

## DVR& Dr. HS

MIC College of Technology

An ISO 9001:2015 Certified Institute
(Approved by AICTE & Permanently Affiliated to JNTUK, Kakinada) Kanchikacherla - 521180, Krishna Dist, A.P, India.



E mail: officemictech@gmail.com, Website: www.mictech.ac.in

## Title of the Projects

DEPARTMENT:E.E.E ACADEMIC YEAR:2022-23

## SEMESTER:IV-II

Batch No	Roll No	Name of the Student	Project Guide	Title of the Project	
	20H75A0253	KoppulaTejasri			
	20H75A0206	GunjaBhanuLakshman		Dynamic Wireless Charging of Electric Vehicle with metering System.	
B1	19H71A0212	PallikantiSadghun	Dr.P.Pradeep		
	20H75A0234	KodigudlaNeeraj	Di.i i radeep		
	19H71A0212	KumpatiKarthik		Fig 000 000 000 000 000 000 000 000 000 000 000 000 000	
	20H75A0216	AlishethyHarika			
	20H75A0256	RavulaUpendra			
	19H71A0201	GudeAkshaya		Enhancing Voltage Stability and	
B2	20H75A0225	LavudiyaMahendra	Dr.B.K.Karunakar Rao	Improving Power Quality in	
	20H75A0233	KalakantiNarasimhaSw amy	Silvintaramakar Rao	Smart Grid with RES Fed Cascaded Multilevel Inverter	
	19H71A0208	Shaik Malik Mohammed			
	20H75A0243	BachuSailaja		Energy Management Strategy of an Electric Vehicle Charging Station Using Photo Voltaic Energy	
	20H75A0248	KommanaboinaSirisha			
	20H75A0230	AppapuramMounika			
В3	19H71A0204	KambhampatiDhayanid hi	Mr.A.V.Ravi Kumar		
	20H75A0231	Shaik Munwar			
	19H71A0216	Bathula Srikanth			
	20H75A0203	VenigallaAkhilesh		Improved direct torque control for IM in EV application	
	20H75A0229	VasamsettiMohith Naga Adithya			
B4	19H71A0202	SudarsanamAnitha			
B4 -	20H75A0221	Bhuvanagiri Jhansi Rani	Mr. M. Sunil Kumar		
	20H75A0241	Ponna Sai Nitheesh			
	20H75A0208	SunkisalaBruce Lee			
	20H75A0215	Sakinala Gopal			
B5	19H71A0206	MadaKranthi Kiran	Mr.M.RamaMohana	Optimal Controller Design for	
	20H75A0258	ChevalaVenkateswara Rao	Rao	BLDC motor Drive with Transit search Optimization Algorithm	



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	19H71A0214	VuyyuruSathwik			
	20H75A0250				
	20H75A0228	SangisettiMohana Sri Lakshmi Renuka			
	20H75A0205	TodetiBhagya Raju	1		
В6	20H75A0238	DondapatiPrasanna Kumar	Mr.N.VenuBabu	Fully automated solar grass cutter	
	20H75A0263	GummaYaswanth			
	19H71A0209 SadineniManasa				
	20H75A0224	Konda Lavanya			
	20H75A0249	Chintha Siva Keerthana			
B7	20H75A0209	DavuluriCharan	M- C D - 1 - 1	Solar Power Generation System	
	20H75A0240	Davu Rama Linga Prasad	Mr.S.Ravikanth	With Power Smoothing Function Using Two Power Stage	
	20H75A0254	PallaTrinadh			
	20H75A0244	KothuriSampath Kumar		An Enhanced Adaptive Filter	
	20H75A0217	GumpenaHarika Devi		Based PQ Improvement In a Three-Phase Four-Wire Inter Linking Converter in Microgrid System	
Do	20H75A0239	Kode Raja Rajeswari			
B8	19H71A0211	Sakamuri Priyanka	Mr.M.Tharun		
	20H75A0264	KolliparaYeswanth Kumar			
	20H75A0255	KandruUday Kiran			
	20H75A0260	UppuluriVennela		A surveillance system to detect bikes without helmet and triple riders	
D.0	20H75A0223	VallepuKoteswara Rao			
В9	20H75A0251	Banavathu Srinivas Naik	Mr.D.Arunkumar		
	20H75A0246	Tikkisetty Satya Vara Prasad			
	20H75A0218	RampillaHarshith		Eye Controlled Wheel Chair For Physically Handicapped Using	
	20H75A0202	MunipalliAkanksha			
B10	20H75A0207	Nadakuditi Bhargava Ram	Mrs. B. Lakshmi Nagamani		
	19H71A0205	VelagapudiDivya Sri	8	RASPBERRY PI	
	20H75A0204	Shaik AllaBakshu			
	20H75A0227	Shaik Manishabegum		Electrical Battery Thermal	
	19H71A0217	Mudavathu Srikanth			
B11	20H75A0210	Chintala Deepak Srinivas	Dr.P.Pradeep	Management System based on calculating state of charge and	
	19H71A0215	VorugantiSatwika		state of Health.	
	20H75A0213	Jaddu Ganesh		Geessel, 100/7-8/8-7411161111	



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	20H75A0259	MogiliVenkateswara Rao			
	20H75A0265	KorraSrinu			
	20H75A0232	Ommi Naga Prameela	1	Design and Development of Parallel Hybrid Propulsion Electric Vehicle Using H-Bridge Multi-Level Inverter Modules to Optimized Fuel Economy	
B12	20H75A0212	Shaik FarukGani	Dr.B.K.Karunakar Rao		
	20H75A0226	CheruvuManikanta			
	19H71A0203	BalneBhuvanesh			
	19H71A0218	RayalaVasavi			
	20H75A0257	AnupojuVenkat			
B13	20H75A0219	Mohammad Imran	Mr.A.V.Ravi Kumar	Modeling of a Dc Microgrid And its Protection From Faults	
DIJ	20H75A0235	VarrePavanKalyanCha kravarthi	Mr.A. v. Ravi Kumar		
	19H71A0207	Gubba Mahesh			
	20H75A0237	MukkidiPeddaiah		Speed Tracking performance of Permanent Magnet Synchronous Motor using Advanced Controllers	
	20H75A0242	Tummala Sai Teja			
B14	19H71A0219	SripalasettiVenkata Kishore	Mr. M. Sunil Kumar		
	20H75A0262	Yathakula William Cary			
	20H75A0252	MedidaSumanth			
	19H71A0210	Gujjarlapudi Nikhil		A. Ess.	
B15	20H75A0236	GugulothuPavan Kumar			
	20H75A0261	Bezawada Vijay Kumar	Mr.M.RamaMohana Rao	Mr.M.RamaMohana  An Effective controller Desi	for BLDC motor Drive with
	19H71A0220	PathanYakhoob		Giant Trevally Optimizer	
)	20H75A0214	VemulaGeetha Veera Naga Prasanna			

## IMPROVED DIRECT TORQUE CONTROL FOR INDUCTION MOTOR USING ARTIFICIAL NEURAL NETWORK

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology In Electrical and Electronics Engineering

by

V.Akhilesh (20H75A0203) B. Jhansi Rani (20H75A0221) V. Mohith Naga Adithya(20H75A0229) P. Sai Nitheesh (20H75A0241) S. Anitha (19H71A0202) S. Bruce Lee (20H75A0208)

Under the Esteemed Guidance of

Mr. M. SUNIL KUMAR, M. Tech.(Ph.D.)
Assistant Professor



Department of Electrical and Electronics Engineering

DVR & Dr. HS

MIC COLLEGE OF TECHNILOGY

(Autonomous)

Kanchikacherla-521180,NTR Dist., Andhra Pradesh

2022-2023



# MIC College of Technology Kamikachieria - 521110, Krishier Diet, A.P. Jahin. Hous 00071. 273537, 300417779. 7302465624



#### CERTIFICATE

This is to certify that the project report entitled "IMPROVED DIRECT TORQUE CONTROL FOR INDUCTION MOTOR USING ARTIFICIAL NEURAL NETWORK" submitted by V.Akhilesh, V.Mohith Naga Adithya, S.Anitha, B.Jhansi Rani, P.Sai Nitheesh, S.Bruce Lee to the DVR & Dr. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in Electrical and Electronics Engineering is a bonafied record of work carried out by bim/her under my/our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

1 Sind Kemal?

Mr. M. Sunil Kumar, M. Tech. (Ph.D.)

Assistant Professor Project Guide (Ph.D.) Dr Addactoral Head

Dr. P. Pradeep, Ph.D. Associate Professor Head of the Department

Dr. T. Vamsee Kiran, M.E, Ph.D. Principal

DVR & Dr. HS MIC College of Technology

Kanchikacherla, N.T.P. Dt. Andhra Pradesh, India - Pin: 521180

Internal Examiner

External Examiner

- 1

## IMPROVED DIRECT TORQUE CONTROL FOR INDUCTION MOTOR USING ARTIFICIAL NEURAL NETWORK

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology In Electrical and Electronics Engineering

by

V.Akhilesh (20H75A0203) B. Jhansi Rani (20H75A0221) V. Mohith Naga Adithya(20H75A0229) P. Sai Nitheesh (20H75A0241) S. Anitha (19H71A0202) S. Bruce Lee (20H75A0208)

Under the Esteemed Guidance of

Mr. M. SUNIL KUMAR, M. Tech.(Ph.D.)
Assistant Professor



Department of Electrical and Electronics Engineering

DVR & Dr. HS

MIC COLLEGE OF TECHNILOGY

(Autonomous)

Kanchikacherla-521180,NTR Dist., Andhra Pradesh

2022-2023



# MIC College of Technology Kamikachieria - 521110, Krishier Diet, A.P. Jahin. Hous 00071. 273537, 300417779. 7302465624



#### CERTIFICATE

This is to certify that the project report entitled "IMPROVED DIRECT TORQUE CONTROL FOR INDUCTION MOTOR USING ARTIFICIAL NEURAL NETWORK" submitted by V.Akhilesh, V.Mohith Naga Adithya, S.Anitha, B.Jhansi Rani, P.Sai Nitheesh, S.Bruce Lee to the DVR & Dr. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree Bachelor of Technology in Electrical and Electronics Engineering is a bonafied record of work carried out by bim/her under my/our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

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Assistant Professor Project Guide (Ph.D.) Dr Addactoral Head

Dr. P. Pradeep, Ph.D. Associate Professor Head of the Department

Dr. T. Vamsee Kiran, M.E, Ph.D. Principal

DVR & Dr. HS MIC College of Technology

Kanchikacherla, N.T.P. Dt. Andhra Pradesh, India - Pin: 521180

Internal Examiner

External Examiner

- 1

### SPEED TRACKING PERFORMANCE OF PERMANENT MAGNET SYNCHRONOUS MOTOR USING ADVANCED CONTROLLERS

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Bachelor of Technology**

In

#### **Electrical and Electronics Engineering**

By

M.Peddaiah	(20H75A0237)
T.Sai Teja	(20H75A0242)
S.Venkata Kishore	(19H71A0219)
Y.William Cary	(20H75A0262)
M.Sumanth	(20H75A0252)

Under the esteemed guidance of Mr. M.Sunil Kumar, M. Tech. (Ph.D) Assistant Professor



Department of Electrical and Electronics Engineering

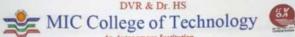
DVR & Dr.HS

## **MIC College of Technology**

(Autonomous)

Kanchikacherla- 521180, NTR Dist., Andhra Pradesh

2022 - 2023



An Autonomous Institution

Approved by AICTE, Permanently Affiliated to INTUK, Kakinada

Kanchikucherle, 521180, Kristina Dr. A.P. India

#### CERTIFICATE

This is to certify that the project report entitled "SPEED TRACKING PERFORMANCE OF PERMANENT MAGNET SYNCHRONOUS MOTOR USING ADVANCED CONTROLLERS" submitted by M. Peddaiah (20H75A0237), T. Sai Teja (20H75A0242), S. Venkata Kishore (19H71A0219), Y. William Cary(20H75A0262), M. Sumanth (20H75A0252), to the DVR & Dr. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Electrical and Electronics Engineering is a bonafede record of work. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

- Control of the Cont

Mr. M. Sunil Kumar, M. Tech. (Ph.D)

Assistant Professor
Project Guide

Dr. P. Pradeep, M. Tech, Ph.D Associate Professor

Head of the Department

Dr. T. Vamsee Kiran, M.E., Ph.D

PRINCIPAL PRINCIPAL

DVR & Dr. HS MIC College of Technology Kanchikacherta, N.T.R. Dt.

Andhra Pradesh, India - Pin: 521180

La Vaminer



### Design And Development of Parallel Hybrid Propulsion Electric Vehicle Using Cascaded H-bridge Multilevel Inverter

A Project Report Submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology
In
Electrical & Electronics Engineering

by 20H75A0265 - K. Srinu 20H75A0202 - O. Naga Prameela 20H75A0212 - SK. Faruk Gani 20H75A0226 - CH. Manikanta 19H71A0203 - B. Bhuvanesh

Under the Esteemed Guidance of

Dr. B. K. Karunakar Rao, M. Tech, Ph. D Associate Professor



Department of Electrical & Electronics Engineering
DVR & Dr. HS
MIC COLLEGE OF TECHNOLOGY

(Autonomous)

Kanchikacherla- 521180, NTR Dist., Andhra Pradesh 2022-2023



# MIC College of Technology BO S00 Dell Consider Institute CApparent by ACCE & Presented Institute CApparent by ACCE & Presented Institute CAPPARENT COLUMN CO



#### CERTIFICATE

This is to certify that the project report entitled "DESIGN AND DEVLOPMENT OF PARLLEL HYBRID PROPULSION ELECTRIC VEHICLE USING CASCADE H BRIDGE MULTI LEVEL INVERTER" Submitted by K. Srinu (20H75A0265), O. Naga Prameela (20H75A0232), SK. Faruk Gani (20H75A0212), CH.Manikanta (20H75A0226), B.Bhuvanesh (19H71A0203), to the DVR & Dr. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Electrical & Electronics Engineering is a bonafide record of work. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

selane.

Dr. B. K. Karunakar Rao, Ph.D. Associate Professor Project Guide

COLLEGE Concentraction of Conc Dr. P. Pradeep, Ph.D.
Associate Professor
Head of the Department EEE

Dr. T. Vamsee Kiran, M.E,Ph.D.

Principal
PRINCIPAL
DVR & Dr. HS MIC College of Technology
Kanchikacherla, N.T.R. Dt.
Andhra Pradesh, India – Pin: 521180

Internal Examine

## A SURVEILLANCE SYSTEM TO DETECT BIKES WITHOUT HELMET AND TRIPLE RIDERS

A Project Report

submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology

in

**Electrical & Electronics Engineering** 

by

K. Uday Kiran (20H75A0255)

U. Vennela (20H75A0260)

V. Koteswara Rao (20H75A0223)

B. Srinivas Naik (20H75A0251)

T. Satya Vara Prasad (20H75A0246)

Under the Esteemed Guidance of Mr. D. Arun Kumar, M.Tech Assistant Professor



Department of Electrical & Electronics Engineering
DVR & Dr. HS MIC College of Technology
(Autonomous)

Kanchikacherla, Andhra Pradesh - 521180 2022 - 2023



# MIC College of Technology Approved by AICT & Processing Afficiate or PCUK, Katsuster



### CERTIFICATE

This is to certify that the project report entitled "A SURVEILLANCE SYSTEM TO DETECT BIKES WITHOUT HELMET AND TRIPLE RIDERS" being submitted for the partial fulfilment of the requirements for the award of the degree in Bachelor of Technology in Electrical & Electronics Engineering from Jawaharlal Nehru Technological University, Kakinada, is a bonafide work done by K.Uday kiran (20H75A0255), U.Vennela (20H75A0260), V.Koteswara Rao (20H75A0223), B.Srinivas Naik (20H75A0251), T.Satya Vara Prasad (20H75A0246) under guidance during the academic year 2022-23 and it has been found suitable for acceptance according to the requirement of the university. This work is not submitted to any other institution or university for the award of any degree.

Mr. D. Arun Kumar, M. Tech Assistant Professor Project Guide COLLEGE Canchileacherts Ph. 527150 Ph. 527150 Ph. 273555

Dr. P. Pradeep, Ph.D.
Associate Professor
Head of the Department EEE

Dr. T. Vamsee kiran, M.E., Ph. D,

Principal PRINCIPAL

DVR & Dr. HS MIC College of Technology

Kanchikacheria, N.T.R. Dt.

Andhra Pradesh, India – Pin: 521189 xternal Examiner

Internal Examiner

### ELETRICAL BATTERY THERMAL MANAGEMENT SYSTEM BASED ON CALCULATING STATE OF CHARGE AND STATE OF HEALTH

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

### **Bachelor of Technology**

In

### **Electrical and Electronics Engineering**

By

Sk. Manisha Begum	(20H75A0227)
M. Srikanth	(19H71A0217)
Ch. Deepak Srinivas	(20H75A0210)
V. Satwika	(19H71A0215)
J. Ganesh	(20H75A0213)
M. Venkateswara Rao	(20H75A0259)

Under the esteemed guidance of Dr. P. Pradeep, M .Tech, Ph.D Associate Professor



Department of Electrical and Electronics Engineering

DVR & Dr.HS

## **MIC College of Technology**

(Autonomous)

Kanchikacherla- 521180, NTR Dist., Andhra Pradesh

2022 - 2023

# MIC College of Technology

(E)

An Autonomous Institution Approved by AICTE, Permanently Affiliated to INTUK, Kakinada Kanchikacherla-521180, Krishna Dt. A.P. India

#### CERTIFICATE

This is to certify that the project report entitled "ELETRICAL BATTERY MANAGEMENT SYSTEM BASED ON CALCULATING STATE OF CHARGE AND STATE OF HEALTH" submitted by Sk. Manisha Begum(20H75A0227), M. Srikanth(19H71A0217), Ch. Deepak Srinivas (20H75A0210), V. Satwika(19H71A0215), J. Ganesh (20H75A0213), M. Venkateswara Rao (20H75A0259) to the DVR & Dr. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Electrical and Electronics Engineering is a bonafide record of work. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

Dr. P. Pradeep, M. Tech, Ph.D Associate Professor Project Guide COLUMN TO THE PROPERTY OF THE

Dr. P. Pradeep, M. Tech Ph.D Associate Professor Head of the Department

As

Dr. T. Vamsee Kiran, M.E., Ph.D Principal PRINCIPAL

DVR & Dr. HS MIC College of Technology Kanchikacherla, N.T.R. Dt. Andhra Pradesh, India – Pin: 521180

Internal Examiner

## MODELLING OF A DC MICROGRID AND ITS PROTECTION FROM FAULTS

A Project Report

submitted in partial fulfillment of

The Requirements for the award of the Degree of

#### BACHELOR OF TECHNOLOGY

In

**Electrical & Electronics Engineering** 

By

R.Vasavi	(19H71A0218)
A.Venkat	(20H75A0257)
Md.Imran	(20H75A0219)
V.P.K. Chakravarthi	(20H75A0235)
G.Mahesh	(19H71A0207)

Under the Esteemed Guidance of Mr. A.V.RAVI KUMAR M.Tech,(Ph.D) ASSISTANT PROFESSOR



Department of Electrical & Electronics Engineering

## DVR & Dr.HS MIC College of Technology

(Autonomous)

Kanchikacherla- 521180, NTR Dist., Andhra Pradesh

2022-2023



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#### CERTIFICATE

This is to certify that the project report entitled "MODELLING OF A DC MICROGRID AND ITS PROTECTION FROM FAULTS" submitted by R.Vasavi (19H71A0218), A. Venkat(20H75A0257), Md.Imran(20H75A0219), V. P. K. Chakravarthi(20H75A0235), G. Mahesh(19H71A0207) to the DVR & Dr. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree Bachelorof Technology in Electrical and Electronics Engineering is a bonafide record of work carried out by her under our guidance and supervision. The contents of this report, in full or in parts, have not been submitted to any other institute for the award of any Degree.

COUSTS

Mr. A.V.Ravi Kumar, M.Tech,(Ph.D)

Assistant professor Project Guide COLLEGE PH : 521100 PP. 277553

Dr. P. Pradeep, Ph.D Associate Professor Head of the Department, E.E.E.

Dr. T. Vamsee Kiran, Ph.D Principal

PRINCIPAL
DVR & Dr. HS MIC College of Technology
Kanchikacherla, N.T.R. Dt.
Andhra Pradesh, India – Pin; 521180

nternal Examiner

# DYNAMIC WIRELESS CHARGING OF ELECTRIC VECHILE WITH METERING SYSTEM

A Project Report

submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology

in

**Electrical & Electronics Engineering** 

by

K. Tejasri	(20H75A0253)
G. Bhanu Lakshman	(20H75A0206)
P. Sadghun	(19H71A0212)
K. Neeraj	(20H75A0234)
K. Karthik	(20H75A0222)

Under the Esteemed Guidance of

Dr. P. Pradeep, Ph.D.

Associate Professor



Department of Electrical & Electronics Engineering

DVR & Dr. HS

## MIC College of Technology

(Autonomous) Kanchikacherla- 521180, NTR Dist., Andhra Pradesh May, 2023



### CERTIFICATE

This is to certify that the project report entitled "DYNAMIC WIRELESS CHARGING OF ELECTRIC VECHILE WITH METERING SYSTEM" being submitted for the partial fulfilment of the requirements for the award of the degree Bachelor of Technological University, Kakinada, is a bonafide work done by K.Tejasri(20H75A0253), G.Bhanu Lakshman(20H75A0206), P.Sadghun(19H71A0212), K.Neeraj(20H75A0234), K. Karthik(20H75A0222) under my guidance during the academic year 2022-23 and it has been found suitable for acceptance according to the requirement of the university. This work is not submitted to any other institution or university for the award of any degree.

Dr. P. Pradeep, Ph.D. Associate Professor Project Guide (2012) (2

Dr. P. Pradeep, Ph.D. Associate Professor Head of the Department EEE

Dr.T.Vamsee Kiran, M.E.,Ph. D, Principal PRINCIPAL

DVR & Dr. HS MIC College of Technology Kanchikacherla, N.T.R. Dt.

Anchira Pradesh, India - Pin: 52118 Xternal Examiner

## SOLAR POWER GENERATION SYSTEM WITH POWER SMOOTHING FUNCTION USING TWO POWER STAGES

A project Submitted in Partial Fulfilment of the Requirements for the award of Degree of

### Bachelor of Technology in Electrical and Electronics Engineering

| By | C20H75A0224| | Ch. Siva Keerthana | (20H75A0249) | D. Charan | (20H75A0209) | D. Ramalinga Prasad | (20H75A0240) | P. Trinadh | (20H75A0254) |

Under the esteemed guidance of

Mr. S. RAVIKANTH, M. Tech Assistant Professor Department of EEE



Department of Electrical & Electronics Engineering DVR & Dr. HS MIC College of Technology

(Autonomous)

Kanchikacherla, Andhra Pradesh - 521180
2022 - 2023



#### CERTIFICATE

This is to certify that the project report entitled "SOLAR POWER GENERATION SYSTEM WITH POWER SMOOTHING FUNCTION USING TWO POWER STAGES" being submitted for the partial fulfilment of the requirements for the award of the degree in bachelor of technology in Electrical and Electronics Engineering from Jawaharlal Nchru Technological University, Kakinada, is a bonafide work done by K. LAVANYA (20H76A0224), CH. SIVA KEERTHANA (20H75A0249), D. CHARAN (20H75A0209), D. RAMALINGA PRASAD (20H75A0249), P. TRINADII (20H75A0254) under my guidance during academic year 2022-2023 and it has been found suitable for acceptance according to the requirement of the university. This work is not submitted to any institution or university for the award of any degree.

INDUSTRY

Mr. S. Ravikanth, M.Tech.
Assistant Professor



Dr. P. Pradeep, Ph.D.
Associate Professor
Head of the Department EEE

Dr. T. Vamsee Kiran, M.E, Ph.D Principal

A DVF

Internal Examiner

Project Guide

DVR & Dr. HS MIC College of Technology Kanchikacherla, N.T.R. Dt. Andhra Pradesh, India – Pin: 521180

### ENHANCING VOLTAGE SABILITY AND IMPROVING POWER QUALITY IN SMART GRID WITH RES FED CASCADED MULTILEVEL INVERTER

A Project Report

Submitted in partial fulfilment of the requirements for the award of the degree of

Bachelor of Technology

In

Electrical & Electronics Engineering

By

20H75A0216 Alishethy Harika

20H75A0256 Ravula Upendra

19H71A0201 Gude Akshaya

20H75A0225 Lavudiya Mahendra

20H75A0233 Kalakanti Narasimha Swamy

19H71A0208 Shaik Malik Mohammad

Under the Esteemed Guidance of Dr.B.K.Karunakar Rao M.Tech, Ph.D. Associate Professor



Department of Electrical & Electronics Engineering
DVR & Dr. HS MIC College of Technology
(Autonomous)

Kanchikacherla, Andhra Pradesh - 521180 (2022 - 2023)



# DVR & Dr. 115 MIC College of Technology BO 1007 D117 Contine Institute (Aggreed by AUCT & Personally Affiliated to 2017/K, Kalanda)



#### CERTIFICATE

This is to certify that the project report entitled "ENHANCING VOLTAGE STABILITY AND IMPROVING POWER QUALITY IN SMART GRID WITH RES FED CASCADED MULTILEVEL INVERTER "being submitted for the partial fulfilment of the requirements for the award of the degree in Bachelor of Technology in Electrical & Electrical Engineering from Jawaharlal Nehru Technological University, Kakinada, is a bonafide work done by A.Harika(20H75A0216), R. Upendra (20H75A0256), G. Akshaya (19H71A0201), L. Mahendra (20H75A0225), k. Narasimha swamy (20H75A0233), SK. Mailk Mohammad (19H71A0201) under the guidance during the academic year 2022-23 and it has been found suitable for acceptance according to the requirement of the university. This work is not submitted to any other institution or university for the award of any degree.

Dr.B.K.Karunakar Rao, Ph.D Associate Professor Project Guide

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Dr. P. Pradeep, Ph.D. Associate Professor Head of the Department EEE

Dr.T.Vamsee Kiran,M.E.,Ph.D. Principal

PRINCIPAL

DVR & Dr. HS MIC College of Technology
Kanchikacherta, N.T.R. Dt.

Andhra Pradesh, India – Pin; 521180

Internal Examiner

# AN EFFECTIVE CONTROLLER DESIGN FOR BLDC MOTOR DRIVE WITH GIANT TREVALLY OPTIMIZER

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor Of Technology in Electrical And Electronics Engineering By

GUJJARLAPUDI NIKHIL	(19H71A0210)
GUGULOTHU PAVAN KUMAR	(20H75A0236)
BEZAWADA VIJAY KUMAR	(20H75A0261)
PATHAN YAKHOOB	(19H71A0220)
VEMULA GEETHA VEERA NAGA PRASANNA	(20H75A0214)

#### Department of Electrical & Electronics Engineering

Under the esteemed guidance of

Mr. M.RAMA MOHANA RAO, M.Tech

Assistant Professor Department of EEE



Department of Electrical & Electronics Engineering
DVR & Dr. HS
MIC College of Technology
(Autonomous)
Kanchikacherla – 521180, NTR Dist, Andhra Pradesh
April, 2023





An Autonomous Institution

Approved by AICTE, Permanently Affiliated to: JNTUK, Kakinada

Kanchikacherla - 521180, Krishna Dist, A.P. India.

#### CERTIFICATE

This is to certify that the project report entitled "An Effective Controller Design for BLDC Motor Drive with Giant Trevally Optimizer" being submitted for the partial fulfilment of the requirements for the award of the degree in Bachelor of Technology in Electrical and Electronics Engineering from Jawahartal Nehru Technological University, Kakinada, is a bonafide work done by Nikhil-G, Pavan Kumar-G, Vijay Kumar-B, Yakhoob P, and Geetha Veera Naga Prasanna V under my guidance during the academic year 2022-23 and it has been found suitable for acceptance according to the requirement of the university. This work is not submitted to any other institution or university for the award of any degree.

Cousis

Mr. M.Rama Mohana Rao, M.Tech.
Assistant Professor
Project Guide

Dr.P.Pradeep.Ph.D Professor Head of the Department



Dr.T.Vamsee Kiran, Ph.D. Principal

PRINCIPAL

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Kanchikacheria, N.T.R. Dt.

Andhra Pradesh, India – Pin: 521180

nternal Examiner

Extract Examiner

### FULLY AUTOMATED SOLAR GRASS CUTTER

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Bachelor of Technology**

In

#### Electrical and Electronics Engineering

By

S.Mohana		(20H75A0228)
T.Bhagya Ra	ju	(20H75A0205)
D.Prasanna	Kumar	(20H75A0238)
G.Yaswanth		(20H75A0263)
S.Manasa		(19H71A0209)

Under the esteemed guidance of Mr.N.Venu Babu, M.Tech Assistant Professor



Department of Electrical and Electronics Engineering

DVR & Dr.HS

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2022 - 2023

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Kanchikatherta (2118). Kroitna Dt. A.P. Jadia

#### CERTIFICATE

This is to certify that the project report entitled "FULLY AUTOMATED SOLAR GRASS CUTTER" submitted by S.Mohana(20H75A0228), T.Bhagya Raju(20H75A0205),D.Prasanna Kumar (20H75A0238), G.Yaswanth(20H75A0263),S.Manasa (19H71A0209), to the DVR & Dr. HS MIC College of Technology in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Electrical and Electronics Engineering is a bonafide record of work. The contents of this report, in full or in parts, have not been submitted to any other Institute for the award of any Degree.

Mr. N. Venu Babu, M. Tech Assistant Professor Project Guide DULFAC Po SPHIN PL2713515

Dr. P. Pradeep, M. Fech, Ph.I Associate Professor Head of the Department

Dr. T. Vamsee Kiran, M.E.,Ph.D Principal

PRINCIPAL
DVR & Dr. HS MIC College of Technology
Kanchikacherla, N.T.R. Dt.
Andhra Pradesh, India – Pin: 521180

nternal Examiner

# AN ENHANCED ADAPTIVE FILTER BASED POWER QUALITY IMPROVEMENT WITH THREE PHASE FOUR WIRE INTERLINKING CONVERTER IN MICROGRID SYSTEMS

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Bachelor of Technology**

in
Electrical & Electronics Engineering

by

K. Sampath Kumar	(20H75A0244)
G. Harika Devi	(20H75A0217)
K. Raja Rajeswari	(20H75A0239)
S. Priyanka	(19H71A0211)
K. Veswanth Kumar	(20H75A0264)

Under the Esteemed Guidance of Mr. M. Tharun, M. Tech Assistant professor



Department of Electrical & Electronics Engineering

DVR & Dr. HS

## MIC College of Technology

(Autonomous) Kanchikacherla – 521180, NTR Dist, Andhra Pradesh

April, 2023



#### CERTIFICATE

This is to certify that the project report entitled "AN ENHANCED ADAPTIVE FILTER BASED POWER QUALITY IMPROVEMENT WITH THREE-PHASE FOUR-WIRE INTERLINKING CONVERTER IN MICROGRID SYSTEMS" being submitted for the partial fulfilment of the requirements for the award of the degree in Backelor of Technology in Electrical & Electronics Engineering from Jawaharlal Nebru Technological University, Kakinada, is a bonafide work done by K. Sampath Kumar (20H75A0244), G. Harika Devi (20H75A0217), K. Raja Rajeswari (20H75A0239), S. Priyanka (19H7JA0211), K. Yeswanth Kumar (20H75A0264) under my guidance during the academic year 2022-23 and it has been found suitable for acceptance according to the requirement of the university. This work is not submitted to any other institution or university for the award of any degree.

Mr. M. Tharun, M.Tech. Assistant Professor Project Guide Dr. P Pradeep, Ph.D.
Associate Professor
Head of the Department EEE

Dr. T. Vamsee Kiran,

PAINCEPAL

OVR & Dr. HS MIC College of Technology

Kanchikacheria, N.T.R. Dt.

Internal Examiner

Ancers Pracesh, India - Pin; 521180 External Examiner





An Autonomous Institution
Approved by AICTE, Permanently Affiliated te: JNTUK, Kakinada
Kanchikacheria - 521180, Krishna Dist, A.P. India.

#### CERTIFICATE

This is to certify that the project report entitled "Optimal Controller Design For BLDC Motor Drive With Transit Search Optimization Algorithm" being submitted for the partial fulfilment of the requirements for the award of the degree in Bachelor of Technology in Electrical and Electronics Engineering from Jawaharlal Nehru Technological University, Kakinada, Is a bonafide work done by Gopal S, Kranthi Kiran M, Venkateswara Rao Ch, Sathwik V and Sri Hari T under my guidance during the academic year 2022-23 and it has been found suitable for acceptance according to the requirement of the university. This work is not submitted to any other institution or university for the award of any degree.

Mr. M.Rama Mohana Rao, M.Tech. Assistant Professor Project Guide Dr.P.Pradeep, Ph.D Professor Head of the Department



Dr. T.Vamsee kiran Principal

PRINCIPAL
DVR & Dr. HS MIC College of Technology
Kanchikacherla, N.T.R. Dt.
Andhra Pradesh, India – Pin: 521180

Internal Examine

External Examiner

### OPTIMAL CONTROLLER DESIGN FOR BLDC MOTOR DRIVE WITH TRANSIT SEARCH OPTIMIZATION ALGORITHM

A Project Report submitted in partial fulfillment of the requirements for the award of the degree of

#### Bachelor of Technology

in

**Electrical & Electronics Engineering** 

by

S. Gopal	(20H75A0215)
M. Kranthi Kiran	(19H71A0206)
Ch. Venkateswara Rao	(20H75A0258)
V. Sathwik	(19H71A0214)
T. Sri Hari	(20H75A0250)

Under the Esteemed Guidance of Mr. M. Rama Mohana Rao, M. Tech Assistant professor



Department of Electrical & Electronics Engineering

DVR & Dr. HS

## MIC College of Technology

(Autonomous) Kanchikacherla – 521180, NTR Dist, Andhra Pradesh

April, 2023

### EYE CONTROLLED WHEEL CHAIR FOR PHYSICALLY HANDICAPPED USING RASPBERRY PI

A Project Report

submitted in partial fulfilment of the requirements for the award of the degree of

Bachelor Of Technology

in

Electrical & Electronics Engineering

R. Harshith (20H75A0218)

M. Akanksha (20H75A0202)

N. Bhargava Ram (20H75A0207)

V. DIVYA SRI (19H71A0205)

SK. Alla Bakshu (20H75A0204)

Under the esteemed guidance of Mrs B. Lakshmi Nagamani Assistant Professor



Department of Electrical & Electronics Engineering
DVR & Dr. HS MIC College of Technology

(Autonomous)

Kanchikacherla, Andhra Pradesh - 521180

2022 - 2023



Kanchikacheria 531180, Kontos Dt. A.F. Indo

#### CERTIFICATE

This is to certify that the mini project report entitled "EYE CONTROLLED WHEEL CHAIR FOR PHYSICALLY HANDICAPPED USING RASPBERRY PI" being submitted by R.HARSHITH, M.AKANKSHA, N.BHARGAV RAM, V.DIVYASRI, SH.ALLA BAKSHU to DVR & Dr. HS MIC College of Technology (Autonomous), in partial fulfilment of the requirements for the awardof the degree in Bachelor of Technology in Electrical and Electronics Engineering is a bonafied work done by under my guidance and Supervision during the academic year 2022-23 and it has been found suitable for acceptance according to the requirement of the university. This work is notsubmitted to any other institution or university for the award of any degree.

B. Lok 9. Mrs B. Lakshmi Nagamani

Assistant Professor

Project Guide

Cancilization of the String Pr. 273535.

Dr. P. Pradeep Ph.D.

Associate Professor

Head of the Department

Dr. T. Vamsee Kiran, Ph.D.

Principal

PRINCIPAL

DVR & Dr. HS MIC College of Technology

Kanchikacheria, N.T.R. Dt.

Andhra Pradesh, India - Pig: 521180

INTERNAL EXAMINER

EXTERNAL EXAMINER