CONSULTATION PROJECT

<u>RETROFIT FOR AUTO RICKSHAW</u>

Sri. Muralidhar K Shenoy, Kaup Shenoy Associates, Durham, USA funded this project. The project deals with design and development of retrofit for a 2 stroke IC engine-based Indian made autorickshaw. The project demands competency in battery storage and management, sophisticated mechanical designs of differential, coupler etc. Two faculty members from the department are currently working on this project.

DEVELOPMENT PROJECTS

<u>DESIGN AND DEVELOPMENT OF SMART HYDROPHONIC FARMING SYSTEM</u>

This project aims to design and develop smart hydrophonic farming system serving apartment containing up to 75 houses. An android app which monitors and controls the system through IOT for various types of vegetables grown in farming setup also will be developed.

<u>TOY PROJECTS</u>

The department has taken up 5 Toy projects to replace Chinese toys which will be marketed by the company Kakunje Software Private Limited. Summary of the projects taken are as follows:

Toy Name	Targeted Age
Animal in my finger tips	0 to 2 year – Boy Baby
Gesture Car	1 to 5 year – Boy Baby
RC Dump Truck	1 to 3 year – Boy baby
RC Battle Tank	1 to 3 year – Boy baby
Moving Doll	0 to 2 year – Girl baby

These toy helps babies to develop the following-

- i.   Perceptual mapping of various animals and their sounds.
- ii.   Helps to increase focusing ability to press individual buttons from their tiny fingers.
- iii.   It helps the child to move around to grab that toy thereby learn to walk early.
- iv.   It entertains kids while simultaneously exploring the world around them.
- v.   It improves their cognitive development.
- vi.   Fine motor skills and Hand eye coordination of the baby.
- vii.   It entertains kids while simultaneously exploring the world around them.
- viii. It improves their cognitive development.
- ix.   Fine motor skills and Hand eye coordination of the baby.

RECENT PATENTS

Sl No	Inventor	Title of the Invention	Patent No.	Patent Office	Publication Date
1.	Sandeep Prabhu M	IOT and Cloud based Agricultural Monitoring System	27/2021	India	2021/7/2
2.	Sandeep Prabhu M	Women Safety using Intelligence of Things	17/2021	India	2021/4/23
3.	Sandeep Prabhu M	Motorcycle pitch with non-linear control and accident-avoidance system using IOT	05/2021	India	2021/1/29
4.	Sandeep Prabhu M	Industrial Safety Monitoring and Accident Reporting System Using IOT	52/2020	India	2020/12/25

RECENT PUBLICATIONS

Sl No.	Faculty	Title of the Paper	Conference/ Journal	ISSN/ DOI/ Page No.
1.	Sandeep Prabhu M	Computer-Aided Detection for Early Detection of Lung Cancer Using CT Images	Intelligent Sustainable Systems, Proceedings of ICISS 2021	ISBN: 978-981-16-2422-3, DOI: 10.1007/978-981-16-2422-3_24, Pages: 287-301
2.	Sandeep Prabhu M	Environmental Monitoring System Based on Internet of Things	Design Engineering	ISSN: 0011-9342, Pages: 425-438
3.	Sandeep Prabhu M	Smart Agriculture and Smart Farming using IOT Technology	Journal of Physics: Conference Series	DOI: 10.1088/1742-6596/2089/1/012038
4.	Raghavendra M Shetty	Review on Algorithms, Theory of Generative Adversial Networks applied to constrained Image Synthesis	3rd International Conference on Advances in Computing and Information Technology	

5.	Sandeep Prabhu M	P-V and I-V Characteristics of Solar Cell	Design Engineering	ISSN: 0011-9342, Pages: 520-528
6.	Sandeep Prabhu M	Plant Disease Detection using Intelligence of Things	Annals of the Romanian Society for Cell Biology	ISSN: 1583-6258, Pages: 4604-4609
7.	Ashwini V R	Design and Analysis of Optical Sensor for Detection of Cancer Biomarkers	6th International Conference on Electronics, Computing and Communication Technologies	
8.	Sujit S pai	Smart Shoe	6th International Conference on Electronics, Computing and Communication Technologies	

FACULTY PURSUING DOCTORAL STUDIES

1. Mr. Raghavendra M Shetty
2. Mr. Vayusutha M
3. Mr. Anantha Krishna Kamath
4. Mr. Sreeram Samartha
5. Mr. Ajay Bolar
6. Mr. Divyesh Divakar