

RE-FORESTATION USING ROBOTIC VEHICLE

A PROJECT REPORT

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PRESIDENCY UNIVERSITY
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CERTIFICATE

This is to certify that the Project report **“Re-forestation using robotic vehicle”** being submitted by “NANDINI R”, “REDDY SREYA” ,“CHANDANA K” , “VINUTHA V” bearing roll number(s) “20211CIT0070” , “20211CIT0101” , “20211CIT0106” , “20211CIT0153” in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering (IOT) is a Bonafide work carried out under my supervision.

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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **RE-FORESTATION USING ROBOTIC VEHICLE** in partial fulfillment for the award of Degree of **Bachelor of Technology in Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **Dr. Anandaraj S P HOD (CCS, CIT), School of Computer Science Engineering & Information Science, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

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ABSTRACT

Studies on automatic agriculture robot car is a critical thing of advancing the agriculture enterprise, mainly in India, wherein agriculture serves because the backbone of the financial system and extensively contributes to GDP. This paper introduces a novel approach to development of Reforestation the use of robotic vehicle integrated with software and hardware components. This primary intention of this studies is to enhance the productivity and sustainability in reforestation practices by using leveraging advanced technologies like a robot automobile and system gaining knowledge of Algorithms. Centred on technology elements of agriculture, this research paper presents an integrated device including two predominant functionalities: 1) robotic automobile that plays numerous farming activities that help farmers including ploughing, sowing, irrigation. 2)Crop prediction the usage of live sensors which include temperature, soil moisture and atmospheric stress. The vegetation is expected the usage of the records sensed via those sensors and use machine studying. Algorithms trained on historical discipline data. Moreover, this research paintings allows the amateur farmer in sowing the adaptive crop lowering the person electricity, enhances planting precision through computerized planting system and reduces the possibilities of crop failures through crop advice gadget. finally, the approach observed on this indicates outstanding potential for automating the farming practices and crop prediction. In fact, the test became finished at the rice and wheat crops established the effectiveness of the proposed approach, and the same method may be used on different vegetation to acquire the equal purpose. looking ahead, this research gives insights into further traits of automating forest management, correct yield prediction of advocated crop, and retaining the ecological stability.

Keywords— □ *Automatic agriculture robot, Reforestation, Self-driven vehicle, Farming activities Crop prediction, Machine learning algorithms, Sustainability*

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LIST OF TABLES

SL.NO	Table Name	Table Caption	Page No
1	Table 1.1	Crop Recommendation Criteria	36

LIST OF FIGURES

SL.NO	Figure Name	Caption	Page No
1	Fig 1	Features of agriculture robot	12
2	Fig 2	Integration of Advanced Analysis Techniques	21
3	Fig 3	steps followed by the robot	28
4	Fig 4	Smart Farming with Autonomous Robotics	31
5	Fig 5	System implementation and design	32
6	Fig 6	Gantt Chart	36
7	Fig 7	AgroBot Prototype	39
8	Fig 8	futuristic vision of agriculture	45
9	Fig 9	EcoTech Rover: Sustainable Farming Revolution	48

TABLE OF CONTENT

Chapter No.	Title	Page No.
I	CERTIFICATE	ii
II	DECLARATION	iii
III	ABSTRACT	iv
IV	ACKNOWLEDGEMENT	v
V	LIST OF TABLES	vi
VI	LIST OF FIGURES	vii
1	INTRODUCTION	1
	1.1 Description	2-10
	1.2 Technology used	10
	1.3 Goals	11
	1.4 Industrial scope	11-12
2	LITERATURE SURVEY	13-17
3	RESEARCH GAPS OF EXISTING METHODS	18
	3.1 Limitations in Current Technological Advancements in Agriculture	18-20
	3.2 Urban Garden Focus and Scalability Issues	20-21
	3.3 Inadequate Integration of Advanced Analysis Techniques	21
	3.4 Absence of Real-Time Data Integration	22
	3.5 Limitations in Sensor-Based Monitoring	22
	3.6 Over-Reliance on Historical Data	22-23
	3.7 Path Forward	23
	3.8 Integrated Multifunctional Systems	23
	3.9 Adaptability to Diverse Soil Types and Terrains	23-24
	3.10 Advanced Analytical Techniques	24
	3.11 Real-Time Sensor Integration and Monitoring	24
	3.12 Promoting Sustainability and Resilience	25
4	PROPOSED METHODOLOGY	26
	4.1 Reforestation Robotic Vehicle: The Hardware Backbone	26
	4.2 Precision in Planting and Maintenance	27

	4.3 Sensor Integration for Real-Time Environmental Monitoring	27-28
	4.4 Data Management and Remote Control via Blynk App	29
	4.5 Expanding Applications for Agriculture and Reforestation	29
5	OBJECTIVES	30
	5.1 Design and Development	30
	5.2 Reforestation-Specific Objectives	30
	5.3 Crop Prediction and Decision Support	30
	5.4 Evaluation and Refinement:	31
	5.5 Dissemination and Knowledge Transfer:	31
6	SYSTEM DESIGN & IMPLEMENTATION	32-35
7	TIMELINE FOR EXECUTION OF PROJECT	36-37
8	OUTCOMES	37
	8.1 Better productivity and Sustainability	38
	8.2 Powerful Crop Prediction	38
	8.3 Guide for novice Farmers	38
	8.4 Automatic Farming Practices	38
	8.5 Successful checking out on Rice and Wheat plants	39
	8.6 Insights for destiny traits	39
	8.7 Ecological and monetary advantages	39
9	RESULTS AND DISCUSSIONS	40
	9.1 Automation of Agricultural Operations	40
	9.2 Real-Time Environmental Monitoring for Resource Optimization	40-41
	9.3 Sustainability and Resource Efficiency	41
	9.4 Real-Time Monitoring and User Interaction	41-42
	9.5 Crop Recommendation and Yield Prediction	42-43
	9.6 Technological Advancements and Component Efficiency	43
	9.7 Implications for Modern Agriculture	44
	9.8 Machine Learning Algorithms for Enhanced Functionality	44
	9.9 Conclusion	45-46
10	CONCLUSION	47-48

	REFERENCES	49
	APPENDIX-A (PSUEDOCODE)	50-58
	APPENDIX-B (SCREENSHOTS)	59-61
	APPENDIX-C(ENCLOSURES)	62-78