Annexure 4

Quality of Student Projects

List of projects with domains

(2019-2023, 2018-2022, 2017-2021)

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2022 - 2023 (Even Semester)

CIRCULAR

The first project (EC8811) review for final year students will be scheduled on 18.03.2023.

Project Assessment Criteria for First Review is as follows:

- Literature review
- Problem Identification and definition
- Project objectives
- Project specifications and constraints
- Project work plan
- Methodology proposed
- Environmental issues consideration
- Oral and Written Communication
- Individual and Team work - Delegation of Responsibilities
- Resource Planning
- Implementation

The schedule for first review is given below:

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Date of Presentation	Name of the Supervisor
1.	953619106016	Elavarasi A	Development of Low cost Retinal Imaging System for Screening Diabetic levels in Eye	18.03.2023	Dr.A.Lakshmi
	953619106001	Abinaya S			
2.	953619106002	Abirami V	Secure Biometric Authentication and its Applications on Chaotic Image Encryption	18.03.2023	Dr.K.Ragavan
	953619106035	Kavya P			
3.	953619106008	Asiba Mina K R	An optimal least square support machine based earnings prediction block chain financial products	18.03.2023	Mr.P.Gunasekaran
	953619106003	Akilandeswari K			
4.	953619106004	Amudhadevi A S	Discrete Rajan Transform Based Secure Crypto watermarking approach for Images	18.03.2023	Dr.S.Vairaprakash
	953619106026	Ishwarya R			
5.	953619106020	Gayathri K	A Hybrid sunflower optimization algorithms for cluster head selection in IoT	18.03.2023	Mrs.R.Ramalakshmi
	953619106005	Anudharshini M			
6.	953619106038	Keshava Mugesh Kumar C M	Machine learning based anomaly detection in network	18.03.2023	Mr.G.Sivakumar
	953619106007	Arumuga Viswanath P			

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Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Date of Presentation	Name of the Supervisor
7.	953619106033	Kavin Kumar R	Analysis of transient characteristics of UWB antenna using different substrates for wireless applications	18.03.2023	Mr.P.Venkatesh
	953619106009	Chidhambaranathan R			
8.	953619106010	Deepak Chakravarthi P	Advanced ATM Surveillance System	18.03.2023	Ms.S.Harini Shriram
	953619106019	Ganeshamoorthy I			
	953619106006	Aravind M			
9.	953619106011	Dharini A	A Deep Learning Approach to Classify Drones and Birds	18.03.2023	Mrs.G.Subhashini
	953619106013	Dharshini P			
10.	953619106017	Gaayatri V S	Design and Analysis of Wideband Microstrip Patch Antenna for Sub 6GHz Applications	18.03.2023	Mr.D.Gopinath
	953619106012	Dharshini K			
11.	953619106024	Harini U	Accuracy improved Low-Energy Multi-Bit Approximate Adders in QCA with less Delay	18.03.2023	Dr.A.Azhagu Jaisudhan Pazhani
	953619106014	Divyashree R			
12.	953619106015	Diwya Dharshini R	Examining Fetal Biometric Ultrasound Images for Anamolies using Deep Learning Techniques	18.03.2023	Ms.R.Chandralekha
	953619106040	Loggaa Sri Agitha K			
13.	953619106036	Keerthika B	Smart School Bus ensuring safety on the road for school children	18.03.2023	Mr.B.Kannan
	953619106034	Kaviya S			
14.	953619106022	Gomathi Naayagam I S	Image segmentation of Prostate cancer using Deep Learning	18.03.2023	Mr.R.Deiva Nayagam
	953619106018	Ganesh G			
15.	953619106021	Giritharan D	Design and Implementation of Efficient ALU using Pass Transistor Logic	18.03.2023	Mr.A.Rameshbabu
	953619106302	Kumaraguruparan A			
16.	953619106023	Hariharan S	EEG signal Classification	18.03.2023	Mrs.V.Srirenga Nachiyar
	953619106031	Kalimuthu K			
	953619106039	Lingesh S			
17.	953619106025	Indhumathi C	Satellite image based wildfire detection and alerting system using Machine Learning	18.03.2023	Dr.R.Rajalakshmi
	953619106027	Jaya Mahima M			
18.	953619106028	Jeyagomathi S	Fake currency detection	18.03.2023	Mrs.S.Jeeva
	953619106029	Jisha P S			

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Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Date of Presentation	Name of the Supervisor
19.	953619106037	Kesav Anand M	DDOS Attack Detection Using ML in Software Defined Networking	18.03.2023	Mrs.G.Gnanapriya
	953619106032	Kamalesh S			
	953619106030	Kalidas P			
20.	953619106041	Mahendra Prakash R	Hybrid Light Weight Cryptography Model for Resource Constraint IoT Devices	18.03.2023	Mr.G.Sivakumar
	953619106301	Balaji S			
	953619106303	Naveen Ajaykumar T			
21.	953619106043	Manojkumar R	Alzheimer Disease Classification using Deep Learning	18.03.2023	Mrs.G.Gnanapriya
	953619106065	Shanmugavisal S V			
22.	953619106051	Padma Priya C	Face Recognition Based New Generation ATM Machine	18.03.2023	Mr.A.Rameshbabu
	953619106075	Vaishnavi M			
23.	953619106055	Rajeshwaran R	Enhancement of Dental X-Ray Images using Image Processing	18.03.2023	Mrs.S.Jeeva
	953619106045	Marimuthu B			
24.	953619106047	M.Mugesh	Design of Approximate Multiplier using Modified 4:2 Compressor	18.03.2023	Dr.A.Azhagu Jaisudhan Pazhani
	953619106048	T.Namasivayam			
25.	953619106049	Naveen Kumar S	Shrewd Headgear for Worker's Safety	18.03.2023	Dr.S.Vairaprakash
	953619106063	Saravanakumar S			
	953619106078	Vijayarammsen A			
26.	953619106050	Nhidhees Laksh Kumar K.B	Design of CPW based Circular Patch Antenna for 5G Applications	18.03.2023	Mr.P.Venkatesh
	953619106062	Santhosh I			
27.	953619106042	Manjula G	R-CNN based Vehicle Detection in Foggy Environment	18.03.2023	Ms.L.Krishna Kumari
	953619106061	Sanghavi G			
	953619106069	Snekha B			
28.	953619106052	Pradeep C	A Double Layer Encryption on Polybius and Vigenere Cipher for Security in Cloud	18.03.2023	Dr.K.Ragavan
	953619106072	Surendar V			
29.	953619106053	Prakathi S	Deep Convolutional Network Architecture for Automatic Detection of Brain Tumors in Images	18.03.2023	Mrs.V.Srirenga Nachiyar
	953619106079	Vijayasankari P			
30.	953619106046	Monika R	Automatic Damage Deetction of Historic Masonry Buildings based on DenseNet Deep learning Model	18.03.2023	Mr.B.Kannan
	953619106054	Priya Dharshini R			
	953619106064	Seetha Devi M			
31.	953619106056	Ramesh Kumar K	ECG based Secure Health Care Monitoring System	18.03.2023	Mrs.G.Subhashini
	953619106058	Sai Vishnu L			

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Date of Presentation	Name of the Supervisor
32.	953619106066	Sharon Tresha A	Detection of Helmet and License Plate using Machine Learning	18.03.2023	Mr.D.Gopinath
	953619106071	Sujitha K			
33.	953619106057	Sabriyah M	Design and Development of Air Pollution Monitoring	18.03.2023	Mrs.R.Ramalakshmi
	953619106068	Sneha P			
34.	953619106067	Shrinithimeena M	Kidney Cancer Detection usimg Microstripe Patch Antenna	18.03.2023	Ms.S.Harini Shriram
	953619106074	Sushmitha K			
35.	953619106044	Marikrishnauthami S	Tampered Image Detection Based on Ring Partition and Half Toning	18.03.2023	Mr.R.Deiva Nayagam
	953619106059	Sakthi Abirami N			
36.	953619106073	Sushma A	Classification of WBC from Bone Marrow Microscopic Images using Custom CNN with Image Processing	18.03.2023	Dr.R.Rajalakshmi
	953619106080	Vinothini Rajam R			
37.	953619106070	Subhash S	Critical Equipment Healthyness Monitoring and Alert System	18.03.2023	Dr.A.Lakshmi
	953619106076	Veeramanimaran P			
	953619106077	Vijayalaxmanasen A			

15/3/23 15/3/23
Project Co-ordinator(s)

15/3/23
HOD

15/3/23
Vice Principal

15/3/23
PRINCIPAL

Department of Electronics and Communication Engineering
Academic Year: 2021- 2022 (Even Semester)
DETAILS OF PROJECT GROUP

Sl.No.	Register Number	Name(s) of the student(s)	Title of the Project	Area of project	Name of the Supervisor	Name & designation of the Alumni / Industry Supervisor
1.	953618106001	AARTHI K	Colon Cancer Image Segmentation Using Deep Learning Techniques	Artificial Intelligence	Mr.R.Deiva Nayagam	
	953618106034	MIRRA S				
2.	953618106002	A.ABUBACKER SIDDDIQ	Risk prediction of Crime data using combined ARIMA & LSTM	Machine Learning	Mr.L.K.Balaji Vignesh	
	953618106009	ARUN K				
3.	953618106003	ACHUTHAN R	Semi-flexible Wearable Antenna for Bio-Medical application	Antenna Design	Mr.P.Gunasekaran	
	953618106017	GOKUL S				
4.	953618106004	ALPHINA CHRISTY V	Virtual Controlling and Monitorization of Jewellery Shop	IOT	Mr.S.Vijayakumar	
	953618106031	KRISHNA VENI S				
5.	953618106005	ANITHA RAM. R	Ground water level identification and its impact on rural district in TamilNadu, India	Embedded System	Dr.A.Azhagu Jaisudhan Pazhani	
	953618106030	KOHILA PRIYA. N				
6.	953618106006	ANU LAKSHMI K S	Lossless Cryptographic Techniques for Images Using Discrete Rajan Transform	Image Processing	Dr.S.Vairaprakash	
	953618106007	ANUSUYA R				

7.	953618106008	APINEYA SRI M	Implementation of High Speed Vedic Multiplier Using Pass Transistor Logic	VLSI Design	Mr.A.Rameshbabu	
	953618106012	BALA KIRUTHIKA A				
8.	953618106011	BALAJI RAJA.K	IOT and Machine Learning based milk monitoring system for detection & Milk Adulteration	Machine Learning	Dr.A.Lakshmi	
	953618106015	DINESH.R				
9.	953618106013	DEEPIKA.A	Wireless Capsule Endoscopy Bleedy Image Classification using SVM Based Model	Medical Image Processing	Mrs.S.Jeeva	
	953618106016	GAYATHRI.R				
10.	953618106014	DHITCHANAA R	Design and Analysis of Biomedical Compatible Patch Antenna for Wireless Body Area Network	Antenna Design	Mr.D.Gopinath	
	953618106026	KEERTHANA S				
11.	953618106018	N.HARSHETHAA	Ambient dust particle detection and control system	Embedded Systems	Mr.B.Kannan	
	953618106032	G.MAHADEVI				
12.	953618106019	HELANMARY M	Monitoring Domestic Sewage Effluent Using LoRa Technology	Wireless Communication	Dr.S.Periyanayagi & Dr.G.Kanthimathi	
	953618106027	KIRUTHIKA P				
13.	953618106020	S JAYALAKSHMI N	Design and Development of Animal detection system to avoid collision.	Image Processing	Mrs.V.SrirengaNachiyar	
	953618106033	MANIMALA				
14.	953618106021	JAYAMADAN K	Raw Water Monitoring and Control System	IOT	Mrs.G.Gnanapriya	
	953618106046	MADHAV P				
15.	953618106022	JEBISH ROBIN.R	Energy Efficient and	Wireless Network	Mrs.G.Subhashini	

	953618106024	KARTHIK.R	Secure Routing Protocol for WSN Based On Block Chain Technology			
	953618106029	HARISH KALYAN K.J				
16.	953618106023	M.KALIPRAKASH	Energy-Efficient Node Deployment in Heterogeneous Two Tier Wireless Sensor Networks Using Neural Training	Wireless Network	Mrs.V.SrirengaNachiyar	
	953618106025	K.KATHIR				
	953618106035	M.MOHANASUDHAN				
17.	953618106301	I.HARINIDURGA	Synthesis and Low-Temperature Sintering of Copper Nanoparticle Pastes for Microelectronic Packaging	Nano Technology	Dr.K.Ragavan & Dr.M.Venkatesh Perumal	
	953618106028	T.KIRUTHIKA				
18.	953618106037	MONISHA A	Smart Street Light Controlling and GPS Tracking for Vehicles using LoRaWAN Technology	IOT- LoRa	Mr.B.Kannan	
	953618106063	SUKUNA K				
19.	953618106039	NARMADHA DEVI M	Tomato Leaf Diseases Detection	Image Processing	Ms.S.Harini Shriram	
	953618106066	SWETHA K				
20.	953618106041	NIRMALA L	Multipurpose Embedded Based Hand Gesture Application for Physically Disabled People	IOT	Mrs.R.Ramalakshmi	
	953618106070	VIDHULA T				
21.	953618106042	NISHA P	Spectrum Sensing and Utilization using Cognitive Radio Technology	Wireless Communication	Mrs.G.Gnana Priya	
	953618106073	VISHNUPRIYA K				
22.	953618106043	NITHISH BALAJI A	Design and Development of Water	Antenna Design	Ms.S.A.Radhika	
	953618106060	SIVARAMAN P				

	953618106303	VENKATRAMANAN M	Surface Antenna for Lora Communication		
23.	953618106044	N. SHAMBHI REDDY	Implementation of FIR Filters using Configurable Booth Multiplier	VLSI Design	Dr.A.Azhagu Jaisudhan Pazhani
	953618106056	SANTHOSHRAJ M			
24.	953618106045	PAVITHRA P	Investigation of Circular and Elliptical Patch Antennas using Different Feeding Techniques for S-Band Application	Antenna Design	Mr.P.Venkatesh
	953618106061	SOPNA S			
25.	953618106051	RAMASURESH M	Sentiment Analysis on Review Comments of Social Media Posts using Machine Learning	Machine Learning	Dr.A.Lakshmi
	953618106072	VISHNU T			
26.	953618106053	SAI SIDDHARTH R	Design of Approximate Adders using Quantum Cellular Automata	VLSI Design	Dr.R.Rajalakshmi
	953618106057	SARATH K			
27.	953618106055	SANTHOSH R	An IOT Security Framework for Cloud Data Storage using Hybrid Cryptography	IOT & Cryptography	Mr.G.Sivakumar
	953618106062	SRIDHAR G			
	953618106074	YASHWANTH K			
28.	953618106054	SAKTHI PRAKASH ADITHYA B	Hydroponics Plants Monitoring System using IOT	IOT	Dr.S.Vairaprakash
	953618106064	SUNDHAR S			
	953618106302	RAMKISHORE K R			
29.	953618106059	SHANMUGA SIVA CHIDAMBARAM S	Contactless ATM Monitoring System with Theft Detection	Embedded System	Dr.R.Rajalakshmi
	953618106068	VENKATA SUBBU N			
30.	953618106040	NINEL BERT COSTA J	Preventive maintenance in industry using LoRaWAN technology	IOT- LoRa	Dr.S.Periyanayagi
	953618106065	SURYAKALA.A			

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31.	953618106069	VETRI RANJANI G	Detection of Chemical and Biological Speices using Surface Plasmon Resonance Sensor	Bio-Sensors	Dr.K.Ragavan & Dr.O.Senthilkumar	
	953618106071	VISHALINI K				
32.	953618106047	PRAVEENKUMAR P	Brain Tumour Segmentation and Classification using Deep Learning	Deep Learning in Medical Image Processing	Mrs.S.Jeeva	
	953618106050	RAAJASEKAR				
	953618106058	SHRIRAM V				
33.	953618106038	M.SATHISH KANNAN	Special Force Protection System	Embedded System	Mrs.R.Ramalakshmi	
	953618106067	UVASRI.S				

5/4/2022 5/4/22

Project Co-ordinator

5/4/22

HOD

Vice Principal

6/4/22

PRINCIPAL

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2020- 2021 (Even Semester)

Details of Project Group

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Area of Project	Name of the Supervisor
1.	953617106001	C.Abinaya	LHS based Alarm Point Locator in Coal Belt Conveyor	Embedded System	Dr.B.Deepa Lakshmi
	953617106002	R.Abirami			
	953617106020	M.Dhana Lakshmi			
2.	953617106004	A.Adishree Trinetra	Automation in despatch of Cement Pack	Embedded System	Ms.S.Radhika
	953617106019	K.Chitra lekha			
	953617106036	G.Jeyavarsha			
3.	953617106006	K.Alex Pandian	Smart Syringe Infusion Pump	Embedded System	Mr.D.Gopinath
	953617106014	S.ArunKumar			
	953617106026	V.Goutham			
4.	953617106007	R.Amaravathi	Design and implementation of Square Multiplier using Vedic Maths in FPGA Kit	VLSI Design	Mr.S.Vijayakumar
	953617106044	P.Kothawari			
	953617106091	K.Sugirtha Shalini			
5.	953617106008	M.Aniruth Shriram	Medication Premixed Nebulizer Liquid Container using an IoT	IoT	Mr.G.Sivakumar
	953617106041	S.Kesavan			
	953617106043	V.Kishore prasath			
6.	953617106009	A Anitha Rahini	An Enhanced Retinal Blood Vessel Segmentation using Deep Convolutional Neural Network	Image Processing	Mr.R.Deivanayagam
	953617106025	A.Farzana Fathima			
	953617106046	K.Lakshmi Gomathi			

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Area of Project	Name of the Supervisor
7.	953617106011	R.Anushya	2D Plotter Simulation and Prototype using NI LabVIEW and NI myRIO	Control System	Mrs.S.Jeeva
	953617106021	Dhanushya. R			
	953617106024	T.Dhivyamuthachi			
8.	953617106012	K. Anusuya	Presaging access amass Communication Shred	Machine Learning	Mrs.G.Gnana Priya
	953617106016	M Aysha Shahana			
	953617106039	S Kalaipriya			
9.	953617106013	T.Arunan	Ethernet based Field Bus System	Embedded System	Dr.S.Vairaprakash
10.	953617106015	R ArunPrasanth	On Board Diagnostics - OBD	Embedded System	Mr.K.Ragavan
	953617106033	S Jegadheesh kumar			
	953617106037	D.Joseph chandrashekar			
11.	953617106018	S.Bhuvan akshay	Design of approximate multiplier for approximate compressor unit and the application in image filtering	VLSI Design	Dr.A.Azhagu Jaisudhan Pazhani
	953617106027	K.Hariram Sundravel			
12.	953617106022	M.Dharini	Voice Controlled Robot using NI Labview & NI myDAQ	Image Analysis	Mrs.R.Chitra
	953617106030	S. Isha Suga Nandhini			
13.	953617106023	S.Dharsini	Pulse Diagnosis system	Embedded System	Dr.B.Deepalakshmi
	953617106047	A.Lakshmi kantham			
14.	953617106028	S.Harithra	Smart Anti-Theft System for Automotive Security with Face Recognition and SMS Ignition Control	Embedded System	Mr.P.Gunasekearn
	953617106040	S.KarthikaShree			
15.	953617106031	S.Jaiharish	Analysing Facial Expression and Hand Gestures using Deep Learning	Artificial Intelligence	Mr.D.Gopinath
16.	953617106032	J Jeevitha	Design of Multiband Patch Antenna for WIMAX and WLAN Applications	Antenna	Mr.P.Venkatesh
	953617106048	B. Lakshmi Praba			

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Area of Project	Name of the Supervisor
	953617106050	R Leon Mobit Bringa.			
17.	953617106034	R.Jenani Rajkumari	IoT Enable Power Profile Monitoring System	IoT	Mrs.R.Divya
	953617106045	M.Lahvanya			
18.	953617106042	B.Kishore kanna	Automation in Cement Bag Feeding in Electronic Rolling Packer	Industrial Automation	Mr.P.Gunasekaran
19.	953617106051	Libiya Joseph	Dynamic Spectrum Sharing in 5G Technology using Cognitive Radio Networks	Wireless Communication	Mr.R.Ramalakshmi
	953617106052	S Mahalakshmi			
20.	953617106005	B.Aishwarya	Vehicle to Vehicle Communication for cooperative driving	Sensors and Embedded system	Mrs.M.Sangeetha
	953617106081	M.Shunmugapriya			
	953617106100	R.Varshini			
21.	953617106010	S.Annapoorani	Face Mask detection using Deep Learning and NI LabVIEW	Image Processing	Mrs.S.Jeeva
	953617106077	M.Santhiya			
	953617106085	V.Siva priya			
22.	953617106029	A.Harnee	Design of High Performance Error tolerant Adder for Approximate Computing Unit	VLSI	M.Sangeetha
	953617106038	A.Joyce Leethiyal			
	953617106083	C.S.Sindhuja			
	953617106095	S.G.Udhaya			
23.	953617106035	V.Jeya lakshmi	Hybrid Edge Detection for Brain Tumor Detection from MR Image using openCV	Image Processing	Mr.B.Kannan
	953617106084	V.Sindhuja			
	953617106089	M.Subhashree			
24.	953617106049	S.Lakshmi Priya	Named Entity Recognition and Classification using Bio-bert Model	Artificial Intelligence	Mr.K.Ragavan
	953617106069	M.Priyanka			

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Area of Project	Name of the Supervisor
	953617106093	S.Swetha			
25	953617106053	A.Manikandan	BDoor App-Blood Donation Application using Android Studio	Android Application development	Dr.S.Periyanayagi
	953617106056	M.Muthukrishnan			
	953617106070	M.Ramakrishnan			
26.	953617106054	A.Manju	Memristor based Pass Transistor Logic	VLSI	Mr.S.Vijayakumar
	953617106068	S. Priyadharshini			
	953617106071	P.Ramya			
27	953617106055	K.Mounica	Smart Energy Meter using LoRaWAN technology	IoT based LoRaWAN technology	Dr.A.Azhagu Jaisudhan Pazhani
	953617106078	S.Selva Dharshini			
28.	953617106057	G.Nandhini Devi	Monitoring Patients undergoing Continuous Ambulatory Peritoneal Dialysis using IoT.	IoT	Mrs.G.Gnana Priya
	953617106059	M.Ponsheela			
	953617106082	S.Siba jasmine			
29.	953617106058	G.Nishanthi	Analysing the PQRST Parameters from ECG Signal to Identify the types of Heart Disease	Artificial Intelligence	Mrs.V.SrirengaNachiyar
	953617106073	V.Sakthi Ramya			
30.	953617106060	G.Ponsuki varman	Smart Car Parking System using IoT	IoT	Dr.S.Vairaprakash
	953617106094	T.Tamilselvan			
	953617106096	G.M.Vairamuthu			
	953617106103	P.Vijay Pramoth P			

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Area of Project	Name of the Supervisor
31.	953617106061	A.Pooja	Smart Parking System based on LoRaWAN Technology	IoT based LoRaWAN technology	Ms.S.Harini shriram
	953617106098	M.Vaishnavi			
32.	953617106062	R.Pradeep	An IoT-based System for Automated Health Monitoring and Surveillance in Post-Pandemic Life	IoT	Mr.L.Balaji Vignesh
	953617106065	R.Praveen			
	953617106064	P.Praveen			
	953617106075	M.Sankar			
33.	953617106063	S.Pradeepa	Drowsiness Detection of a Driver	Image Processing	Mrs.R.Ramalakshmi
	953617106066	V.Priya			
	953617106074	K.Sangavi			
34.	953617106067	R.Priya dharshini	Soil Irrigation with LoRaWAN	IoT based LoRaWAN technology	Mrs.R.Chitra
	953617106086	R.Sivasakthi			
	953617106097	A.Vaishnav Arundhati			
35.	953617106072	S.Sai Nandha kishore	Multipurpose Patient Monitoring System using LabVIEW	Signal Processing	Mr.A.Rameshbabu
36.	953617106076	S.Sankara Narayanan	Vehicle Speed Management System	Embedded system	Mr.A.Rameshbabu
	953617106101	V.Vasanthakumar			
	953617106092	S.V.Sumanth			
37.	953617106079	J.Shaina Davita	Vehicle Diagnostics and Monitoring using OBD module	Embedded system	Dr.S.Periyanayagi
	953617106088	V.Sri Gowsalya			
	953617106087	S.Sri Deepika			
38.	953617106090	S.Suganya		Artificial Intelligence	Mr.R.Deiva Nayagam

Sl. No.	Register Number	Name(s) of the student(s)	Title of the Project	Area of Project	Name of the Supervisor
	953617106099	C.Varsha	COVID-19 Detection from Chest CT Scan Images		
39.	953617106102	V.Veeralakshmi	Performance analysis of photonic network on chip	VLSI	Mr.R.Divya
	953617106104	V.Yogeshwari			

Patents Publication

PATENT DETAILS

2020 – 2021

SI.No	Title of the Invention	Name of the Faculty members & Students	Department	Application Number	Filing Date	Status	Date of Publication
1.	Smart Uniform For Girl Children With Artificial Intelligence	1.Dr.S. Periyanayagi 2.Dr.S.Kannan 3.Dr.B. Deepa Lakshmi 4.Dr.K.Karthikeyan 5.Mr.Moorthi Kanagaraj	ECE / EEE	2020102896	20.10.2020	Granted	02.12.2020
2.	Local Area Way Finder	1.Mr. R. Deiva Nayagam 2.Dr. S. Periyanayagi 3.Mr. A. Rameshbabu 4.Mr. P. Venkatesh 5.Ms. V. Harsheni 6.Ms. L. Janani 7.Ms. V. Sivabala	ECE	202041056634	28.12.2020	FER Received on 15.09.2021 FER Reply Filed on 22.03.2022	Published in Gazette on 01.01.2021
3.	Adaptive Headlight Beam Automation in Vehicles	1.Dr.B.Deepa Lakshmi 2.Dr.S.Periyanayagi 3.Mrs.R.Ramalakshmi 4.Mrs.R.Divya 5.Mr.A.Alisodaipandian 6.Mr.M.Ananth 7.Mr.K.Aravint Kumar	ECE	202141000506	06.01.2021	FER Received on 14.01.2022 FER Reply Filed on 13.07.2022	Published in Gazette on 15.01.2021
4.	User Wearable Device for Face Recognition	1.Mrs.M.Sangeetha 2.Dr.S.Periyanayagi 3.Mr.K.Ragavan 4.Mrs.V.Srirenganachiyar	ECE	202141001155	11.01.2021	FER Received on 05.01.2022	Published in Gazette on 22.01.2021

		5.Mr.V.Paulesakki 6.Mr.S.Rajaguru 7.Mr.B.Sundharamoorthy				FER Reply Filed on 07.07.2022	
5.	Bike Ignition Control Using Chin Strap Switch	1.Mr.B.Kannan 2.Dr.A.Azhagu Jaisudhan Pazhani 3.Mr.P.Gunasekaran 4.Dr.S.Periyanayagi 5.Mr.S.Shanmuga Sivabala 6.Mr.A.Veerendrakumar 7.Mr.C.Vijay Amalan	ECE	202141003316	25.01.2021	FER Received on 17.02.2022 FER Reply Filed on 18.08.2022	Published in Gazette in 05.02.2021
6.	Animal Intrusion Detection and Prevention System for Reserved Area	1.Mrs.R.Chitra 2.Dr.S.Periyanayagi 3.Mrs.G.Gnana Priya 4.Mr.G.Sivakumar 5.Ms.M.Aishwarya 6.Ms.R.Archana 7.Ms.G.Minilakshmi	ECE	202141003953	29.01.2021	FER Received on 02.09.2021 FER Reply Filed on 08.03.2022	Published in Gazette on 05.02.2021

2021 – 2022

SI.No	Title of the Invention	Name of the Faculty members & Students	Department	Application Number	Filing Date	Status	Date of Publication
1.	Cooperative Driving: Vehicle To Vehicle Communication	8.Mrs.V.Srirenganachiyar 9.Dr.S.Periyanayagi 10. Mr.K.Ragavan 11. Ms.B.Aishwarya 12. Ms.M.Shunmugapriya	ECE	202141046204	11.10.2021	FER Received on 29.03.2022	Published in Gazette on 19.11.2021
2.	Drowsiness Detection of A Driver	8.Mrs.R.Ramalakshmi 9.Dr.S.Periyanayagi 10. Dr.B.Deepa Lakshmi 11. Mr.P.Venkatesh 12. Ms.S.Pradeepa 13. Ms.V.Priya 14. Ms.K.Sangavi	ECE	202141046208	11.10.2021	FER Received on 14.03.2022 FER Reply Filed on 11.07.2022	Published in Gazette on 19.11.2021
3.	Machine Learning Method & System For Solving a Prediction Problem from larger data source	1.Dr.P.Sivakumar 2.Dr. Hasmath Farhana Thariq Ahmed **3.R.Rajalakshmi** 4.Mr.B.Kannadasan 5.Mrs.B.Jegajothi 6.Dr.C.Naresh	ECE	202141050927	07.11.2021	Published in Gazette	03.12.2021
4.	Square Multiplier	8.Mr.S.Vijayakumar 9.Dr.S.Periyanayagi 10. Mr.A.Rameshbabu 11. Mr.R.Deiva Nayagam 12. Ms.R.Amaravathi 13. Ms.P.Kothawari 14. Ms.K.Sugirtha Shalini	ECE	202141051884	12.11.2021	FER Received on 05.07.2022 FER Reply Filed on 26.12.2022	Published in Gazette on 03.12.2021

5.	Mobile App For Health Monitoring and Surveillance System	1. L.K.Balaji Vignesh 2. Dr.S.Periyanayagi 3. Dr.S.Vairaprakash 4. D.Gopinath 5. R.Pradeep 6. P.Praveen 7. R.Praveen 8. M.Sankar	ECE	202141056086	03.12.2021	FER Received on 09.06.2022	Published in Gazette on 10.12.2021
6.	Employee Location Tracking and Attendance Monitoring System Using wearable Device	1. Dr.A.Azhagu Jaisudhan Pazhani 2. Dr.S.Periyanayagi 3. Mr.B.Kannan 4. Mr.P.Gunasekaran 5. Ms.J.Gayathri 6. Ms.R.Manjupriya 7. Ms.K.Sahithya	ECE	202141057452	10.12.2021	FER Received on 25.04.2022	Published in Gazette on 24.12.2021
7.	System For Monitoring Continuous Ambulatory Peritoneal Dialysis Patients	1. Mrs.G.Gnana Priya 2. Dr.S.Periyanayagi 3. Mr.G.Sivakumar 4. Ms.G.Nandhini Devi 5. Ms.M.Ponsheela 6. Ms.S.Sibajasmine	ECE	202241009901	24.02.2022	FER Received on 01.08.2022 FER Reply Filed on 27.01.2023	Published in Gazette on 11.03.2022

2022 – 2023

8.	Contactless ATM Monitoring System With Theft Detection""	Dr.R.Rajalakshmi, Dr.L.Lakshmi, Dr.B.Deepa Lakshmi, Mrs.G.Subhashini, Ms.L.Krishnakumari, Ms.R.Chandralekha	ECE	202341040039	12/06/2023	Published in Gazette	08/09/2023

Projects Submitted for ISTE Award

Indian Society for Technical Education

Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, PunjabNational Award for Best B.Tech. Project from Engineering Colleges Related to Sustainable Development in

– Computers and Communication

Proforma for NominationYear of

Year of Award : 2023

Name of the Nominee(s) with Branch and Semester/Year (not more than two students for one Project)	: ABINAYA S (953619106001), ELAVARASI A (953619106016) ECE, VIII semester /IV year
Membership (Professional Societies	:ISTE student chapter member
Email and Mobile No.	: 953619106001@ritrjpm.ac.in, 953619106016@ritrjpm.ac.in, lakshmi@ritrjpm.ac.in,
Address of the Institution	:North Venganallur Village, Rajapalayam - 626 117, Virudhunagar District, Tamil Nadu
Name of Guide(s) and his address	:Dr.A.Lakshmi, Associate Professor/ECE, Ramco Institute of Technology, North Venganallur Village, Rajapalayam-626117,Virudhunagar Dt
Title of the Project (in capital letters)	:DEVELOPMENT OF LOW COST RETINAL IMAGING SYSTEM FOR SCREENING DIABETIC LEVELS IN EYE
Brief resume of the Project (not more than 150 words) (The detailed project Report may please be enclosed)	:

Diabetic Retinopathy is a complicated disease due to diabetic mellitus that affects the blood vessels and nerve tissue in the retina. This leads to threatening damage to the retina like blurry vision or it stops blood flow in eye, eventually leading to blindness. This also gives rise to the risk of other eye diseases such as glaucoma and retinal detachment. The damage can be prevented by early detection with appropriate treatment. As the number of individuals with diabetes continues to grow, the

Infrastructure needed to prevent blindness due to DR will become even more insufficient. So, the usage of diabetic retinopathy detection as the aim, we seemed to take publicly available clinical facts and train a system to gain knowledge that could run the device to predict the DR level. In this project, we develop a portable scientific device that would accurately detect one of the five levels of diabetic retinopathy such as No DR, Mild DR, Moderate DR, Severe DR, Proliferative DR, would significantly reduce the quantity of instances of blindness due to diabetic retinopathy. is now feasible.

Indian Society for Technical Education
Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib,Punjab National Award for Best B.Tech. Project from Engineering Colleges related to Sustainable Development in India

Year of Award : 2023

RESUME OF THE PROJECT

Problem Statement:

Diabetic retinopathy is a complication of diabetes, caused by high blood levels, damaging the back of the eye (retina). It can cause Blindness, Vitreous hemorrhage, Retinal detachment, Glaucoma, if left undiagnosed and untreated. Now days, the detection is performed by Opthalmologists, with a dilated eye exam, ophthalmoscopy and slit-lamp biomicroscopy. The eye drops used for this exam can cause the close vision to blur and other traditional methods also needs a well trained clinicians to examine the retina. Also, this may take more time to diagnose and in rural regions around the sector wherein get entry to vision care is confined, the detection is difficult, before a case will become severe.

The objectives are:

- To prevent the vision loss and other retinal damages, the diabetic retinopathy should be detected early.
- So, our project aims to classify and detect the diabetic level in retina with the Machine Learning device with the limited time.
- And it does not require any specialized healthcare professional to diagnose the diabetic levels in eye.
- It also provides the cost effective system for detection, so that make it available for all kind of people.

Significance of the Project to industry/ community: Smartphone fundus photography is a simple technique to obtain ocular fundus pictures using a smartphone camera and a conventional handheld indirect ophthalmoscopy lens. This technique is indispensable when picture documentation of optic nerve, retina, and retinal vessels is necessary but a fundus camera is not available. The main advantage of this technique is the widespread availability of smartphones that allows documentation of macula and optic nerve changes in many settings that was not previously possible. For early detection of diabetic retinopathy we proposed a cost effective system with high accuracy and prevention. We detect the level of diabetic retinopathy as five classes mentioned below:

1. No diabetic retinopathy (No DR)
2. Mild DR
3. Moderate DR
4. Severe DR
5. Proliferative DR

The different classes of Diabetic Retinopathy conveniently with our mobile phone. We inference that this project gives the effective method to classify the level of DR, to assist the doctors

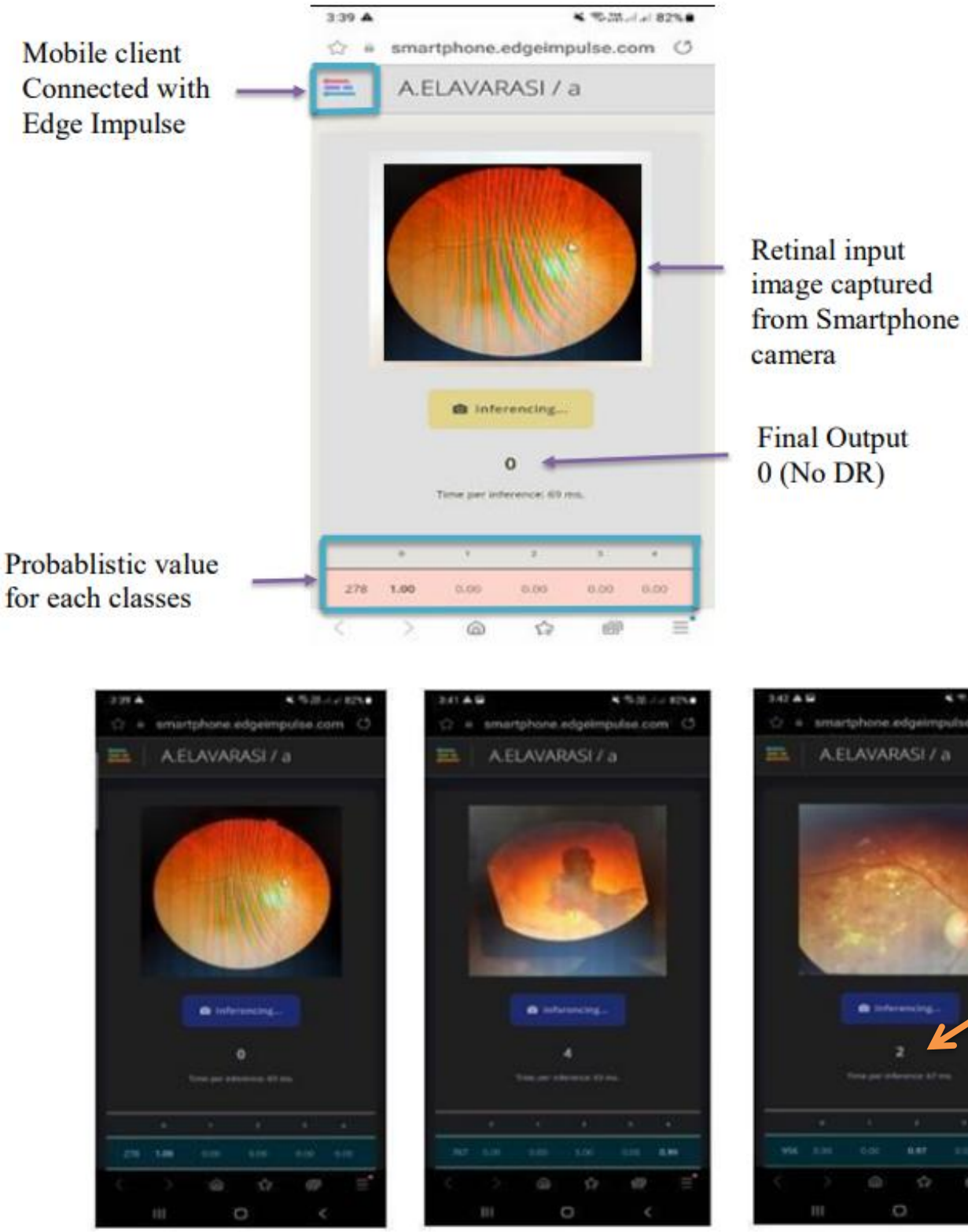


Figure1: Output of Mobile deployment

Possible applications, applications already made and their impact:

- Ophthalmology is the specialized field of medicine that focuses on the health of the eye**.**

Social Impact Projects: The science of ophthalmology encompassed all aspects of visual function, both in health and in illness. For extracting the retinal image, has a larger primary lens with a variable focusing, allowing for a wider field-of-view. It requires specialized equipment and costlier. Only the trained professionals can operate the device.

Startup Funding: Our Smartphone ophthalmology can be used as initial screen test to identify the severity of the DR and can be used in any clinic with less trained professionals.

Proposed Methodology:

The Diabetic Retinopathy detection method is simple, effective, and also a cost effective. It gives the highly accurate prediction in the detection of the DR level. It gives the method for automatic detection of DR in less time when compared with manual diagnosis of the retina. Our deployed model gives the robust system to predict the level of Diabetic Retinopathy with good performance in the real time. In our project, we are getting input image through Smart Phone Camera. We built our trained model using web in smartphone from edge impulse. We had done the real time implementation, using the smartphone to predict the level of Diabetic Retinopathy through the retinal image.

Procedure of proposed methodology

At first, we collected the Diabetic Retinopathy level detection datasets necessary for our project from the kaggle website.

- The dataset contains the retinal images of five DR classes mentioned above. Each category of images in the dataset was simply given an code from 0-5, 0 being the lowest severity of No DR and 5 being the worst, or Proliferative DR.
- The various CNN models are trained to classify normal retina and diabetic retina
- Validation will be carried for the each CNN model and the performance is analyzed. The model which gives higher accuracy will be used for further training in Edge Impulse for our project.
- The best model which has good performance accuracy in predicting the level of DR is trained in the Edge Impulse which has different functions to perform some functions like feature extraction.
- Each class of datasets are uploaded with labeling the facts as one of the 5 classes, and perform the feature extraction and then perform training with the optimum model.
- The trained model is tested with some of the retinal images to obtain the model performance.
- Once the model performance is acceptable to predict the DR classes, it will be deployed in the device.

The working process of DR level detection is mentioned in Figure

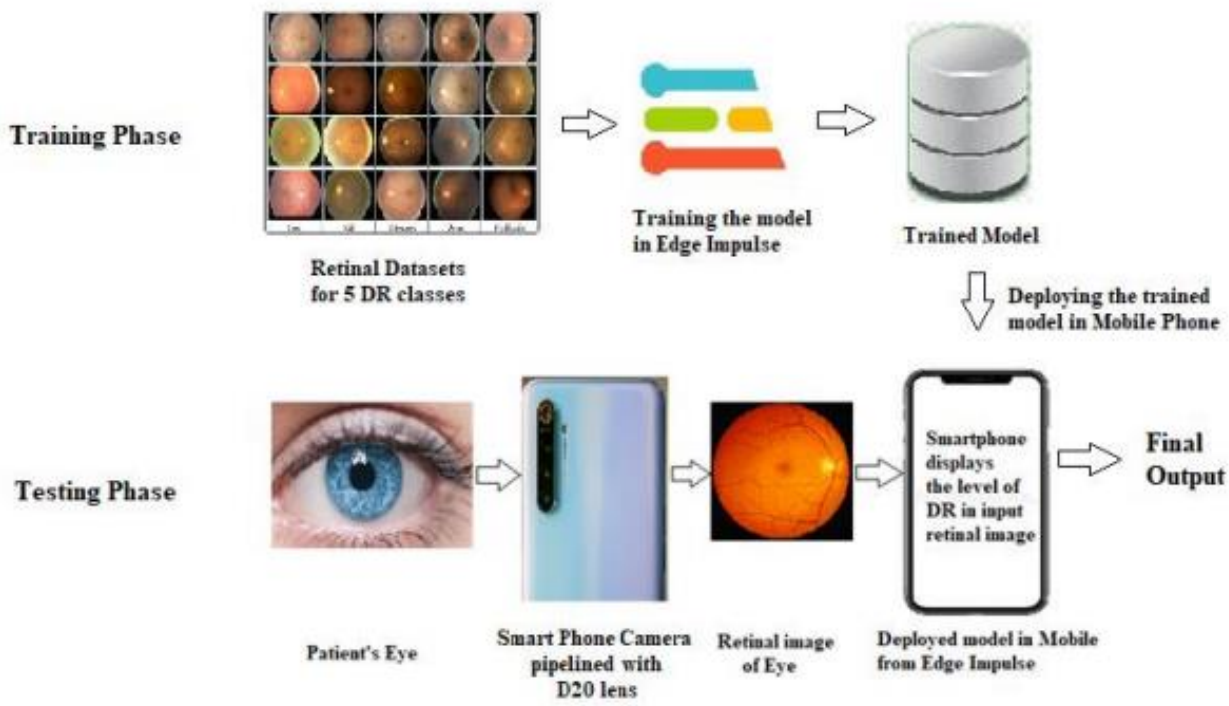


Figure 2: Working Process flow

Future Work: In future, it can be developed as a product by combining the method of extracting the real retinal image through the D20 lens pipelined with the camera module with our project. It will surely help the doctors to find the DR level easily with limited time. It also a cost effective one compared with the traditional equipment used for detection. So, it can also be afford in places like clinics, because this method of DR detection does not require any specialized healthcare professional. It can be done with the clinicians or even with the nurse. So, this project let a way to develop the product for DR detection which can be utilized by all the people easily.

Possible limitations of the work: However, smartphone ophthalmoscopy has its limitations. The image quality may be limited by the stability of examiners_ hands, small pupil size or unwanted corneal reflections. The quality of fundus images was higher when images were captured by more experienced examiners compared to junior examiners.

Note: This method of retinal extraction requires the healthcare professional. So, in our project, we used the datasets collected from the kaggle website for training our model which recognizes the level of diabetic retinopathy

Indian Society for Technical Education

NIT, Kozhikode National Award for Best B.Tech. Project in

- Electrical Engineering and Electronics

Proforma for Nomination

Year of Award: 2023

Name of the Student Nominee(s) with Branch and Semester/Year (not more than TWO Students for one Project) : Ms.M.Sabriyah & Ms.P.Sneha, VIII Semester/IV Year ECE

Membership (Professional Societies) : ISTE Student Chapter Member

Email and Mobile No. : 953619106057@ritrjpm.ac.in, 953619106068@ritrjpm.ac.in ramalakshmiramasamy@ritrjpm.ac.in, 9600989342, 9940916637

Address of the Institution : Ramco Institute of Technology, North Venganallur Village, Rajapalayam – 626 117

Name of Guide(s) and her address: Mrs.R.Ramalakshmi, Assistant Professor (Senior Grade), Department of ECE, Ramco Institute of Technology, Rajapalayam – 626 117

Title of the Project (in capital letters): INTEROPERATIVE BIOPSY SITE RELOCALIZATION IN ENDOSCOPE FOR GASTRO INTESTINAL TRACT USING DLT

Brief Resume of the Project (not more than 150 words) (The detailed project report may please be enclosed) :

An endoscope, a flexible fiberoptic tube with a video camera at the end, is inserted in the tract and provides images of areas affected by problems such as ulcers, abnormal growths, and GI bleeding. Since some of the more serious conditions originate in the small intestine, this organ is a frequent imaging target during the diagnosis process. For example, Crohn's disease (inflammation

of the lower part of the small intestine of causes not fully understood yet) is a condition of particular interest, as it can lead to severe intestinal blockage. All images are enhanced, and the noise is removed before they are inputted into the deep learning networks. Kvasir dataset contains 200 images divided equally into five types of lower gastrointestinal diseases (dyed-lifted polyps, normal cecum, normal pylorus, polyps, and ulcerative colitis). In the classification stage, pretrained convolutional neural network (CNN) models are tuned by transferring learning to perform new tasks. SoftMax activation function receives the deep feature vector and classifies the input images into five classes. All CNN models achieved superior results. We store the Data's through the IoT webpage and send through the SMS.

NIT, KOZHIKODE NATIONAL AWARD FOR BEST B.TECH. PROJECTFROM ENGINEERING COLLEGES IN INDIA

Year of Award: 2023

RESUME OF THE PROJECT

Problem Statement:

In recent years, endoscopic technologies have been developed since disease for digestive system of latest human body increases gradually. Among the endoscopic technologies, a capsule endoscope is highlighted for the patient's convenience and the possibility of the application in the small intestine. Because the movement of the capsule endoscope only depends on the peristaltic motion, it has some limitations to get the image of the digestive organ. Therefore, the research of the capsule's locomotion is necessary. As the basic study of the locomotive mechanism, the information of bio-material property is required. Especially, the friction force of the tissues of the gastro-intestinal tract is very important information. The new filter is an edge-preserving filter especially when images are polluted by mixed noise containing Gaussian noise, Poisson noise, and impulse noise. The structural features are obtained from multi resolution analyses which are used to discriminate the structures as borders, dots and streaks. On the other side, the textural features computed by LBP operators are used to discriminate the local variation of colors, the pigment network etc. Later, these features are fused in multiple combinations to investigate the influence of each combination in the performance of detection. Manually checking process (SVM algorithm).
The objective is ,

- To design an interoperative biopsy site relocalization in endoscope for gastro intestinal tract using DLT.

Significance of the Project:

Notifies the user automatically through smartphone if any anomalies begins to form. To send alerts, the system incorporates an automatic signaling and indicating device called GSM. Overall, this system represents a novel approach to intravenous therapy and has the potential to be a valuable tool for healthcare providers. Provides accurate results rather than doing it through manual processes. Easy to find the anomalies that a person is infected from. Quick and effective approach in the medical industry. The deficiencies of the radiologist and other human factors can lead to a false diagnosis, so a computer-aided automated method would be valuable for diagnosing polyps with high

accuracy and at the early stages of cancer. Artificial intelligence techniques have shown massive potential in various medical fields for helping humans to visualize disease that cannot be discovered with the naked eye.

Applications:

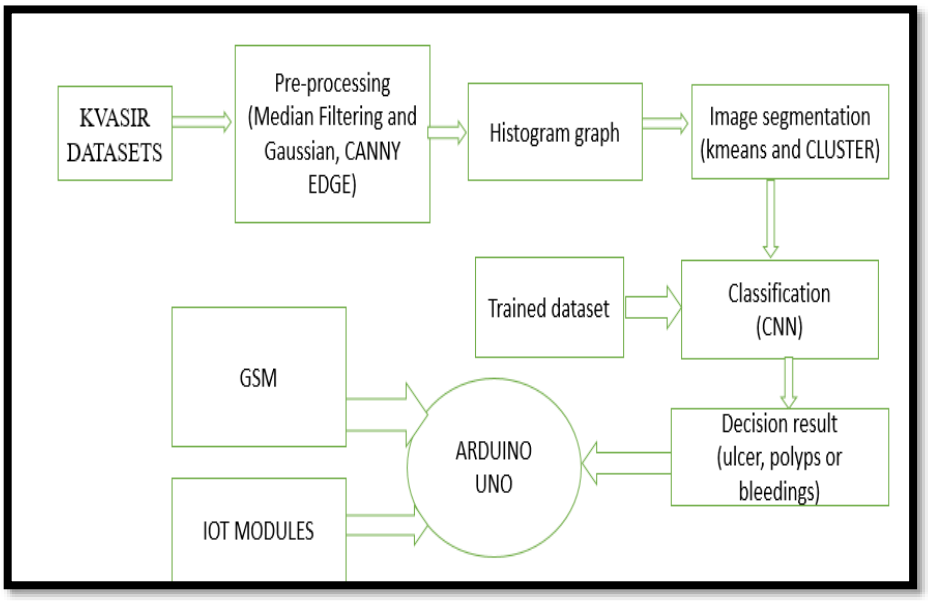
- Bio Medical
- Hospitals
- Scanning center

Proposed Methodology:

Current endoscopy captures the patient's internal organs in much lesser pixel which is used in patient rehabilitation. Our paper focuses on technologies that can be used to automatically diagnose images derived from gastrointestinal biopsies. Using deep learning algorithms for biopsy pictures may aid in detecting distinct features in enteropathies-affected tissues. Learning from distinct sections of a picture or searching for comparable patterns in new photos enables the construction of prospective classification or clustering models. Such techniques offer a cutting-edge method for detecting anomalies. Convolutional Neural Networks (CNNs), for example, are deep learning approaches for computer vision that can learn such complicated information and assist in issue solving. CNNs are generally used to solve picture classification and object recognition problems. The primary focus is on using CNNs to detect variations in histologically identical tissues that may be indistinguishable under a microscope. Eight different preprocessing algorithms were applied to increase the accuracy of feature extraction. The algorithms included converting the image to gray scale, sharpening, median, smoothing, binary masking, RGB extraction, histograming, and the Sobel operator. Before turning an image into a gray scale version, the RGB values are removed. To make the details of the infected area more distinct, a sharpening filter is applied to the gray scale image. Additional features like entropy, kwotsis, skewness, etc. will be introduced. To find the bleeding, polyps, and ulcers, we employed the CNN algorithm. To read the data using MATLAB and transmit the IOT and SMS, we are utilizing an Arduino UNO.

In order to improve the accuracy of feature extraction, eight different pre-processing algorithms were used. The RGB values of the images are extracted before converting it into a gray scale image.CNNs are computational systems designed for the purpose of pattern recognition. CNN has entered into a number of fields, including healthcare and has an important role in the diagnostics

of images obtained in early disease stages.Sharpening filter is applied to the Gray scale image in order to sharpen the details of the infected region. Advanced feature will be added such as Entropy, kwotsis, Skewness etc. .We using CNN algorithm to detect the ulcer, polyps and bleeding.We using Arduino uno to read the data though the MATLAB and finally send the IOT and SMS.



FLOW DIAGRAM

To develop a fully integrated system which can be used to detect any kind of polyphs, ulcers, bleeding and tumours before the person is at serious risk.

Future Work:

This work presents three deep learning models, confusion matrix form, feature extraction and Labels that can direct the doctor's focus to the most important regions that may have been missed. The existing model can be significantly improved to accommodate different feature extraction and pixel clarity requirements. The future of the medical field is dependent on the endoscopy techniques as elderly people face lot of pain while having to go through these procedures.

INDIAN SOCIETY FOR TECHNICAL EDUCATION

KERALA GOVERNMENT ENGINEERING DESIGN NATIONAL AWARDFOR ENGINEERING DEGREE STUDENTS

PROFORMA FOR NOMINATION

Year of Award : 2023

Name of the Student Nominee(s) (not more than TWO Students	: INDHUMATHI C and JAYA MAHIMA M
Discipline, Branch and Semester/ Year of study	: IV/ECE/VIII/2023
Membership (Professional Societies	: ISTE
Email and Mobile No.	: rajalakshmi@ritrjpm.ac.in Mobile:7502638715
Address of the Institution	: Department of ECE, Ramco Institute of Technology, North Venganallur, Rajapalayam-626117, Virushunagar District,Tamil Nadu,India.
Name of Guide(s) and his address	: Dr.R.Rajalakshmi,Assistant Professor, Department of ECE, Ramco Institute of Technology, Rajapalayam
Title of the Project (in capital letters)	: SATELLITE IMAGE BASED WILDFIRE DETECTION AND ALERTING SYSTEM USING MACHINE LEARNING
Significance of the Project (Indicate two specific applications, outcomes or overall impact of Project)	: 1. The main significance of this project is early warning benefit. 2.This system can be installed just about any where in a commercial building, malls and at many more public places for fire detection

(The detailed Project Report may please be enclosed).

KERALA GOVERNMENT ENGINEERING DESIGN AWARDFOR ENGINEERING DEGREE STUDENTS

Year of Award : 2023

RESUME OF THE PROJECT

(Please indicate in the following space the significance of the Project to industry/community, possible applications, applications already made and their impact, how the project work is different from similar work/studies already done by others, how the work can be further improved, possible limitations of the work, etc.)

Wildfires are one of the natural element of the Earth system. They are important for foliage growth, release of nutrients on the timber bottom, and help in maintaining a balanced forest ecosystem. However, wildfires are also one of the most destructive natural hazards in the world. They contribute to global warming, destroy property, and lead to tremendous economic losses and eventually to loss of mortal and animal lives. Research has shown that artificial intelligence formerly plays a veritably important role in wildfire management. In this, machine learning approach has been defined to spot wildfire detection in real time with high perfection. This system is trained for day and night time to validate and feed wildfire images sorted by different times of day. This is integrated with available forest response systems via API's for waking to produce an automated wildfire detection system in real time. This research result can be extended by fine tuning the network to build wildfire detection systems for different regions and locations.

Interdisciplinary project

RAMCO INSTITUTE OF TECHNOLOGY
RAJAPALAYAM

Date: 04.04.2023

Submitted to Chairman,
Respected Sir,

Chairman Order No. : RIT/CA/2023/050

Head of Division : Establishment /**Finance / Approval**

Sub.: Submission of information - RIT- Students qualifying for finals – TIFAN 2023 - National Level Vehicle Competition organized by SAEINDIA – Requesting permission to participate and approval of proposed budget- Reg.

We are pleased to inform you that our team (RIT-FOLKS) qualified for finals in the National Level Vehicle Competition on "Cultivate Innovations Competition- Multi-Vegetable Transplanter for students under TIFAN (Technology Innovation Forum for Agriculture Nurturing) 2023" organized by the professional body namely Society of Automotive Engineers (SAE) INDIA. Initially, a preliminary round was conducted on vehicle design; our EEE, ECE & mechanical students (25 Nos.). They participated and cleared the preliminary round, which consisted of design drawing using AutoCAD®, creation of vehicle 3D model using CREO®, Simulation and Analysis of vehicle structure using ANSYS®, which are available in our mechanical department CAD lab. After qualifying in the preliminary round, our team is shortlisted and selected to appear for final round, which will be conducted at Mahatma Phule Krishi Vidyapeeth Rahuri, Pune during the month of May 2023.

The summary details of various rounds, its head of expenses with budget and remarks for your kind reference.

Competition Rounds	Process	Propose Budget (Rs.)	Remarks
Preliminary Round	Team Registration	8,900/-	• Registration cost is sponsored by RIT under the head of RIT/Dept./student's co-curricular • Cleared the preliminary round (Design) – Online. • Selected for finals
Final Round	Team Registration	5,900/-	• Requested budget will be utilized for fabrication & Testing. **Students Contribution** • Accommodation & Travel expenses during fabrication. • Transportation of vehicle, (to and fro) RIT to Pune and Pune to RIT. • Travelling and other expenses of participating in the final round. **Other Information's** • Final round registration will be closed at the end of March 31st, 2023. • Finals will be held during mid of May 2023.
	Vehicle Fabrication & testing, trail run at Chennai	8,90,400/-	
	Accompanying faculty advisor for finals as per the event norms	11,000/-	• Travelling expenses of faculty advisors; RIT to Pune and Pune to RIT
	Total	**9,07,300/-**	• Excluding Preliminary registration fees.

The Details of SAE Registered Faculty Advisors and Department Faculty Facilitators who are guiding the project are given below.

S.No	Faculty Position	Faculty Coordinator
1.	SAE Registered Faculty Advisor(s)	Mr.J.Jerold John Britto, AP(SG)/Mech Mr.R.Venkatesh, AP/Mech
2.	Dept. Faculty Facilitator(s)	Mr. B.Kannan, AP(SG)/ECE Mr.M.Thangam, AP(SG)/EEE

The list of the RIT-FOLKS student's team members as given below.

S. No.	Name and Register Number	Year/ Branch/ Section
1.	Kalirajakumar B (953620114319)	III Mech B
2.	JeyaPrakash. J (953620114317)	III Mech A
3.	SakthiJeyachandran.M (953620114031)	III Mech A
4.	Ganesh. R (953620114312)	III Mech B
5.	Muthu Kumar. R (953621114304)	II Mech
6.	GuruSankar. N (953621114028)	II Mech
7.	Dhakshana Moorthy. S (953620114007)	III Mech B
8.	Jeyaprakash. K (953621114016)	II Mech
9.	Kalyanasundaram. K (953621106037)	II ECE A
10.	Mithran. R.S (953620114023)	III Mech A
11.	Alagar samy. N(953620114002)	III Mech A
12.	Ganesh Kumar. P (953621114010)	II Mech
13.	Praveen Selvamani. M (953620105017)	III EEE B

S. No.	Name and Register Number	Year/ Branch/ Section
14.	Kartheeswaran. M (953621106040)	II ECE A
15.	Shree Harish. R (953621106098)	II ECE B
16.	Srikanth. K (953621105049)	II EEE
17.	Kishore. V (953620114324)	III Mech B
18.	Yuvaraj. S.K (953620114040)	III Mech A
19.	Ramsundar Siranjeevi. S (953621105042)	II EEE
20.	Sakthi Vinayagam. C (953621106086)	II ECE B
21.	Karthikeyan. M (953621114019)	II Mech
22.	Neertahi Lingam. K (953620106052)	III ECE B
23.	Pondurai.M (953620106054)	III ECE B
24.	Rishikanth.R (953621105043)	II EEE B
25.	Krishna Kumar. M S (953620114326)	III Mech B

Based on SAE-Event guidelines, we are going to formulate the shadow team (consists of 25 members) to meet the subsequent process follow up in the coming years.

Hence, we seek your kind permission and approval to take part in TIFAN-2023 and sanction of the requested budget of Rs.9,07,300/- from RIT funds.

For favour of approval.

Head of Account : RIT/Dept./Students/Co-curricular

Enclosure : TIFAN-2023 poster and list of shortlisted qualified team for finals.

4/4/23
HOD/MECH

S.K 04/04/23
HOD/EEE

04/04/2023.
HOD/ECE

04/04/23
GM(A)

4/4/23
Vice Principal

04/04/23
Principal

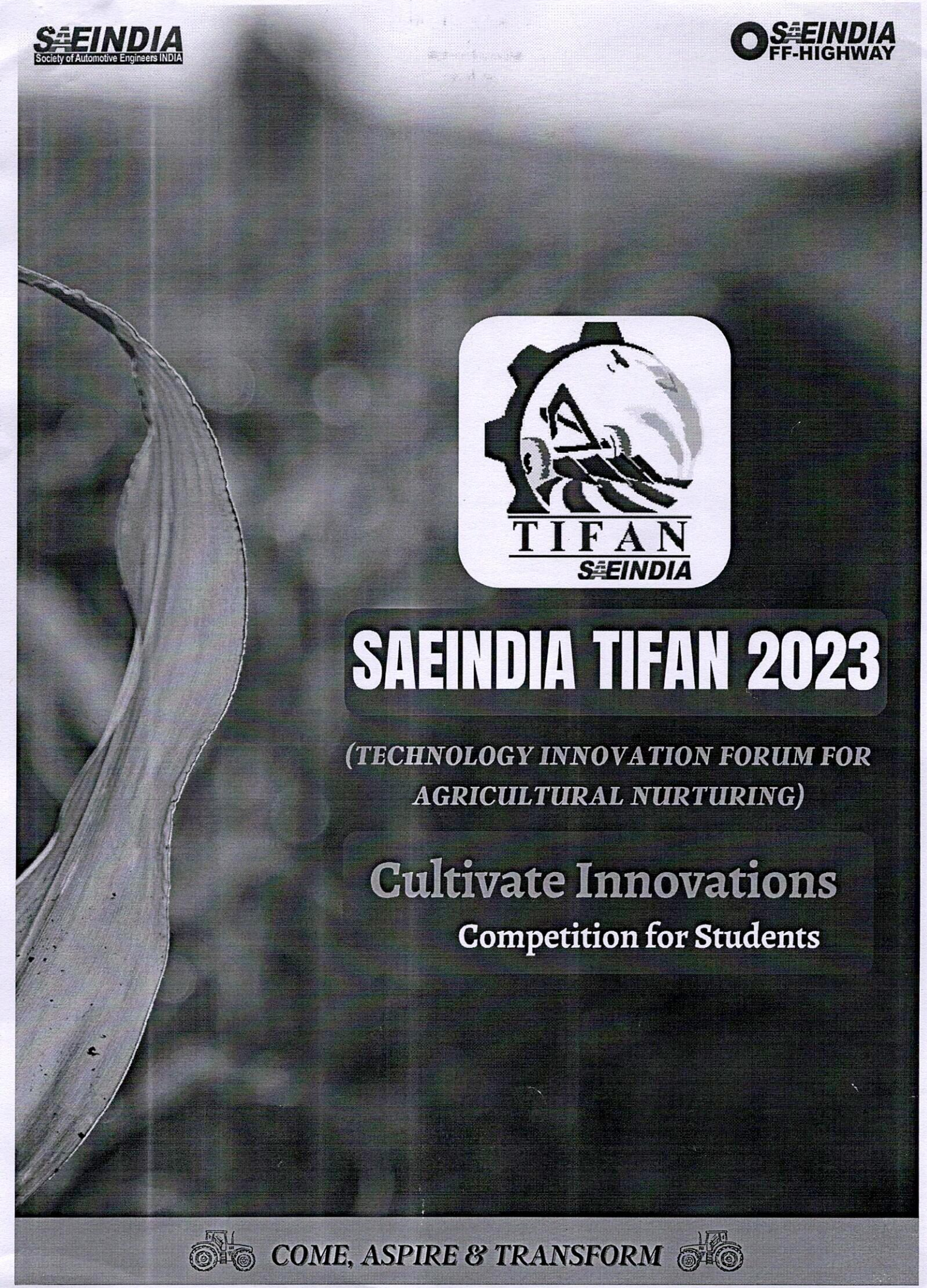
6/4/23
CEO

Approved / ~~Not Approved~~

CHAIRMAN

SAEINDIA
Society of Automotive Engineers INDIA

SAEINDIA
OFF-HIGHWAY



SAEINDIA TIFAN 2023

(TECHNOLOGY INNOVATION FORUM FOR AGRICULTURAL NURTURING)

Cultivate Innovations

Competition for Students

COME, ASPIRE & TRANSFORM

#TIFAN2023

COME, ASPIRE & TRANSFORM

Theme: 'Automated Multi-Vegetable Transplanter'

SAEINDIA OFF-HIGHWAY BOARD takes immense pleasure to invite all **Engineering / Agricultural Students** across India to participate in the 5th Edition of its flagship Student Competition – **" TIFAN"**

Highlights-

- Open to all Engineering & Agricultural undergraduate students
- Team consist of 15 to 25 students
- Teams to design, develop & demonstrate "Automated Multi-Vegetable Transplanter"
- Prizes worth up to ₹ 5,00,000 to be won
- Opportunities for Product commercialization
- Innovation Opportunities
- Team Registration Deadline is being extended till 15th Dec 2022
- Total amount to be paid - Rs. 8000 + 18%GST
- Qualifying Round – Feb 2022
- Final Round – April 2023 onwards, Rs. 5000 + 18 % GST (Not Applicable in case of digital format of the competition**)

Important Information TIFAN 2023	
Team Registration	Extended up to Dec 15, 2022
Qualifying Round	FEB 2022
Final Round	Apr 2023

COMPANIES ASSOCIATED WITH TIFAN

JOHN DEERE · Mahindra Rise. · BKT GROWING TOGETHER · ALTAIR · Ansys · CYIENT · DT · ARAI Progress through Research · Cummins

Reach us

Website – www.saeindia.org/tifan/
Email: tifansaeindia@gmail.com / tifan@saeindia.org

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Society of Automotive Engineers INDIA

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TIFAN
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SAEINDIA TIFAN 2023

(TECHNOLOGY INNOVATION FORUM FOR AGRICULTURAL NURTURING)

MAY 2023 (Tentative)

*Final dates of the event are subjected to the venue availability.

TIFAN2023`s Finals - Qualified Team List

Team Samskara	Maverick
Team Ambush	Agrosters
Team Mavericks 5.0	Team Mechagrincs
Team Ashwamedha	COAETian Innovators
BHUMIPUTRA	Team Aayudh 2.0
Rage Farmers	RIT-FOLKS ✓
Team Sonic Diggers	ARKLS 3.0
Sowertact	TEAM RPM
Team Orion	Farm Tiger
Team Sanjivan	Team Agrovators

2nd Phase Registration Deadline: MAR 24, 2023
Registration fee: Rs. 5000 + 18%GST

REACH US +91 73977 60949 tifan@saeindia.org www.saeindia.org/tifan/

Consultancy Project Initiation

Ref.: BOIII Meeting/2 Date: 17.02.2023

Minutes of 2nd Board of Industry Institute Interaction Meeting

The 2nd meeting after the formulation of Board of Industry Institute Interaction was held on 11.02.2023 (Saturday) from 10:00AM to 11:40AM at Gowrihouse Metal Works, LLP.

The meeting was convened with following agenda.

1. Review of MoU activities
2. Scope of BOIII
3. Dissemination of BOIII objectives
4. Plan of action
    a. Progressive & Continual Improvement Division (PCID)
    b. Knowledge Transfer Division (KTD)
    c. Technical Consultancy Division (TCD)

Members present:

1) Mr. A. Thulasiram, DGM-Factory Head / GMW
2) Mr. A. R. Jai Saravana, production Manager / GMW
3) Dr. P. Suresh Kumar, Associate Professor / Mechanical - RIT
4) Mr. M. Ramar, Asst. Professor / Mechanical – RIT
5) Mr. M. Nalliraj Madhavan, Production Supervisor / GMW
6) Mr. J. Ganesh Kumar, Quality Incharge / GMW
7) Dr. A. Lakshmi, Associate Professor / ECE - RIT
8) Dr. M. Gomathy Nayagam, Associate Professor / CSE – RIT
9) Mr. J. Jerold John Britto, Asst. Professor(S.G) / Mechanical - RIT
10) Mr. R. Prabhakaran, Asst. Professor / Mechanical - RIT

All the Board members were formally welcomed for the 2nd meeting of Board of Industry Institute Interaction.

Sl. No.	Points Discussed	Target	Responsibility
1.	**Review of MoU activities:** • Dr. P. Suresh Kumar, Associate Professor / Mechanical - RIT, reviewed the MoU activities carried out in collaboration with Gowrihouse Metal Works. He explained that 1018 grade material was difficult to make the nail product due to frequent failure. Process flow analysis has been made through theoretical concept. This problem has been resolved based on theoretical understanding, which has increased production.	Completed	Faculty and student of Mechanical Engineering
2.	**Scope of BOIII:** • Mr. A.R. Jaisaravanan, Production Manager / GMW explained the scope of Board of Industry Institute Interaction (BOIII). • RIT is doing extensive work in the areas like progressive and quality improvement, Knowledge transfer and consultancy works along with GMW. • The BOIII is initially constituted with the three divisions; 1. Progressive & Continual Improvement Division (PCID) 2. Knowledge Transfer Division (KTD) 3. Technical Consultancy Division (TCD)	--	--
3.	**Dissemination of BOIII objectives:** • Mr. A. Thulasiram, DGM-Factory Head / GMW of BOIII appreciated all the members and disseminated the roles and responsibilities of each division. Finally he insist, speedup the students projects and utilize GMW facilities. Progressive & Continual Improvement Division (PCID): • Progressive & Continual improvement on production. • Progressive & Continual improvement on quality.	--	--

	• Periodic assessment of production efficiency. • Implementation of TPM and 5S for the production and quality improvement. Knowledge Transfer Division (KTD): • Arranging lectures for the GMW employees based on their need. • Production and quality improvement through knowledge transfer. • Improving positive attitude and team work through lectures. Technical Consultancy Division (TCD): • Prepare drawings for the screws and tools used in screw manufacturing. • Consultancy projects on automation of work in the possible areas.		
4.	**Plan of action**: All the board members gave the plan of action on their division. Progressive & Continual Improvement Division (PCID): • Improving and monitoring production and quality through the implementation of 5S in main hall.	Continuous	Progressive & Continual Improvement Division Members
	Knowledge Transfer Division (KTD): • Arranging lecture series on Technical & Non-Technical topics.	1 per Month	Knowledge Transfer Division Members
	Technical Consultancy Division (TCD) • Doing consultancy project on automation. • Describe about the works related to layout of the industry using CATIA software.	Project – 1 per Year Drawings – Based on request	Technical Consultancy Division Members
	DGM informed the following activities/works are need to be carried out for this academic year from RIT		
	1.New working area, shop floor layout and part model drawing	Completed	Mechanical Engineering
	2. 5S, SOP and TPM follow up	Continuous	Mechanical Engineering
	3.Technical Input whenever needed for industry	Continuous	Mechanical Engineering
	4. Revisit of Kanban implementation and follow up	Continuous	Mechanical Engineering
	5.Automatic machine for defect detection of screw	May 2023	Mechanical Engineering and CSE

	6.Automatic Screw Sorting Machine	Drawing Completed	ECE
	7. Lecture Series- Technical and Non-Technical	Every month	MoU Coordinator
	8.Creating Industry profile and website design	Completed	CSE
	9. Energy audit and energy conservation	Continuous	EEE
	10. Electrical safety lecture series	Two months once	EEE

Prepared by:
Mr.A.R.Jaisaravanan, Production Manager / GMW

Approved by:
Mr.A.Thulasiram, DGM-Factory Head / GMW

Copy to: 1) All the board members
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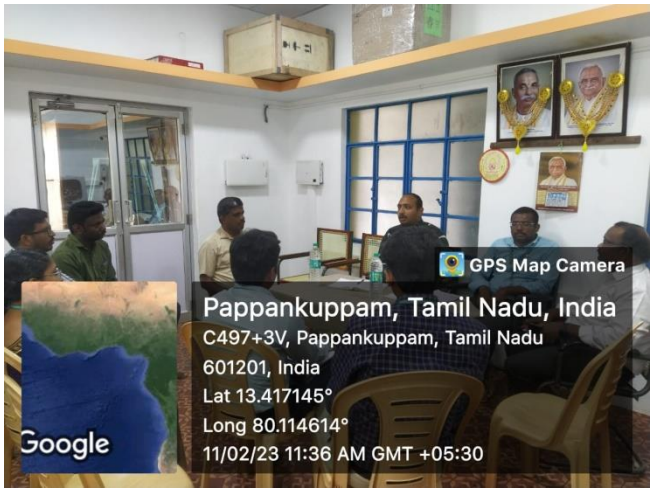
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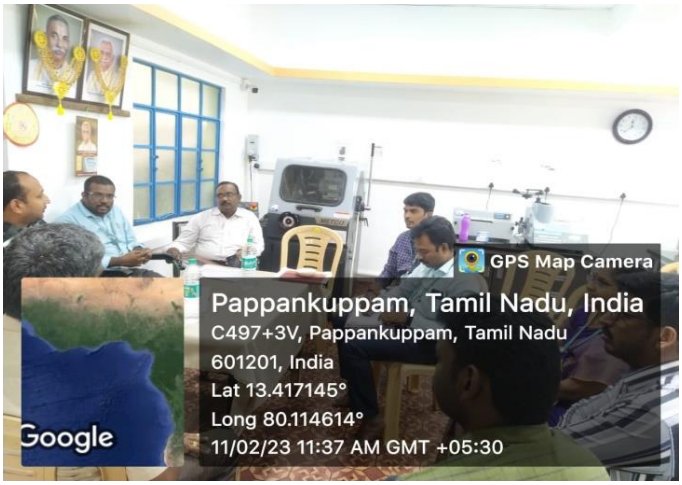
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