



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:22-06-2021

Department	ELECTRICAL AND ELECTRONICS ENGINEERING	Application No.	202110078
Area of Research	POWER ELECTRONICS	Research Mode	PART TIME

Name :AMJITH S
Date of Birth / Age :20-11-1991 / 29 Years
Gender :MALE
Category :OBC
e-Mail ID :amjiths1991@gmail.com
Mobile :8547441808



Father's/Husband's Name	B SAHAJAN	Father's/Husband's Occupation	BUSSINESS
Family Income	300000	Residential Type	RURAL
Birth Place	KRISHNAPURAM	Mother Tongue	MALAYALAM
Religion	HINDU	Martial Status	SINGLE
Aadhaar No.	913349556065	PAN No.	GZXPS2103A
Physically Challenged	NO	Type of Disability	-
Address for Communication: 315 PULLIKKANAKKU KAYAMKULAM APALPUZHA DISTRICT KERALA INDIA Pin-690537		Permenant Address: 315 PULLIKKANAKKU KAYAMKULAM APALPUZHA DISTRICT KERALA INDIA Pin-690537	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
B TECH	STUDENT	KERALA UNIVERSITY	2015	6.21	2ND	REGULAR
M TECH	STUDENT	KTU	2018	7.2	1ST	REGULAR

Experience				
Organization	Designation	Experience From	Experience TO	Work Nature
MAHAGURU INSTITUTE OF TECHNOLOGY	ASSISTANT PROFESSOR	2018-06-01	1970-01-01	TEACHING

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status
202110078_210630175757	VHD40078913737	30-06-2021	600	SUCCESS

Proposed Area and Topic of Research

Name of the Candidate : AMJITH S

Field of Research : POWER ELECTRONICS

Proposed title of the work:

Modelling of system components for Vehicle-to-Grid (V2G) and Vehicle-to-Home (V2H)

Research problem:

The problematic of the Plug-in Electric Vehicles charging costs in housing sector. A review of the optimal strategies is proposed and as such six algorithms are presented: three smart unidirectional and three smart bidirectional charging algorithms where the Vehicle-to-Grid and the Vehicle-to-Home concepts were exploited. In addition an innovative V2G algorithm named Optimal Logical Control (V2G-OLC) is introduced in this project..

Scientific background:

Developed countries promote the Plug-in Electric Vehicles (PEVs) which are rising. Today, many car manufacturers are embedded in PEVs. It is expected a consequent rise of vehicles with bidirectional on-board chargers in the market. This will make possible V2G and V2H concepts.

Novelty:

Early works in stroke area concentrates on the stroke detection and classification only. But this method helps the doctors to detect, segment, classify and to point out the exact position of the hemorrhagic stroke which again helps the doctors for the improved treatment of the disease. This method would help the radiologist and the doctors to analyse CT data without misdetection and misinterpretation by considering the HU value. Research on the PEV/Grid topic is now focused on Vehicle-to-Grid (V2G) and Vehicle-to-Home (V2H) concepts with various aims based mainly on economic aspect. PEVs are used to support the grid frequency thanks to V2G. In this same theme aspect, PEVs are also used to mitigate potential overloads in the distribution system and to minimize charging costs during the same operation.. Grid components are still at the heart of the research activities. As such, a centralized model to co-optimize the transformer loss-of-life with the benefits for PEVs' owners on charging/discharging management was proposed. Peak shaving with PEVs is also implemented, proves the possible profits in decrease of home peak load with customer costs together and presented a two-stage mechanism for peak shaving coupled with renewable energies.

Objectives:

The main objective is to modelling of system components for Vehicle-to-Grid (V2G) and Vehicle-to-Home (V2H)

Methodology:

The flow chart of proposed method is shown in Figure: 1. The proposed method is divided into four steps; namely, preprocessing, segmentation, feature extraction and classification.

Research time plan(Chart):

Figure: 1 flow chart of proposed method

Stages of Research	0-6 months	6-12 months	12-18 months	18-24 months	24-30 months	30-36 months
Selection of topic	█					
Literature Review	█	█				
Research methodology plan		█	█			
Selection of appropriate research techniques			█	█		
Analysis				█	█	
Findings and recommendations					█	
Data Compilation, Publications and Final Report					█	█

Possible outcome:

The majority of the possible strategies in the context of the charge of one vehicle associated to one house. The common aim of all the optimal algorithms is to reduce the charging cost of the vehicle.

References:

M. Yilmaz and P. T. Krein, "Review of Battery Charger Topologies, Charging Power Levels, and Infrastructure for Plug-in Electric and Hybrid Vehicles," in *IEEE Transactions on Power Electronics*, vol. 28, no. 5, pp. 2151-2169, May 2013.

B. K. Lee, J. P. Kim, S. G. Kim, and J. Y. Lee, "An Isolated/Bidirectional PWM Resonant Converter for V2G(H) EV On-Board Charger," in *IEEE Transactions on Vehicular Technology*, vol. 66, no. 9, pp. 7741-7750, Sept. 2017.

L. Pieltain Fernandez, T. Gomez San Roman, R. Cossent, C. Mateo Domingo and P. Frias, "Assessment of the Impact of Plug-in Electric Vehicles on Distribution Networks," in *IEEE Transactions on Power Systems*, vol. 26, no. 1, pp. 206-213, Feb. 2011.

H. Turker, S. Bacha, D. Chatroux and A. Hably, "Low-Voltage Transformer Loss-of-Life Assessments for a High Penetration of Plug-In

Hybrid Electric Vehicles (PHEVs)," in *IEEE Transactions on Power Delivery*, vol. 27, no. 3, pp. 1323-1331, July 2012.



APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
(A State Government University)



*The University on the recommendation of
the Board of Governors hereby confers*



on

AMJITH S

the Degree of

Master of Technology

in

Electrical and Electronics Engineering

with specialisation in

Electrical Machines

having fulfilled the requirements at the examination held in

April 2018

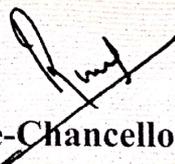
Given under the seal of the University, this day, the 24th of November 2018

Register Number: SBC16EEEM01

Cumulative Grade Point Average (CGPA): 7.22

Name of Institution: SREE BUDDHA COLLEGE OF ENGINEERING, PATTOOR




Vice-Chancellor



FACULTY OF ENGINEERING AND TECHNOLOGY

*The Senate of the University of Kerala hereby makes known that **Amjith S.** has been admitted to the Degree of Bachelor of Technology under **Electrical and Electronics Engineering** Branch, he having been certified by duly appointed examiners to be qualified to receive the same and having been by them placed in the **Second Class** at the examination held in **April 2015** .*



Given under the seal of the University



University Buildings

Thiruvananthapuram April 08, 2016

Vice Chancellor

0415805



APJ Abdul Kalam Technological University

Semester Grade Card

Name of Candidate	AMJITH S	Register No	SBC16EEEM01
Name of College	SREE BUDDHA COLLEGE OF ENGINEERING, PATTOOR	Branch	ELECTRICAL AND ELECTRONICS ENGINEERING(ELECTRICAL MACHINES)
Semester	S4	Program	M.Tech

Course Name	Code	Grade	Credits	Month & Year of Examination
PROJECT PHASE II	03EE7914	B	18.0	April-2018
Total Earned Credits			18	
SGPA			7.0	
CGPA			7.22	



Controller of Examinations*



UNIVERSITY OF KERALA

Serial No : 15 12 9182
Ref. No. EG : 15 33 8912 V



Thiruvananthapuram
Date : 23-09-2015

Revised Marklist
issued on 5/3/2016..

Name of Programme : B.Tech. Electrical & Electronics Engineering
Semester : 1 & 2
Month & Year of Exam : Apr 2015
Name of Student : AMJITH S

Exam Code : 411 08107
Candidate Code : 10 425 005

Statement of Grades

Subject Code	Subjects	Credits	Letter Grade
08101	Engineering Mathematics	6	E
08102	Engineering Physics	6	E
08105	Engineering Mechanics	6	D
	Semester - 1&2		6.4
	Semester - 3		6
	Semester - 4		6.33
	Semester - 5		6.24
	Semester - 6		6.03
	Semester - 7		6.07
	Semester - 8		6.19
Result : Passed			CGPA : 6.21 (Six . Two One)

Prepared by

Checked by

Section Officer

Controller of Examinations

* Pass requirements & papers to be cleared if any shown overleaf



SREE BUDDHA COLLEGE OF ENGINEERING

Pattoor P.O., Alappuzha Dist., Kerala Pin-690 529

Accredited by NAAC & Included Under Section 2(f) of the UGC Act 1956

Affiliated to the University of Kerala: Approved by the AICTE

Tel: (0)0479-2375440, 42, 43 Fax: 0479-2375441

Email: sreebuddhacollege@hotmail.com, principal@sbce.ac.in Web: www.sbce.ac.in

TRANSFER CERTIFICATE

T.C.No:7068

Date:04-08-2018

1. Name of student : AMJITH S
2. Admission No. : 2016PG5673
3. Date of Birth (in figures and words) : 20-11-1991 (Twenty Nov Nineteen Ninety One)
4. Nationality : Indian
5. Gender : Male
6. Name of the Parent/Guardian : B Sahajan
7. Relationship with the student : Father
8. Caste and Religion : Hindu, Ezhava
9. Whether the student was in receipt of fee concession : No
10. Date of Admission : 22-07 -2016
11. Academic status of student : Good
12. Class to which admitted & branch of Study : First Semester MTech EEE
13. Class from which relieved : Fourth Semester MTech EEE
14. Date of Leaving : 20-06-2018
15. Reason for Leaving : Course Completed
16. Name of the University Examination for which the candidate was last presented from the college : 4th Semester MTech Degree.April 2018

Principal



MAHAGURU INSTITUTE OF TECHNOLOGY

Approved by AICTE and Affiliated to APJ Abdul Kalam Technological University
Accredited by NAAC with B+ Grade

MIT/OF/21/1258

22-JUN-2021

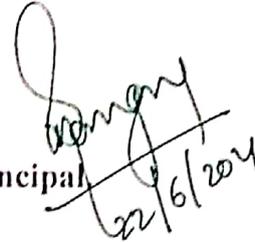
TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. AMJITH S, PRATHEEKSHA, PULLIKANAKKU P.O., KAYAMKULAM is working in this institution as ASST. PROFESSOR in the Department of ELECTRICAL & ELECTRONICS ENGINEERING since 01-06-2018.

This Certificate has been issued on his request for forward submission to apply for PhD under Kalasalingam Academy of Research and Education .

Sincerely,

Principal


22/6/2021



Managed by: Sree Gurudeva Charitable and Educational Trust | Reg. No: APL/TC/369/2015

Kattachira, Pallickal P.O., Kayamkulam, Alappuzha Dist, Kerala - 690503, India

Ph: 0479 - 2331696, 2331391, 2331392, 2334393, Fax: 0479 - 2331304

Email: office@mahagurutech.ac.in, <http://www.mahagurutech.ac.in>

आयकर विभाग

INCOME TAX DEPARTMENT

AMJITH S

SAHAJAN

20/11/1991

Permanent Account Number

GZXPSS2103A

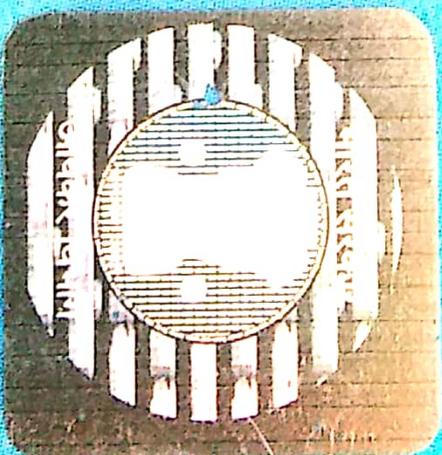
Amjith S

Signature



भारत सरकार

GOVT. OF INDIA



In case this card is lost / found, kindly inform / return to :

Income Tax PAN Services Unit, UTIITSL

Plot No. 3, Sector 11, CBD Belapur,

Navi Mumbai - 400 614.

इस कार्ड के खोने/पाने पर कृपया सूचित करें/लौटाएं :

आयकर पैन सेवा यूनिट, UTIITSL

प्लॉट नं: ३, सेक्टर ११, सी.बी.डी.बेलापुर,

नवी मुंबई-४०० ६१४.



ഇൻഡ്യ തെരഞ്ഞെടുപ്പ് കമ്മീഷൻ

ELECTION COMMISSION OF INDIA

സമ്മതിദായക ഫോട്ടോ തിരിച്ചറിയൽ കാർഡ് - ELECTOR PHOTO IDENTITY CARD



ALS0609917



പേര് : അംജിത്ത് എസ്

NAME : Amjith S

അച്ഛന്റെ പേര് : സഹജൻ ബി

FATHER'S NAME : Sahajan B

ലിംഗം/ SEX : പുരുഷൻ / Male

ജനനത്തീയതി / വയസ്സ്

DATE OF BIRTH/AGE : 20/05/1992 / 22

മേൽവിലാസം : 2/10, പ്രതീക്ഷ, രണ്ടാംകുറ്റി,
690537

ADDRESS : 2/10, Pratheeksha, Randamkutty,
690537



ഇലക്ടറൽ രജിസ്ട്രേഷൻ ഔഫീസർ

Date: 04/12/2014 ELECTORAL REGISTRATION OFFICER

അസംബ്ളി നിയോജകമണ്ഡലം : 108, കായംകുളം
നമ്പറും പേരും

ASSEMBLY CONSTITUENCY No. : 108, KAYAMKULAM
& NAME

പാർട്ടി നമ്പർ : 134

PART No.

NOTE / കുറിപ്പ്

1. Mere possession of this card is no guarantee that you are elector in the current electoral roll. Please check your name in the current electoral roll before every election.

1. ഈ കാർഡ് കൈവശമുള്ളത് കൊണ്ട് മാത്രം നിങ്ങൾ നിലവിലുള്ള വോട്ടർ പട്ടികയിൽ ഒരു സമ്മതിദായകൻ ആകണമെന്നില്ല. ഓരോ തെരഞ്ഞെടുപ്പിനും മുമ്പായി നിലവിലുള്ള വോട്ടർ പട്ടികയിൽ നിങ്ങളുടെ പേര് ഉണ്ടോയെന്ന് പരിശോധിക്കേണ്ടതാണ്.

2. Date of Birth mentioned in this card shall not be treated as a proof of age/D.O.B. for any purpose other than registration in electoral roll.

2. ഈ കാർഡിൽ സൂചിപ്പിച്ച ജനനത്തീയതി വോട്ടർ പട്ടികയിൽ രജിസ്റ്റർ ചെയ്യുന്നതിനല്ലാതെ ജനനത്തീയതി/വയസ് തെളിയിക്കുന്നതിനുള്ള ഒരു രേഖയായി പരിഗണിക്കുവാൻ പാടില്ല.

0014 108 134 0013

201500900115

GOVERNMENT OF KERALA
KRISHNAPURAM VILLAGE OFFICECASTE CERTIFICATE

No. 56485922

Date: 28/06/2021

Certified that the person with the details mentioned below belongs to the caste mentioned below.

Name of Person to whom certificate is issued	AMJITH S
Gender	Male
Age	29
Name of Father	B SAHAJAN
Address	PRATHEEKSHA, 315, PULLIKKANAKKU
Religion	Hindu
Caste	OBC/ EZHAVA
Post Office with Pin code	PULLIKKANAKKU, 690537
Name of Local body	Krishnapuram
Village	Krishnapuram
Taluk	Karthikappally
District	Alappuzha
Date of Issue of Certificate	28/06/2021
Designation of the issuing officer	Village Officer

This certificate is issued based on the details given in the application, local enquiry, facts and records produced and is valid only for a period of three years from the date of issue.

Security Code : 8P9XV

Signature Not Verified

Digitally signed by N ANUP

Date: 2021.06.28 09:52:26 IST

NOTE:

1. This digitally signed document is legally valid as per the Information Technology (IT) Act, 2000.
2. Authenticity of this document can be verified from <http://edistrict.kerala.gov.in/> and submitting the Certificate Number and Security code. Alternatively, please call the numbers 155300(from BSNL landline), 0471155300(from BSNL mobile), 04712335523/04712115094/04712115098(from other networks) and quote the Certificate Number to the operator.

ANNEXURE-I

CERTIFICATE FROM THE ORGANISATION WHERE THE CANDIDATE IS EMPLOYED

Certified that Mr./Ms./Mrs. AMJITH.S is
employed as Assistant Professor (Designation) in the
Electrical and Electronics Engineering (Department/Division Name)
of Mahaguru Institute of Technology
(Institution/Industry Name).

We have no objection in forwarding his/her application for the Ph.D. Research Programme.

FOR FULL TIME:

The candidate will be sanctioned leave for the duration of the research programme and will be relieved from duty from _____ to _____ to undertake the full time research work in the University.

FOR PART TIME:

The candidate will be permitted to undertake part time study in the University/College and will be allowed to be present for discussions with the supervisor, attending course works, conduct of experiments and participations in seminars and related presentations. Further the required facilities at our organization will also be provided to the candidate for doing research.

Date:

21/6/2021

Signature of the Head of Organization with office seal

