

Research & Development Cell Proposal for Seed Money Grant

Project Title

SMART IRRIGATION SYSTEM USING IOT

A. Details of the Guide:

Name of the Guide	Y.RAMESH
Department	COMPUTER SCIENCE AND ENGINEERING
Experience in SRIT	5.5 Years
# Projects Guided	UG:7 PG:2

B. Particular of Student/(s)

Sl.	Name	Reg. Number	Aggregate marks	# of Backlogs
S1	J.SOWMYA	154G1A0584	73	0
S2	G.SAI SHARADA	154G1A0576	69.5	0
S3	L.S.SREEJA	154G1A0587	66	1
S4	M.WASEEM AKRAM	154G1A05B0	55	5

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Sl.	UG/PG	Department	Year of study	Completion date of study (dd/mm/yyyy)	Area of research
S1	UG	COMPUTER SCIENCE AND ENGINEERING	4	30/04/2019	IOT
S2	UG	COMPUTER SCIENCE AND ENGINEERING	4	30/04/2019	IOT
S3	UG	COMPUTER SCIENCE AND ENGINEERING	4	30/04/2019	IOT
S4	UG	COMPUTER SCIENCE AND ENGINEERING	4	30/04/2019	IOT

C. Details of Published Papers in Journals / Conferences:

- 1) By the Guide(s) (Please mention maximum 5 published papers in Peer-reviewed journals and National & International Conferences)

Sl.	Title of Paper	Authors	Name of Journal / Conference	Volume No. & Page no. (from-to)
1	Dynamic Link Prediction Algorithm over MANET using AODV Protocol	Mr.Y.Ramesh	Journal of Applied Science and Computations	Volume No-5

D. Objectives of the proposed project – (2000 characters)

- Smart Irrigation System includes supplying only the sufficient amount of water to the plants which results in healthy crop.
- It helps in reduction of water wastage.
- It also reduces power consumption.
- It prevents soil damage by preventing the growth of fungus.
- It reduces the human intervention in the agriculture field.

E. Review of R&D in the proposed area (National & International Status, Importance, patents etc.) – (3000 characters)

Mobile Integrated Smart Irrigation Management and Monitoring System Using IOT
 Vaishali S, Suraj S, Vignesh G, Dhivya S and Udhayakumar S
 International Conference on Communication and Signal Processing(IEEE)
 Page No:2164-2167

F. Project Duration (in months)

01

G. Work plan (including detailed methodology and time schedule) – (5000 characters)

WEEK 1: GATHERING REQUIREMENTS
 WEEK 2: ASSEMBLING THE GATHERED REQUIREMENTS
 WEEK 3: CODING
 WEEK 4: TESTING & DOCUMENTATION
 WEEK 5: VERIFICATION

H. Future plans (1200 characters)

We are looking forward to extend this implementation to be spread for larger area of field by using wireless sensors to overcome the limitations like wired connectivity, high perimeter range, water quality assessment.

I. Where the Research Findings / Developed Equipment can be used in future (1000 characters)

It can be used in agricultural sector for irrigation purpose to manage the usage of water and electricity.

J. Facilities to be provided by Concerned Department of SRIT:

IOT lab is to be provided by Concerned Department of SRIT.
High Broad Band Internet Facility is also to be provided by Concerned Department of SRIT.

M. If your project has received any Industry Support in cash /kind, please give details)

NO

N. If your project has got any connectivity with an entrepreneurship or start up idea?
(Please give details)

NO

O. Details of Financial Requirements (in INR) [Fund will be provided for non-recurring expenditure only]

Sl. No.	Details of expenditure		Estimated Cost In INR	Fund to be arranged by student / other sources	Fund required from the Institute in INR
	Heads	Items			
1.	Special Equipments / Standard kits	1. GSM MODULE	1100/-		1100/-
		2. RASPBERRY PI 3	3500/-		3500/-
2.	Small Tools	1. MOISTURE SENSOR	80/-		80/-
		2. RELAY MODULE	220/-		220/-
		3. MOTOR	600/-		600/-
		4.CONNECTING WIRES	100/-		100/-
		5.ELECTRICITY SENSOR	100/-		100/-
			100/-		100/-

		6.PIPES	650/-		650/-
		7.POWER SUPPLY	300/-		300/-
		8.PAD			
3.	Testing	1.			
		2.			
		3.			
4.	Experimentation / Project-specific special software	1.			
		2.			
		3.			
5.	Field Visit	1.			
		2.			
		3.			
6.	Others	1.			
		2.			
		3.			
TOTAL:			6750		6750

Declaration

Project Title

SMART IRRIGATION SYSTEM USING IOT

Declaration by applicant(s)/student(s):

We, J.SOWMYA, G.SAI SHARADA, L.S.SREEEJA, M.WASEEM AKRAM of COMPUTER SCIENCE AND ENGINEERING hereby declare that I/we are full-time student(s) of the above mentioned department and shall undertake the project strictly in accordance with the provisions specified in the project proposal and we shall submit the reports about the progress of the work periodically and final report as per the format prescribed by the R&D Cell of SRIT on completion of the project.

Date:

Place:

Signature of student/s

Recommendation by guide(s):

I Y.RAMESH of COMPUTER SCIENCE AND ENGINEERING recommend the above project, which is to be carried out under my/our supervision. I/We shall arrange to submit the reports about the progress of the work and final report as per the format prescribed by the R&D Cell of SRIT on completion of the project.

Date:

Place:

Signature of guide(s)

Recommendation by Head of the Department:

- ☐ Shall be Recommended
- ☐ Revise & Resubmit for consideration
- ☐ Not Recommended

Note: Head of the concerned department is liable to ensure the prototype/working model/Physical equipment purchased (if any) to be submitted to the department laboratory for further usage.

Recommendation by Convener, R&D Cell:

- ☐ Shall be Recommended
- ☐ Revise & Resubmit for consideration
- ☐ Not Recommended

Seal of University/Institute

Signature of the Principal