTRODUCTION

II. RELATED WORK

III. MOTIVATION

dsfdfs

IV. PRELIMINARIES

sdf

REFERENCES

- [1] Arthur Richards and Jonathan How. Mixed-integer programming for control. In *Proceedings of the 2005, American Control Conference, 2005*. IEEE, 2005.
- [2] Kiri Wagstaff, Claire Cardie, Seth Rogers, Stefan Schrödl, et al. Constrained k-means clustering with background knowledge. In *Icml*, 2001.