

# **KPR Institute of Engineering and Technology**

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai - 25)

Accredited by NBA (CSE, ECE, EEE & MECH) and NAAC with 'A' Grade
An ISO 9001:2015 and ISO 14001:2015 Certified Institution
DSIR Certified Scientific and Industrial Research Organization



# DEPATRMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

## **Electroblitz**

Volume 4 Issue 1 June 2018





# INDEX

Content	Pg.No
Vision, Mission, PEOs	1
POs and PSOs	2
Faculty Details	3
Association Activities	5
List of Eminent Academicians/Scientists visited	13
Conference and Journal Publications	14
Seminars/Workshops Attended	15
Proposals Submitted to Funding Agencies	17
Placement Details	18
Value Added Course conducted	20
Students` Achievements and Activities	21
Inplant Training	24
Sports Activities	28
Alumni Corner	29
Students` Corner	35
Photo and Art Gallery	44
Articles / Events in Newspaper	48

#### Vision

To be the centre of higher learning in the field of Electrical and Electronics Engineering by educating the students to meet the global challenges with professional ethics and social consciousness.

#### Mission

Providing technical, intellectual and ethical environment to the students through knowledge centric education and research.

Collaborating with industries in the vicinity, nationally and internationally for exposure and innovation.

Enabling the students to serve the society through prolific ideas.

#### About the Department

The Department of Electrical and Electronics Engineering was established in the year 2009. The sheer hard work and enthusiasm of the faculty and students of the department has helped in making it one of the best departments on campus. The department believes in serious academic pursuit and encourages radical and original thinking which paves the way for creativity and innovative ideas. The zeal and fervour with which the department is working will surely help it to achieve further success. The course has been designed with the aim of providing breadth and depth of knowledge and significant design experience across the key areas of Electrical Engineering that evolve with society needs. To achieve a blending of knowledge acquisition and applications of such knowledge in real life situations our department provides well equipped laboratory with global standards. We promote graduates in this diverse and always evolving field to use their knowledge of engineering principles and practices to design, develop and implement in a way our students are provided with a platform to innovate achieve and lead. The students have won laurels in state and national level events, their all round personality is developed so that they are devoted to serve the nation and community by engendering and broadcasting knowledge and technologies essential to the local and global needs in the field of Electrical and Electronics Engineering.



#### **Program Educational Objectives (PEOs)**

The Graduates of Electrical and Electronics Engineering will

PEO1: Possess an adequate knowledge to meet the needs of the stakeholders and excel in their chosen profession with good communication and managerial skills.

PEO2: Adapt to emerging technologies and practice their profession confirming to ethical and human values.

PEO3: Continuously improve the habit of self-study through professional development activities.

#### **Program Outcomes (POs)**

Graduates of Electrical and Electronics Engineering will be able to:

PO1. Engineering Knowledge: Apply the knowledge of mathematics, science, engieering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2. Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3.** Design/development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6. The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7.** Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### **Program Specific Outcomes (PSOs)**

Graduates of Electrical and Electronics Engineering will able to:

PSO1. Develop skills to the expectations of the dynamic industrial practices in Electrical Engineering and allied areas.

PSO2. Analyse, design and integrate various renewable energy sources to meet the energy demand.

#### **Faculty Details**

S.No	Name	Designation
1)	Dr. S. RAMKUMAR, M.E., Ph.D.,	Professor and Dean
2)	Dr. V. KUMAR CHINNAIYAN, M.E., Ph.D.,	Professor and Head
3)	Dr. C. GANESH, M.E., Ph.D.,	Professor
4)	Dr. J. KARPAGAM, M.E., Ph.D.,	Professor
5)	Mr. R. NACHIMUTHU, M.E., M.I.S.T.E.,	Associate Professor
6)	Dr. R. UTHIRASAMY, M.E., Ph.D.,	Associate Professor
7)	Dr. V. KARTHIKEYAN, M.E., Ph.D.,	Associate Professor
8)	Mr. S. VIVEKANANDAN, M.E., M.I.S.T.E.,	Assistant Professor (Sr.G)
9)	Mr. G. SARAVANAN, M.E., M.I.S.T.E.,	Assistant Professor (Sr.G)
10)	Mr. A. GOWRISHANKAR, M.E., M.I.S.T.E.,	Assistant Professor (Sr.G)
11)	Mr. D. SATHISH KUMAR, M.E., M.I.S.T.E.,	Assistant Professor (Sr.G)
12)	Mr. S. KRISHNA PRABHU, M.E., M.I.S.T.E.,	Assistant Professor (Sr.G)

S.No	Name	Designation
13) <i>N</i>	Ns. B. LALITHA, M.E., M.I.S.T.E.,	Assistant Professor
14) M	s. V. J. VIJAYALAKSHMI, M.E., M.I.S.T.E.,	Assistant Professor
15) M	s. R. REVATHI, M.E., M.I.S.T.E.,	Assistant Professor
16) M	r. P. KAMALAKANNAN, M.E., M.I.S.T.E.,	Assistant Professor
17) M	r. A. MOHAMED IBRAHIM, M.E., M.I.S.T.E.,	Assistant Professor
18) M	As. R. JEEVITHA, M.E., M.I.S.T.E.,	Assistant Professor
19) M	r. K. SIVAKUMAR, M.E.,	Assistant Professor
20) M	as. P. RAVIKUMAR, M.E.,	Assistant Professor
21) N	Ns. D. ABIYA, M.E.,	Assistant Professor
22) N	Ns. R. SHOBANA, M.E.,	Assistant Professor
23) N	Ns. B. REVATHI, M.E.,	Assistant Professor
24) D	r. G. RAMYA, M.E.,	Assistant Professor
25) N	Nr. S. SRIRAMPRAKASH, M.Tech.,	Assistant Professor
26) N	Ar. S. PRAVEEN KUMAR, M.E.,	Assistant Professor
27) N	Ns. M. SOWMYA, M.E.,	Assistant Professor
28) N	Nr. K. BALAMURUGAN, M.E.,	Assistant Professor
29) N	Ns. T. JAYASUDHA, M.Phil.,	Assistant Professor (SI. G)
30) N	Ns. D. SUDHA, M.Phil.,	Assistant Professor (Sr.G)
31) N	Ns. K. BABY, M.Phil.,	Assistant Professor
32) N	Ns. S. SATHYA, M.Phil.,	Assistant Professor
33) N	Ns. V. SARANYA, M.Phil.,	Assistant Professor
	Non-Teaching	Staff

#### Non-Teaching Staff

5.N	o Name	Designation
1)	Mr. SENTHIL, D.E.C.E.,	Lab Assistant
2)	Mr. VINODHKUMAR, D.E.E.E.,	Lab Assistant
3)	Mr. P. BHARATHIRAJA, MCA.,	Office Assistant
4)	Mr. A. THIRUPATHY, B.E.,	Lab Assistant
5)	Mr. P. BHAGAVATHY, B.E.,	Lab Assistant

#### **Association and Societies**

#### Guest lecture on Myths and Facts about Electrical Engineering

The Department of EEE of KPR Institute of Engineering and Technology has conducted the guest lecture on "Myths and Facts about Electrical Engineering" on January 8<sup>th</sup> 2018. The Head of the Department Dr.V.Kumar Chinnaiyan welcomed the gathering. Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The Guest Lecture was delivered by Er.D.Mahesh Kumar, DGM & Head (Operations), Larsen & Toubro Ltd., Coimbatore. He pointed out that electrical engineers have to take responsibility to prevent electrical accidents and take suitable measures for handling electricity safely and effectively. He wished that knowledge on Indian Electricity Regulations has to be imparted to the students in the curriculum. The coordinators of the program Dr.C.Ganesh,Prof/EEE and Ms.R.Shobana, AP/EEE, Ms.B.Revathi, AP/EEE made all the necessary arrangements for the smooth conduct of the program.



#### Campaign on Swachh Bharat Abiyaan Activity

The students of EEE department were involved in one day campaign on "Swachh Bharat Abiyaan Activity" on January 27<sup>th</sup> 2018. The event was inaugurated by Dr.K.Bommanna Raja, Principal, Dr.S.Ramkumar, Dean and Dr.V.Kumar Chinnaiyan, HoD/EEE. In the inaugural address all the dignitaries deliberated the importance of Swachh Bharat Abiyaan activity "the campaign is not only the duty of the Government but each and every citizen of the country is equally responsible to keep the nation clean or swachh. They collected the non-bio degradable plastic wastes of about 32 bags on the either side of road stretch of about five kilometers from KPRIET campus to Thennampalayam. It is implemented to fulfill the vision and mission of clean India a day"and motivated the students to involve in waste removal activity and awareness creation program wherever required. Around hundred students from EEE department and IEEE branch participated in this event along with faculty members and physical directors. Prof.A.Mohamed Ibrahim and Prof.M.Sowmya made all the arrangements for the smooth conduct of the program.



#### Workshop on MATLAB & Simulink for Engineering Applications

The Department of EEE has conducted the one day workshop on "MATLAB & Simulink for Engineering Applications" on 30<sup>th</sup> January 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The first session was handled by Dr.R.Uthirasamy. He gave an introduction about the MATLAB and Simulink. Prof.G.Saravanan, AP(SI.G)/EEE.elaborated the applications of MATLAB tools during second session.Nearly 55 students attended the workshop. Prof.S.Vivekanandan, AP (SI.G)/EEE, Prof.A.Mohamed Ibrahim, AP(Sr.G) made all the necessary arrangements for the smooth conduct of the program.



#### Seminar on Future Trends in Electrical Engineering

The Department of EEE has conducted a seminar on "Future Trends in Electrical Engineering" on January 30<sup>th</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The seminar was delivered by Dr.V.Kumar Chinnaiyan, HoD/EEE. He elucidated the recent trends in electrical engineering with the openings for Electrical Engineers in public sectors and private sectors. Nearly 220 students of second year and third year attended the seminar. An interaction session was held. The seminar concluded with the feedback session. Prof.R.Shobana, AP/EEE, made all the necessary arrangements for the smooth conduct of the program.

#### Workshop on Android App Development for Engineering Applications

The Department of EEE has conducted a one day national level workshop on "Android App Development for Engineering Applications" on February 10<sup>th</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The resource person was Mr.C.Selvaraj, Associate App Developer, Infinijith Technologies, Coimbatore. The session started with the recent trends in mobile applications, App development for Engineering Applications and its challenges & importance. The workshop provided an integrated platform for understanding the theory and real-time applications associated with various engineering fields. Nearly 50 students and 5 faculty members attended the workshop. Prof.B.Lalitha, AP(Sr.G)/EEE, Prof.D.Sathish Kumar, AP(Sr.G)/EEE and Prof.A.Mohamed Ibrahim, AP(Sr.G)/EEE made all the necessary arrangements for the smooth conduct of the program.



# Workshop on Restructuring of Power System — Need of Renewable and Energy Storage (NCIAES'17)

The Department of EEE has conducted one day National level workshop on "Restructuring of Power System – Need of Renewable and Energy Storage" on February 16<sup>th</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The resource person was Er.S.Selva Kumar, Project Lead, ABB Limited, Chennai. The session started with the discussion about the various sources, cost for producing electricity and the efficiency of power plant. He also explained the higher penetration of solar and wind into the grid and the increase in the need for energy storage Nearly 50 students and 5 faculty members attended the workshop. Dr.J.Karpagam, Prof/EEE and Prof.M.Sowmya, AP/EEE made all the necessary arrangements for the smooth conduct of the program.



#### Workshop on Energy Management System for Smart Grids

The Department of EEE has conducted the one day national level workshop on "Energy Management System for Smart Grids" on February 24<sup>th</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The resource person was Er.S.Selva Kumar, Project Lead Engineer, ABB Global Industries Ltd., Chennai. He delivered about the Energy Management Systems for Smart Grids and Micro Grid Systems. The afternoon session was handled by Er. S. Prasanth, Power System Engineer, Power Research & Development Consultants Pvt. Ltd, Bengaluru. He discussed about the energy management in grid connected renewable energy resources. He encouraged the participant to do more projects on smart grid systems. Nearly 60 students from various institutions attended the workshop. Dr.R.Uthirasamy, AsP/EEE, Prof.P.Ravikumar, AP(Sr.G)/EEE made all the necessary arrangements for the smooth conduct of the program.



#### Celebration of National Science Day

The Department of Electrical and Electronics Engineering has celebrated the National Science Day "TECH SCIENCE 1.0" on February 28th 2018 in commemoration of Sir C.V.Raman's discovery of Raman effect. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The Chief guest Dr.S.Jone Kirubavathy, Associate Professor/Chemistry, PSGR Krishnammal College for Women addressed the gathering. She gave an enriching lecture on Challenges for Science & Technologists in the present scenario. She discussed the challenges faced by technologists, need for alternate energy fuels, various energy sources, Approaches in Nanotechnology. In the afternoon session many events like paper presentation, Project expo, science quiz, science talk and short film was conducted. Students actively participated in the events and exhibited their talents. Prof.T.Jayasudha, AP(SI.G.)/EEE and Prof.D.Sudha, AP(Sr.G)/EEE made all the necessary arrangements for the smooth conduct of the program.



#### Hands on Training on DSLR and Adobe Photoshop

The Department of Electrical and Electronics Engineering has organized a one day National level Hands on training on "DSLR and Adobe Photoshop" on March 2<sup>nd</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The Resource person for the morning session was Mr.S.Mohana Pradeep, Final year EEE Student, KPRIET. He briefed about the evolution of photography and latest trend in camera technology. He explained the features of DSLR and various options available in the device. The second session was handled by Mr.M.Vivek, Final year EEE Student, KPRIET. He explained about the photoshop environment and various tools available for design purpose. Nearly 37 participants from various colleges attended the workshop. The co-ordinators of the workshop Prof.S.Vivekanandan, AP(SI.G)/EEE and Prof.A.Mohamed Ibrahim, AP(Sr.G)/EEE, made all the necessary arrangements for the smooth conduct of the program.



#### National Conference on Innovations and Advancements in Electrical Sciences (NCIAES'18)

The Department of EEE has organized third one day National Conference on Innovations and Advancements in Electrical Sciences (NCIAES'18) on March 23<sup>rd</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The Chief guest Dr. R. Jayapal – Independent Automation Consultant shared his valuable experience and expertise in the field of automation to the gathering. He motivated the participants to involve themselves in the field of IOT and the disruptive technologies. Prof.G.Saravanan, AP (SI.G)/EEE presented a brief report about the conference and the conference accomplished on recent trends in the field of Electrical, Electronics, Communication and Computer Science Engineering. 46 papers were selected for the presentation after a peer review of more than 75 manuscripts. Parallel sessions were conducted on the themes such as IoT, optimization Techniques and Electrical sciences. The delegates presented the ideas in the respective theme and the best paper was awarded in each theme.



#### Workshop on Modern Control Techniques for Hybrid Electric Vehicle Application

The Department of EEE has conducted the one day national level workshop on "Modern Control Techniques for Hybrid Electric Vehicle Application" on March 23<sup>rd</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. The Resource person for the morning session was Dr.R.Jayapal, Independent Automation Consultant, Coimbatore. He initially started with the history of electric vehicles and the need for the change towards electrical transportation. He then briefly presented the topic "EV Landscape and the Disruption of Automotive Industry". The second session was handled by Dr.R.Shanmugasundaram, Professor/EEE, Sri Ramakrishna Engineering College, Coimbatore. He explained about the BLDC motor construction and its working in the area of electric vehicles. Nearly 50 participants from various colleges attended the workshop. The co-ordinators of the workshop Dr.C.Ganesh, Professor/EEE, Prof.K.Sivakumar, AP/EEE, Prof.V.Kamalkumar, AP/EEE, made all the necessary arrangements for the smooth conduct of the program.



#### Intra Department Project Expo'18

The Department of EEE has conducted the one day national level workshop on "Modern Control Techniques for Hybrid Electric Vehicle Application" on March 23<sup>rd</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. Dr.R.Jayapal, Independent Automation Consultant & Former DGM, BHEL, Trichirapalli and Er.V.Ramesh Babu, Sr.Manager, Salzer Electronics Ltd., Coimbatore were the Chief Guest for the Expo. Project expo included various projects done by final year EEE students. 30 projects were presented and the prizes were given to the best projects. The co-ordinators Prof.S.Vivekanandan, AP(SI.G) and Prof.A.Mohamed Ibrahim, AP(Sr.G)/EEE made all the arrangements for the smooth conduct of the Expo.



#### Celebration of World Intellectual Property Day

The Department of Electrical and Electronics Engineering has celebrated the "World Intellectual Property Day" on April 24<sup>th</sup> 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. Dr.A.M.Natarajan, Chief Executive, KPR Institute of Engineering and Technology briefed about the importance of IPR as well as the global challenges faced by modern IP system. He also gave a talk on inspiring contributions of women around the globe and their achievements. About 100 students from various department and 40 faculty members attended the program.



#### Awareness program on Anti Child Labour

The Department of EEE has conducted an awareness program on "Anti Child Labour" on April 30<sup>th</sup>, 2018. Dr.V.Kumar Chinnaiyan, Head of the Department and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. Dr.S.Ramkumar, Dean (Academics & Administration), KPRIET explained the need for providing quality education to prevent children working in any commercial field. He also expressed that the growth of the nation is very much dependent on the empowerment of children with good and sound education. He also narrated the success of KPR mills in the textile field. About 250 students from various department and 40 faculty members attended the program.



#### Seminar on Tips and Tricks of Andragogy

The Department of EEE has conducted a seminar on "Future Trends in Electrical Engineering" on May 19<sup>th</sup> 2018. Dr.J.Karpagam, Professor/EEE welcomed the gathering and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. Dr.V.Kumar Chinnaiyan the Head of the Department handled the sessions which included the need for changing from pedagogy to andragogy, various technological effects on present learning environment, various techniques of andragogy teaching were emphasized. Activity based sessions also provided faculty an easy understanding of skills sets required andragogy teaching.

#### Hands on Training on Dialux Software

The Department of Electrical and Electronics Engineering has organized three days hands on training on "Dialux Software" from May 23<sup>rd</sup>, 2018 to May 26<sup>th</sup>, 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. Er.S.Hari Haran and team from Power Projects handled the sessions. Around 55 students and 10 faculty members attended the program. Sessions included introductory overview of renewable energy sources and its utilization.

#### Hands on Training on PVSyst Software

The Department of Electrical and Electronics Engineering has organized three days hands on training on "PV Syst Software" from May 28th, 2018 to May 31st, 2018. Dr.V.Kumar Chinnaiyan, Head of the Department welcomed the gathering and Dr.K.Bommanna Raja, Principal and Dr.S.Ramkumar, Dean (Academics & Administrative) of KPRIET presided over the function. Er.S.Hari Haran and team from Power Projects handled the sessions. Around 50 students and 8 faculty members attended the program. Sessions included system sizing and simulation of PV system.



# List of Eminent Academicians / Scientists Visited

S.No.	Name and Designation	Organization
1.	Er. E. D. Mahesh Kumar, DGM and Head (Operations)	Larsen & Toubro Ltd., Coimbatore
2.	Mr. C. Selvaraj, Associate App Developer	Infinijith Technologies, Coimbatore
3.	Er. S. Selva Kumar, Project Lead Engineer	ABB Global Industries Ltd., Chennai
4.	Dr. S. Jone Kirubavathy, Associate Professor/ Chemistry	PSGR Krishnammal College for Women, Coimbatore
5.	Dr. R. Jayapal	Independent Automation Consultant & Former DGM, BHEL, Tiruchirapalli
6.	Dr. R. Shanmugasundaram, Professor/EEE	Sri Ramakrishna Engineering College, Coimbatore
7.	Er. V. Ramesh Babu, Sr.Manager	Salzer Electronics Ltd., Coimbatore
8.	Er. S. Hari Haran, Senior Design Engineer	Power Projects, Bangalore
9.	Er. S. Prasanth, Power Sysytem Engineer	Power Research and Development Consultants Pvt. Ltd, Bangalore

# **Faculty Publications in Journal**

S.No	Name of the Author and Co-authors	Title of the Paper	Name of the Journal	Volume No.	Month and Year
1	Dr.R.Uthirasamy Dr.V.Kumar Chinnaiyan, Dr.J.Karpagam	Investigation on Three- Phase Seven-Level Cascaded DC-Link Converter Using Carrier Level Shifted Modulation Schemes for Solar PV System Applications	IET Renewable Power Generation	Vol.12	Jan 2018
2	Mr. G. Saravanan Dr. C. Karthikeyan	Optimal PI Controller Design for BLDC Motor Speed Control Using Chaotic Differential Evolutionary Algorithm	IEEE Xplore	978-1- 5386- 4303-7	Jan 2018

3	Dr. S. Ramkumar	Parameter Improved Particle Swarm Optimization Based Direct-Current Vector Control Strategy for Solar PV System	Advances in Electrical and Computer Engineering	Vol.18 No.1	Jan 2018
4	Dr. S. Ramkumar	A Comprehensive Analysis of Carrier Shifting Algorithms for Diode- Clamped MLI Based Drive	Journal of Electrical Engineering	Vol.1 <i>7</i> No.2	Feb 2018
5	Dr. S. Ramkumar	A Reduced Switch Count Asymmetrical Three Phase Multilevel Inverter Topology	Journal of Electrical Engineering	Vol.1 <i>7</i> No.2	Feb 2018
6	Mr. A. Mohamed Ibrahim	Minimizing Industrial Power Consumption Penalty by Using Thyristor Switching Capacitor	International Journal of Recent Trends in Engineering & Research	Vol. 4 No.3	April 2018
7	Dr. S. Ramkumar	A New PWM Modulated Multilevel Inverter Topology with Reduced Switch Count in Conduction Path	Journal of Electrical Engineering	Vol.17 No.2	April 2018
8	Dr. S. Ramkumar	New Resonant Diode- Bridge Inserted Boost PFC Rectifiers for Positive and Negative Voltage Outputs	Journal of Electrical Engineering	Vol.18 No.1	April 2018

# **Faculty Publication in Conference Proceedings**

<b>S.N</b>	No.	Name of the Faculty	Title of the Paper	Name of the Conference	Date
	1	Dr. G. Ramya	Implementation of photovoltaic fed single phase nine level hybrid cascaded modular multilevel inverter with reduced number of devices	IEEE International conference on Power Electronics and Drive System (PEDS 2017), Hawaii, USA	January 2018

2	Dr. R. Uthirasamy Dr. J. Karpagam Mr. P. Ravikumar	Power Quality Analysis on Multilevel DC link Inverter with Reduced Power Switch Components	International Conference on Electrical Energy Systems	February 2018
3	Mr. P. Ravikumar Dr. R. Uthirasamy	FPGA based SIDO DC Converter Autonomous Rovers Applications	International Conference on Electrical Energy Systems	February 2018
4	Mr. R. Uthirasamy Dr. J. Karpagam Mr. P. Ravi Kumar	Investigation of hybrid Power Converters for Cascading Solar PV Systems	International Conference on Electrical Energy Systems	February 2018
5	Dr. G. Ramya	Analysis and Determination of Switching Angles Based on Half-Height Method for Hybrid Modular Multilevel Converter for Reduced Total Harmonic Distortion	4th International Conference on Electrical Energy Systems	February 2018
6	Mr. G. Saravanan Mr. K. Sivakumar Mr. A. Mohamed Ibrahim	Automotive ECU Testing and Data Logging Using LABVIEW	National Conference On Power and Energy Systems	March 2018
7	Mr. P. Kamalakannan Mr. S. Vivekanandan Mr. S. Krishna Prabhu	Simulation of Multiple Input Boost Converter for Renewable Energy Applications	NCPES 2K18 — Sri Ram Engineering College	March 2018
8	Dr. R. Uthirasamy	Solar fed Smart Irrigation System using Zeta Converter	International Conference on Emerging Trends in Engineering, Science and Sustainable Technology	April 2018
9	Mr. A. Mohamed Ibrahim	Minimizing Industrial Power consumption penalty using TSC	International Conference on Advanced Science and Engineering Research	April 2018

# Participation in FDP/Seminar/Faculty Workshop/Orientation Program

S.No	Name of the Faculty	Type of Program	Title of the Course	Venue	Date
1	Ms. V. Saranya	Workshop	Molecular Spectroscopy	Karunya Institute of Technology and Sciences, Coimbatore	11/01/2018
2	Ms. M. Sathya	Workshop	Stochastic Differential Equations and its Applications	CMS College, Kottyam	12/01/2018

			1	1	
3	Dr. R.Uthirasamy	Workshop	Microgrid with Distributed Generation and Electric Vehicles	Vellore Institute of Technology, Vellore	19/01/2018 & 20/01/2018
4	Mr. P. Ravikumar	Workshop	Microgrid with Distributed Generation and Electric Vehicles	Vellore Institute of Technology, Vellore	19/01/2018 & 20/01/2018
5	Mr. K.Sivakumar	Seminar	Productivity Conclave 2018 "4.0"	Leveraging Coimbatore Industry Profile Towards Industry	22/02/2018
6	Mr. P. Kamalakannan	Workshop	Design of Power Electronics Converters using MATLAB	K.S.R. College of Engineering, Tiruchengode	23/03/2018
7	Mr. P. RaviKumar	Workshop	Design of Power Electronics Converters using MATLAB	K.S.R. College of Engineering, Tiruchengode	23/03/2018
8	Mr. S. Vivekanandan	Workshop	Design of Power Electronics Converters using MATLAB	K.S.R. College of Engineering, Tiruchengode	23/03/2018
9	Mr. A. Gowrishankar	Workshop	Design of Power Electronics Converters using MATLAB	K.S.R. College of Engineering, Tiruchengode	23/03/2018
10	Mr. S. Krishnaprabhu	Workshop	Design of Power Electronics Converters using MATLAB	K.S.R. College of Engineering, Tiruchengode	23/03/2018
11	Mr. G. Saravanan	FDTP	Three day TEQIP III sponsored Faculty Development Training Programme on Research based Statistical, Analytical and Data modeling Tools	Thiagarajar College of Engineering, Madurai.	26/04/2018 - 28/04/2018
12	Mr. V. Kamalkumar	Workshop	Effective Pedagogy Assessment and Technological Tools in Teaching	KPR Institute of Engineering and Technology, Coimbatore	20/04/2018 - 12/05/2018
13	Dr. G. Ramya	Workshop	Effective Pedagogy Assessment and Technological Tools in Teaching	KPR Institute of Engineering and Technology, Coimbatore	20/04/2018 - 12/05/2018
14	Ms. M. Sowmya	Workshop	Effective Pedagogy Assessment and Technological Tools in Teaching	KPR Institute of Engineering and Technology, Coimbatore	20/04/2018 - 12/05/2018
15	Mr. S. Sriramprakash	Workshop	Effective Pedagogy Assessment and Technological Tools in Teaching	KPR Institute of Engineering and Technology, Coimbatore	20/04/2018 - 12/05/2018

# Proposal Submitted by Faculty members to funding agencies during (Jan 2018 to June 2018)

Name of the Faculty	Program	Funding Organization
	Awareness on Electronic Waste Management	Ministry of Environment, Forest and Climate Change
Dr. R. Uthirasamy	Mitigation of Chaotic Behaviour and Electro Magnetic Interference in Grid Connected Solar PV Systems	Science and Engineering Research Board

### Faculty Online Certification Course (Jan 2018 to June 2018)

Name of the Faculty	Type of program	Title of the course	Date
Mr. P. RaviKumar	NPTEL	Outcome Based Pedagogic Principles for Effective Teaching	18/05/2018

# Faculty Invited Talk (Jan 2018 to June 2018)

Name of the Faculty Type of Program		Title of the Course/ Program	Date	
Ms.V.J.Vijayalakshmi	Symposium	Jury member -National Level Technical Symposium- REWOP'18	02/03/2018	
Dr. R. Uthirasamy Mr. G. Saravanan	Workshop	MATLAB & Simulink for Engineering Applications	30/01/2018	

#### **Publication of books**

Title of the Book	Author	Publisher	Month & Year	Price
Basics of Electrical and Electronics Engineering(Civil Engineering)	Mr. D. Sathish kumar AP(Sr.G) / EEE	Thakur Publication Pvt. Ltd.	ISBN- 9789387483507 March 2018	Rs.105.00

# **Students' Placement Details**

S.No.	Name of the Student	Name of the Organization
1	AKHIL DINESH A.N.	VEE TECHNOLOGIES, VALUED EPISTEMICS
2	ANDREWS REGINOLD J.	AMAZON, TECH MAHINDRA, MAGUS
3	ARAVIND K.	GALORE NETWORKS, DHARANI PUMPS
4	ARAVIND M.	GALORE NETWORKS
5	ARAVIND RAJ R.	MAGUS
6	BALAJI T.	SANMINA
7	CELLAKUMAR P.	GALORE NETWORKS
8	FABIN ROY M.	HEXAWARE,TECH MAHINDRA, MAGUS
9	GIRIJA V.	THOUGHT BEES
10	gokulakrishna s.	THINK & LEARN
11	HEMAPRIYA R.	THOUGHT BEES, SCHNEIDER ELECTRIC
12	JANANI C.	MICROLAND, VDART
13	JENITH CABRIELLA C.	THOUGHT BEES, SCHNEIDER ELECTRIC
14	JOHINTHAR R.	HEXAWARE
15	JOY DANIEL M.	TECHNOSOFT
16	KARTHIK G.	TVS
17	KOTTAIMUTHU V.	GALORE NETWORKS
18	MAILANANDAN H.	HEXAWARE
19	MANIKANDAN C.V.	THINK & LEARN
20	MATHAN G.	ASIAN PAINTS,MAGUS

21	MOHANA PRADEEP S.	SANMINA
22	GOKULNATH V.	HOFINCONS
23	HARI PRASATH V.	SANDVIK, GALORE NETWORKS,ASIAN PAINTS
24	KARTHIKEYAN A.	SANDVIK,DHARANI PUMPS
25	KAVINKUMAR P.	THINK & LEARN
26	KIRUBAKARAN R.	HEXAWARE
27	MAHENDERAN M.	GALORE NETWORKS
28	mohankumar p.	SANDVIK, GALORE NETWORKS,ASIAN PAINTS
29	NANDHAKUMAR S.	SANMINA
30	MUKESHSRINIVAS K.	VEE TECHNOLOGIES,TECH MAHINDRA
31	MULLAI VENDHAN P.	SANMINA
32	MUTHU PRADEEP E.	QUBEE TECH,TECH MAHINDRA
33	NANDHAKUMAR K.C.K.S.	DHARANI PUMPS
34	NANDHINI G.	raasi constructions
35	NATARAJAN V.	HEXAWARE
36	NAVEEN KUMAR A.	ASIAN PAINTS
37	NAVEEN KUMAR K.K.	KGISL
38	NAVEEN RAJ S.	AMAZON
39	NELSON RAJ A.	GALORE NETWORKS
40	PRASANNAKUMAR M.	DATA PATTERNS
41	PRAVEEN C.	CRI PUMPS
42	RAJKUMAR S.	HOFINCONS

43	SANTHOSH S.	HOFINCONS	
44 SATHISH KUMAR R.		INFOSYS	
45	SHANMUGAPERUMAL S.	MICROLAND, TECHNOSOFT, ASIAN PAINTS, JUST DIAL, VDART	
46	SHARMILASREE K.	RAASI CONSTRUCTIONS, VEE TECHNOLOGIES, VDART	

## Value Added Course Conducted

S.No	Name of the Course	Year	Section	Date
1	C Programing	II	A & B	11.06.2018 to 13.06.2018
2	Modern Electrical	III .	А	23.05.2018 to 26.05.2018
	Simulation Tools		В	28.05.2018 to 31.05.2018
3	3 PLC & SCADA	IV	А	19.06.2018 to 26.06.2018
3			В	27.06.2018 to 05.07.2018

# **Events Organized by Students**

S.No.	Name of the Student	Name of the Event	Level of the Event	Supporting Institution/ Company/ University/ Professional Society	Date	Fund Generated (Rs.)
1	P. Mohankumar C. S. Dhuvarakesh K. K. Naveenkumar	MEET UP 2.0	National	IEEE,IETE,ISTE,-IEI, Renewable Energy Club	10/03/2018	34,000

2	A. Bharath Raj J. Madhumidha	Tech Science 1.0	National	IEEE,IETE,ISTE,IEI, Renewable Energy Club	28/02/2018	14,000	
3	S. Mohana Pradeep M. Vivek	DSLR and Adobe Photoshop	National	IEEE,IETE,ISTE,IEI, Renewable Energy Club	02/03/2018		

# Students Participation in Co-Currlicular Activities

S.No	Name of the Student	Name of the Event	Level of the Event	Organizing Institution	Venue	Date
1	Mohan Kumar E.	Circuit Debugging	National	Rathinam Technical Campus	Coimbatore	05/01/2018 06/01/2018
2	Mohan Kumar E.	Paper Presentation	National	Rathinam Technical Campus	Coimbatore	05/01/2018 06/01/2018
3	Gayathri A.	Workshop	National	Sri Ramakrishna Engineering College	Coimbatore	05/01/2018
4	Deepika M.	Workshop	National	Sri Ramakrishna Engineering College	Coimbatore	05/01/2018
5	Indhirani D.	One Day Hands on training	National	KPR Institute of Engineering and Technology	Coimbatore	30/01/2018
6	Devaprakash L.	One Day Hands on training	National	KPR Institute of Engineering and Technology	Coimbatore	30/01/2018
7	Infranta Merlin I.	One Day Hands on training	National	KPR Institute of Engineering and Technology	Coimbatore	30/01/2018
8	Harini R.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018
9	Janani K.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018
10	Keerthana J.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018
11	Vyshali M.	Engineers World Record Attempt for Techno-Fest	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018

12	Vyshali M.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018
						01/02/2018
13	Rashmitha K.M.	Workshop	National	Karpagam College of Engineering	Coimbatore	03/02/2018
14	Rashmitha K.M.	Engineers World Record Attempt for Techno-Fest	National	Karpagam College of Engineering	Coimbatore	01/02/2018
15	Yuvashree M.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018
16	Yuvashree M.	Engineers World Record Attempt for Techno-Fest	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018
17	Yalinipriya M.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018
18	Yalinipriya M.	Engineers World Record Attempt for Techno-Fest	National	Karpagam College of Engineering	Coimbatore	01/02/2018
19	Kiruthika K.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018
20	Sasidharan S.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018
21	Sasidharan S.	Engineers World Record Attempt for Techno-Fest	National	Karpagam College of Engineering	Coimbatore	01/02/2018
22	Sasidharan S.	Paper Presentation	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018
23	Gayathri M.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018
24	Abirami K.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018
25	Anushiya R.	Workshop	National	Karpagam College of Engineering	Coimbatore	01/02/2018 - 03/02/2018

				Karpagam		01/02/2018
26	Abarna M.	Workshop	National	College of Engineering	Coimbatore	03/02/2018
27	Nethra M.	Machine Learning	National	SNS College of Engineering and Technology	Coimbatore	05/02/2018 06/02/2018
28	Rajashree V.	Machine Learning	National	SNS College of Engineering and Technology	Coimbatore	05/02/2018 06/02/2018
29	Muthunivedha R.	Machine Learning	National	SNS College of Engineering and Technology	Coimbatore	05/02/2018 06/02/2018
30	Nithika P.	Machine Learning	National	SNS College of Engineering and Technology	Coimbatore	05/02/2018 06/02/2018
31	Tharunika S.	Machine Learning	National	SNS College of Engineering and Technology	Coimbatore	05/02/2018 06/02/2018
32	Susma S.	Machine Learning	National	SNS College of Engineering and Technology	Coimbatore	05/02/2018 06/02/2018
33	Sasidharan S.	Workshop	National	Kumaraguru College of Technology	Coimbatore	07/02/2018 08/02/2018
34	Shanmathi V. S.	Workshop	National	PSG Institute of Engineering and Technology	Coimbatore	12/02/2018 13/02/2018
35	Vamathi P.	Workshop	National	PSG Institute of Engineering and Technology	Coimbatore	12/02/2018 13/02/2018
36	Thirunavukkarasu R.	Circuit Debugging	National	Sri Ramakrishna college of Engineering	Coimbatore	17/02/2018 18/02/2018
37	Thiyagarajan S. M.	Circuit Debugging	National	Sri Ramakrishna college of Engineering	Coimbatore	17/02/2018 18/02/2018
38	Subash M.	Circuit Debugging	National	Sri Ramakrishna college of Engineering	Coimbatore	17/02/2018 18/02/2018
39	Hari Priyadharshini A.	TECH SCIENCE 1.0	National	KPR Institute of Engineering and Technology	Coimbatore	28/02/2018
40	Sandhiya B.	Workshop	National	Excel Engineering College	Namakkal	01/03/2018 02/03/2018
41	Nivashini S.	Workshop	National	Excel Engineering College	Namakkal	01/03/2018 02/03/2018
42	Hari Priyadharshini A.	MEET UP 2.0	National	National Institute of Technology	Trichy	09/03/2018
43	Sasidharan S.	Project Presentation	National	Bannari Amman Institute of Technology	Sathyamanga lam	15/03/2018 16/03/2018

44	Kumaran G.	Project Presentation	National	Bannari Amman Institute of Technology	Sathyamanga lam	15/03/2018 16/03/2018
45	HariPriyadharshini A.	Paper Presentation	National	National Institute of Technology	Trichy	17/03/2018
46	Harini S.	Hands On Training	National	Sunshiv Electronic Solutions	Coimbatore	20/06/2018

# Inplant and Internship Details

S. No	Semester	Name of the Students	N	Period		
			Name of Industry	From	То	
1	VIII	Gokulakrishna S.	Think and Learn, Bangalore	12/12/2017	21/03/2018	
2	VIII	Manikandan C.V.	Think and Learn, Bangalore	12/12/2017	21/03/2018	
3	VIII	Kavinkumar P.	Think and Learn, Bangalore	12/12/2017	21/03/2018	
4	VIII	Prasannakumar M.	Data Pattern, Chennai	22/01/2018	30/04/2018	
5	VIII	Muthu Pradeep E.	Qubee Tech, Coimbatore	30/01/2018	30/04/2018	
6	VIII	Prem C.	Lakshmi Electrical Control Systems, Coimbatore	30/01/2018	30/04/2018	
7	VIII	Praveen C.	CRI Pumps, Coimbatore	22/01/2018	30/04/2018	
8	VIII	Rajan K.	Sandvik, Pune	18/01/2018	30/05/2018	
9	VIII	Akhil Dinesh A. N.	GRE edge, Chennai	24/01/2018	25/07/2018	
10	IV	Naveena K.	NSTEDB, DST, New Delhi	30/05/2018	11/07/2018	
11	IV	Nivashini S.	NSTEDB, DST, New Delhi	30/05/2018	11/07/2018	
12	IV	Noorasleena S.	NSTEDB, DST, New Delhi	30/05/2018	11/07/2018	
13	IV	Sandhiya B.	NSTEDB, DST, New Delhi	30/05/2018	11/07/2018	

				1	
14	IV	K.Muralidharan	Balaji Electronics	25/05/2018	15/06/2018
15	II	A.Hari Priyadharshini	Kriger Group	02/06/2018	
16	IV	R.Murali	Spatez Technology LLP, Thrissur	01/06/2018	16/06/2018
17	IV	M. Maithreyini	ABB India Pvt., Ltd, Chennai	04/06/2018	08/06/2018
18	IV	A.Jane Lourde Teresha	ABB India Pvt., Ltd, Chennai	04/06/2018	08/06/2018
19	IV	P.R.Harshidha	Mahendra Pumps, Cbe	04/06/2018	08/06/2018
20	IV	A.Andrew Franklin Raj	Aqua Flow	04/06/2018	09/06/2018
21	IV	S.Aswin	Aqua Flow	04/06/2018	09/06/2018
22	IV	S.Lakshminarayanan	BSNL, Chennai	04/06/2018	08/06/2018
23	IV	S.Sumithra	ABB Pvt .Ltd	04/06/2018	08/06/2018
24	IV	G.S.Srinithi	ABB Pvt .Ltd	04/06/2018	08/06/2018
25	IV	T.Sriram	RTTC BSNL(Chennai)	04/06/2018	08/06/2018
26	IV	Aldrin Jose	Waves Electronics Pvt. Ltd., Cochin	05/06/2018	09/06/2018
27	IV	K.Madhuleka	Finetech Systems, Cbe	07/06/2018	16/06/2018
28	IV	M.Gokula Priya	Instrument Calibration and Test Centre, Cbe	11/06/2018	16/06/2018
29	IV	M.Abarna	The Riveraa Pumps, Cbe	11/06/2018	15/06/2018
30	IV	K.Abirami	The Riveraa Pumps, Cbe	11/06/2018	15/06/2018
31	IV	R.Anushiya	The Riveraa Pumps, Cbe	11/06/2018	15/06/2018
32	IV	M.Ellakkiya	The Riveraa Pumps, Cbe	11/06/2018	15/06/2018

IV	J.Kousalya	Electric Loco Shed, Erode	11/06/2018	13/06/2018
IV	I.Infranta Merlin	Electric Loco Shed, Erode	11/06/2018	13/06/2018
IV	D.Indhirani	Electric Loco Shed, Erode	11/06/2018	13/06/2018
IV	P.Bavithra	Electric Loco Shed, Erode	11/06/2018	13/06/2018
IV	S.Bharathi	Seshasayee Paper and Boards Ltd.,	11/06/2018	15/06/2018
IV	K.Gowtham	Aqua Flow	11/06/2018	15/06/2018
IV	S. Hari Haran	Aqua Flow	11/06/2018	15/06/2018
IV	T.M.Arunmozhi	Sharp Liquid Tech Foundry Division	11/06/2018	15/06/2018
IV	A.Andrew Franklin Raj	Sharp Liquid Tech Foundry Division	11/06/2018	15/06/2018
IV	S.Kesava Suriyan	Think Aside	11/06/2018	17/06/2018
IV	S.P.Keerthi Aravind	Ambal Autos	11/06/2018	15/06/2018
IV	R.Sujitha	Electric Loco Shed	11/06/2018	13/06/2018
IV	V.Saravanakumar	BSNL (Dharmapuri)	11/06/2018	15/06/2018
IV	E.Vijay	BSNL (Dharmapuri)	11/06/2018	15/06/2018
IV	G.Priya	ICTC (Coimbatore)	11/06/2018	16/06/2018
IV	P.Vannatharani	ICTC (Coimbatore)	11/06/2018	16/06/2018
IV	S.Nevash	ICTC (Coimbatore)	11/06/2018	16/06/2018
IV	P.Kiruthika Devi	TNEB (Dharmapuri)	16/06/2018	18/06/2018
II	A.Hari Priyadharshini	TAQA Neyveli Power Company Private Limied	18.06.2018	22.06.2018
IV	P.Chaarumathi	Durga Tech, Research & Development, Cbe	18/06/2018	23/06/2018
IV	S.R.Divya	Durga Tech, Research & Development, Cbe	18/06/2018	23/06/2018
	IV I	IV I.Infranta Merlin IV D.Indhirani IV P.Bavithra IV S.Bharathi IV K.Gowtham IV S. Hari Haran IV T.M.Arunmozhi IV A.Andrew Franklin Raj IV S.Kesava Suriyan IV S.P.Keerthi Aravind IV R.Sujitha IV V.Saravanakumar IV E.Vijay IV G.Priya IV G.Priya IV P.Vannatharani IV S.Nevash IV P.Kiruthika Devi II A.Hari Priyadharshini IV P.Chaarumathi	IV I.Infranta Merlin Electric Loco Shed, Erode IV D.Indhirani Electric Loco Shed, Erode IV P.Bavithra Electric Loco Shed, Erode IV S.Bharathi Seshasayee Paper and Boards Ltd., IV K.Gowtham Aqua Flow IV S. Hari Haran Aqua Flow IV T.M.Arunmozhi Sharp Liquid Tech Foundry Division IV A.Andrew Franklin Sharp Liquid Tech Foundry Division IV S.Kesava Suriyan Think Aside IV S.P.Keerthi Aravind Ambal Autos IV R.Sujitha Electric Loco Shed IV V.Saravanakumar BSNL (Dharmapuri) IV E.Vijay BSNL (Dharmapuri) IV G.Priya ICTC (Coimbatore) IV P.Vannatharani ICTC (Coimbatore) IV S.Nevash ICTC (Coimbatore) IV P.Kiruthika Devi TNEB (Dharmapuri) II A.Hari Priyadharshini TAQA Neyveli Power Company Private Limied IV P.Chaarumathi Durga Tech, Research & Development, Cbe	IV   I.Infranta Merlin   Electric Loco Shed, Erode   11/06/2018   IV   D.Indhirani   Electric Loco Shed, Erode   11/06/2018   IV   P.Bavithra   Electric Loco Shed, Erode   11/06/2018   IV   S.Bharathi   Seshasayee Paper and Boards Ltd.,   IV   K.Gowtham   Aqua Flow   11/06/2018   IV   S. Hari Haran   Aqua Flow   11/06/2018   IV   T.M.Arunmozhi   Sharp Liquid Tech Foundry Division   IV   A.Andrew Franklin Raj   Sharp Liquid Tech Foundry Division   IV   S.Kesava Suriyan   Think Aside   11/06/2018   IV   S.P.Keerthi Aravind   Ambal Autos   11/06/2018   IV   S.P.Keerthi Aravind   Ambal Autos   11/06/2018   IV   R.Sujitha   Electric Loco Shed   11/06/2018   IV   V.Saravanakumar   BSNL (Dharmapuri)   11/06/2018   IV   E.Vijay   BSNL (Dharmapuri)   11/06/2018   IV   P.Vannatharani   ICTC (Coimbatore)   11/06/2018   IV   P.Kiruthika Devi   TNEB (Dharmapuri)   16/06/2018   IV   P.Kiruthika Devi   TNEB (Dharmapuri)   16/06/2018   IV   P.Chaarumathi   Durga Tech, Research & Development, Cbe   Durga Tech, Research & Durga Te

			Durge Toch Posserch 8		
54	IV	K.V.Mehareethaa	Durga Tech, Research & Development, Cbe	18/06/2018	23/06/2018
55	IV	G.Chandhini	BSNL, Nilgiris	18/06/2018	23/06/2018
56	IV	B.Chithra	Code Bind Technologies	18/06/2018	23/06/2018
57	IV	S. Shanmati	Code Bind Technologies	18/06/2018	18/06/2018
58	IV	M. Nethra	Code Bind Technologies	18/06/2018	18/06/2018
59	IV	V.Rajashree	Code Bind Technologies	18/06/2018	18/06/2018
60	IV	Nithya Dharshana	Code Bind Technologies	18/06/2018	18/06/2018
61	IV	Pavithra	Code Bind Technologies	18/06/2018	18/06/2018
62	IV	P.Vanmathy	Code Bind Technologies	18/06/2018	18/06/2018
63	IV	P. Subhasree	MAS Solar Systems Pvt. Ltd., Cbe	19/06/2018	23/06/2018
64	IV	R.Muthunivedha	MAS Solar Systems Pvt. Ltd., Cbe	19/06/2018	23/06/2018
65	IV	P.Nithika	MAS Solar Systems Pvt. Ltd., Cbe	19/06/2018	23/06/2018
66	IV	S.Susma	MAS Solar Systems Pvt. Ltd., Cbe	19/06/2018	23/06/2018
67	IV	S.Tharunika	MAS Solar Systems Pvt. Ltd., Cbe	19/06/2018	23/06/2018
68	IV	Bhagya Sasi	MAS Solar Systems Pvt. Ltd., Cbe	19/06/2018	23/06/2018
69	IV	R.Devisri	MAS Solar Systems Pvt. Ltd., Cbe	19/06/2018	23/06/2018
70	IV	L.Devaprakash	Manfree Technologies	21/06/2018	22/06/2018
71	IV	P.Jagadesh	Manfree Technologies	21/06/2018	22/06/2018
72	IV	J.Gokul	Manfree Technologies	21/06/2018	22/06/2018
73	IV	C.Chakravarthi	Manfree Technologies	21/06/2018	22/06/2018
74	IV	R.Hari Krishann	Manfree Technologies	21/06/2018	22/06/2018

## **Sports Activities**

S.No	Student Name	Event	Venue	Date
1	Vyshali M.	Chess	Sri Krishna College of Engineering and Technology, Coimbatore.	29/01/2018 - 05/02/2018
2	Manoj Kumar M.	Volley Ball	Coimbatore Institute of Technology, Coimbatore	09/03/2018 - 11/03/2018
3	Manoj K.	Volley Ball	Coimbatore Institute of Technology, Coimbatore	09/03/2018 – 11/03/2018
4	Manoj Kumar M.	Volley Ball	Kalaignar Karunanithi Institute of Technology, Coimbatore	25/03/2018 – 29/03/2018
5	Manoj K.	Volley Ball	Kalaignar Karunanithi Institute of Technology, Coimbatore	25/03/2018 – 29/03/2018
6	Ragghav S.	Volley Ball	PPG Engineering College, Coimbatore	08/02/2018 - 9/02/2018
7	Ragghav S.	Volley Ball	Sri Krishna Engineering & Technology, Coimbatore	29/01/2018 – 30/01/2018
8	Ragghav S.	Volley Ball	KIT Engineering College, Coimbatore	26/03/2018 – 28/03/2018
9	Ragghav S.	Volley Ball	Sri Ramakrishna Engineering College, Coimbatore	18/01/2018 – 20/01/2018
10	Naveen N.	Basket Ball	Sri Krishna Engineering College, Coimbatore	29/01/2018 – 30/01/2018
11	Naveen N.	Basket Ball	Coimbatore Institute of Technology, Coimbatore	09/03/2018 – 10/03/2018

#### **Alumni Corner**

Name: Er. Aswinth Raj

Designation: Project Engineer and Technical Editor

at CircuitDigest.com

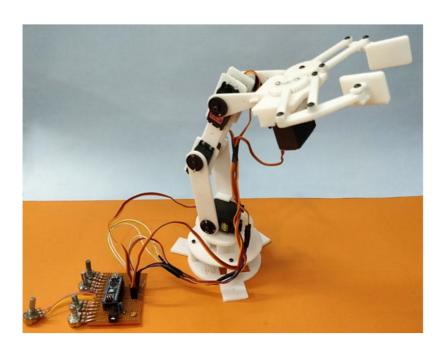
**Experience:** • Technical Editor Circuit Digest

March 2017 - Present (1 Year 3 Months) India

Embedded System Engineer

Ampere Vehicles Pvt Ltd

January 2016 – April 2017 (1 Year 4 Months)



Record and Play 3D Printed Robotic Arm using Ardunio

Robotic Arms have proved themselves useful and more productive in many applications where speed, accuracy and safety is required. But to me, what's more than that is these things are cool to look at when they work. I have always wished for a robotic arm that could help me with my daily works just like Dum-E and Dum-U that Tony stark uses in his lab. These two bots can be seen helping him while building the Iron man suits or filming his work using a video camera. Actually Dum-E has also saved his life once, and this is where I would like to stop it because this is no fan Page. Apart from the fictional world there are many cool real world Robotic Arms made by Fanuc, Kuka, Denso, ABB, Yaskawa etc. These robotic arms are used in production line of automobiles, mining plants, chemical industries and many other places.

So, in this tutorial we are going to build our own Robotic Arm with the help of Arduino and MG995 Servo motors. The Robot will have a total of 4 Degree of Freedom (DOF) excluding the gripper and can be controlled by a potentiometer. Apart from that we will also program it to have a Record and play feature so that we can record a motion and ask the Robotic Arm to repeat it as many times as we require it. Sounds cool right!!! So lets start building.

#### Material Required

- Arduino Nano
- 5 MG-995 Servo Motor
- 5-Potentiometer
- Perf Board
- Servo horns
- Nuts and Screws

Note: The body of the robotic arm is completely 3D Printer. If you have a printer you can print them using the given design files. Else, uses the 3D model provided and machine your parts using wood or acrylic. If you don't have anything then you can just use cardboards to build simple Robotic Arm.



Real Time Face Detection and Tracking Robot using Ardunio

Ever wanted to build a Face Tracking Robotic Arm or Robot by simply using Arduino and not any other programming like OpenCV, visual basics C# etc? Then read along, in this project we are going to implement face detection by blending in the power of Arduino and Android. In this project, the mobile camera will move along with your face with the help of servos. The advantage of using the Android Mobile Phone here is that you do not need to invest on a camera module and the whole image detection work can be done in the phone itself, you do not need your Arduino connected to your computer for this to work. Here we have used Bluetooth Module with Arduino to communicate with Mobile wirelessly.

The Android application used in this project was created using Processing Android, you can either directly install the application by downloading the APK file (read further for link) or put on your programming cap and make your own more appealing Android Application using the Processing Code given further in the Tutorial. Learn more about Processing by checking our previous Processing Projects.

By the end of this tutorial you will have a Mini Tilt and Span Robotic Arm that could track your face and move along with it. You can use this (with further advancement) to record your vlog videos or even take a selfie with the rear camera of your mobile phone since it positions your face exactly at the centre of your mobile screen. So!! Sounds interesting? Check the Demo Video at the end this tutorial to see it working. Let's see how we can build one...

I have tried my best to make this project to work as simple as possible, anyone with minimum knowledge on hardware or coding can use this guidelines to make this project work in no time. However once you make it I suggest you to get behind the codes so that you can really know what makes this thing work and how.

#### Materials Required:

- 1. Arduino Nano
- 2. Servo motor SG90 2Nos
- 3. Android Phone with decent camera
- 4. HC-05/HC-06 Bluetooth Module
- 5. Computer for programming
- 6. 3D printer (optional)
- 7. 9V Battery

Name: Dineshkumar S.S.

Designation: Senior System Engineer

Cognizant, Coimbatore



#### திருக்குறளும் அறிவியலும்!

தமிழன்னை சூடிக்கொண்ட எத்தனையோ அணிகலன்கள் இன்னும் நம் கைகளிலே புத்தகமாக இருந்தாலும், அந்த தமிழ் அன்னையின் மணிமுடியில் வைரக்கல்லாக இருப்பது திருக்குறள். உலகத்தின் அதிக மொழிகளில் மொழிபெயர்க்கப்பட்ட தமிழர்களின் ஒப்பற்ற நூல் என்ற பெருமை திருக்குறள் ஒன்றிற்கே உண்டு. உலகப்பொதுமறை என்கிற பெயர் வரக் காரணமுமே கூட திருவள்ளுவர் சமண சமயத்தவர் என்றாலும் அந்த நூல் எந்த சமய, மத, இன சாரப்பும் இல்லாமல் இருப்பது தான். இரண்டு வரிகளில் மிகக் கூர்மையான செய்திகளை சொல்லக் கூடிய ஆற்றல் திருவள்ளுவருக்கு இருந்திருக்கிறது.

வள்ளுவம் நீதிநூல் தான் என்றாலும் கூட அது தருகிற அறிவியல் செய்திகளும், அறிவியல் பார்வைகளும் ஏராளம்.ஆக இந்த கட்டுரை என்பது அந்த திருவள்ளுவம் தருகிற அறிவியல் செய்திகளும்(Scientic Informations), அறிவியல் பார்வைகளும் (Scientific Outlook) பற்றிய ஒரு குருகிய விவாதமே. ஒரு சுவையான செய்தியைச் சொல்ல வேண்டும். இந்த ஒப்பற்ற நூலின் ஓலைச்சுவடிகள் இன்னமும் சென்னை பல்கலைகழகத்தின் ஓலைசுவடி அருங்காட்சியகத்திலே இருக்கிறது. அதை இந்த நாட்டுக்கு கொடுத்தவர்கள் கோவை மக்கள். ஆங்கிலேயே அதிகாரி ஹாரிங்டன் அவர்கள் தமிழ் ஓலைச்சுவடிகளை சேகரித்த காலத்திலே அவரிடம் திருக்குறள் ஓலைச்சுவடிகளை கொடுத்தவர் அவரது சமையலர் திரு.தங்கப்பன்னார் அவர்கள். அவரின் பேரன் தான் அய்யா திரு.அதியோத்திதாச பண்டிதர் அவர்கள். தமிழர்கள் ஒரு காலத்திலே ஓலைச்சுவடிகளை அனல்வாதம் புனல்வாதமாய்(ஓலைச்சுவடிகளை தண்ணீரில் விடுவதும், அடுப்பில் எரிப்பதும்) வீண்டித்த வரலாறும் உண்டு.

#### அறிவியல் கூறுகள்:

வெள்ளத்தனைய மலர்நீட்டம்: வள்ளுவர் உள்ளத்தின் உயர்வை இப்படிச் சொன்னார் வெள்ளத்தனைய மலர்நீட்டம் மாந்தர் தம் உள்ளத் தனைய துயர்வு. ஒரு குளத்தின் ஆழத்தை பொருத்து வளர்ச்சி பெறும் தாமரையின் உயரத்தைப்போல மனிதர்கள் தங்கள் உள்ளத்துக்கு ஒப்ப உயர்வார்கள் என்கிறார் வள்ளுவர். இதை அறிவியல் விஞ்ஞானிகள் பின்னாளிலே ஆயிரம் ஆண்டுகளுக்கு பின் தான் உறுதிபடுத்தியிருக்கிறார்கள். "THE MORPHOLOGY OF AQUATIC PLANTS", அதாவது நீர்தாவரங்களின் வளர்ச்சி கூறுகள் பற்றி ஆராய்ந்த லாரன் அலெக்ஸாண்டரும் (Lauren Alexander), இசபெல்லா அபார்டும்(Isabella abart) நீரில் இருக்கும் தாவரங்களின் தண்டுகள் நீரின் உயரத்தைப் பொருத்தே வளரும் என்று கண்டுபிடித்தார்கள் . அறிவியல் இன்று சொல்வதை அன்றே புரிந்திருந்தவர் வள்ளுவர் என்பது கண் கூடு.

#### கோபர்நிக்கஸும் வள்ளுவரும்!

வள்ளுவர் மானுடம் பாடிய வானம்பாடி, அவர் உழவர்களை கடவுளர்க்கும் மேலே உயர்த்திப்பார்த்தவர்.அதனால் தான் தெய்வத்தால் ஆகாதெனினும் முயற்சி தன் மெய்வருத்தக்கூலி தரும் என்று உழைப்பைக் கடவுளுக்கும் மேலே உயர்த்திச் சொல்கிற துணிச்சல் வள்ளுவருக்கு வந்தது. அப்படி அவர் உழவை குறித்த ஒரு புகழ்பெற்ற குறளில்

"சுழன்றும் ஏர் பின்னது உலகம் அதனால்

உழன்றும் உழவே தலை" என்கிறார்.

பல தொழில்களைச் செய்து சுழன்று கொண்டிருக்கும் இந்த உலகம், ஏர்த்தொழிலின் பின்னேதான் சுற்ற வேண்டியிருக்கிறது. எனவே எவ்வளவுதான் துன்பம் இருப்பினும் உழவுத் தொழிலே சிறந்தது.இந்தக்குறளை ஊன்றி படிப்பவர்களுக்கு முதல் வார்த்தையின் அறிவியல் செய்தி விளங்கும். "சுழன்றும் ஏர் பின்னது உலகம்" என்றால் உலகம் சுழல்கிறது என்பதே செய்தி! இதை அதை கோபர்நிகஸுக்கு முன்பே கண்டு மிகச் சாதாரணமாக அன்றே சொன்னவர் திருவள்ளுவர்.அதுவரை உலகத்தை சுற்றுகிறது சூரியன் என்கிற ஜாதக அறிவியலை மட்டுமல்லாமல் உலகம் சுற்றுகிறது என்கிற செய்தியை ஒரு வார்த்தையிலேயே உணர்த்தியவர் வள்ளுவர்.வள்ளுவர் மைலாப்பூரில் பிறந்தார், அவர் மனைவி வாசுகி என்பதெல்லாம் வேறு ஒரு புலவர் பற்றிய குறிப்பு என்றும். இதில் உண்மை இல்லை என்றும் வரலாற்று நூலாசிரியர்கள் தெளிவாக எடுத்துரைக்கிறார்கள்.

#### மனித அறிவியல் தத்துவங்கள்:

அகழ்வாரைத்தாங்கும் நிலம் போல என பொருமையை போதிக்கிற அதே வள்ளுவர் ஒரு இடத்தில் பசியோடு மனிதனைப் படைத்த்கடவுள் பைத்தியமாய் அலையட்டும் என்று கோபம் கொப்பழிக்க போதிக்கிறார். வள்ளுவர் முரண்பாட்டு வாதி என்று நாம் சொல்ல முடியாது. இதில் கவனமாக பார்க்க வேண்டிய செய்தி வள்ளுவர் எங்கே பொருமையாக இருக்கச் சொல்கிறார் என்றால் நமக்கு ஒரு தீமை வரும் போது அதைப் பொருத்துக்கொள்ள வேண்டும் ஒரு நிலம் போல. அதுவே சக மனிதனுக்கு துன்பம் வரும் போது உடுக்கை(உடை) இழந்தவன் கையைப் போல உதவவேண்டும், போராட வேண்டும் என்கிறார்.

மனித வாழ்வில் எது அறிவு என்று வள்ளுவன் சொல்கிறான், இது எந்த தத்துவவாதியும் சொல்லாத கருத்து, நன்றின் பால் உய்ப்பது அறிவு. எது சகமனிதனுக்கு நன்மை தருமோ அதுவே அறிவு.பெற்ற தாய் பசியில் துடித்தாலும் சான்றோர் பழிக்கும் செயலை செய்து அவளைக் காக்க கூடாது என்று சொன்ன அதே வள்ளுவன், பொய்மையும் வாய்மையிடத்து என்று சொல்வதன் பொருள் ஒருவன் உயிரைக் காப்பாற்றுமானால் அந்த்பொய் தவறில்லை என்பது தான். உலகத்திலேயே பொய் சொல்லலாம் என்று விதிவிலக்கு அறம் சொன்னது வள்ளுவம் மட்டுமே. அதன் உட்பொருள் நன்மை பயக்கும் மனிதநேய மாண்புக்கு காவலாகுமானால் அந்த பொய் தவறில்லை என்பதே.

எந்த செயலுக்கும் ஒரு எதிர்வினை உண்டு என்று சொன்ன ஐன்ஸ்டினுக்கு முன்னோடி பிறர்க்கின்னா முற்பகல் செய்யின்என்று அறம் பாடிய வள்ளுவப் பெருந்தகை. பிற மொழி இலக்கியங்களை, ரஷ்ய நாவல்களை, உருது கவிதைகளை கொண்டாடுகிற தமிழர்கள் தங்கள் நிலத்தின் முளைத்த சூரியனை, வள்ளுவனை தரிசிக்க தயங்குவது ஏன் என்பது நமக்கிருக்கிற மிகப் பெரிய கேள்வி!!

வள்ளுவத்தைப் பரப்பவும், அதை சுவை பட விளக்கவும் தமிழர்கள் தலைப்பட வேண்டும் என்பதே நம் நிலைப்பாடு. இந்த கட்டுரை ஒரு விவாதம் என்று நான் தொடக்கத்தில் சொன்னேன். நான் உறையாடி முடித்து முற்றுப்புள்ளி வைக்கும்போதும் நீங்கள் அந்த உறையாடலை தொடர்வீர்கள் என்று நான் உளமாற நம்புகிறேன்!!



திருவள்ளுவர் சிலை கன்னியாகுமரி

# Students' Corner

# The Future of VR and AR

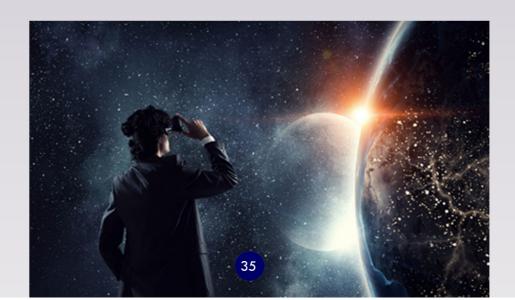
Virtual Reality and Augmented Reality are undoubtedly two of the biggest trends in the entire tech world. We saw the rise of VR in gaming applications and mapping software, but what is the future of this technology? How will Virtual Reality impact on our day to day life? Is it going to be a scary matter or is the technology just moving a bit too fast?

# SLAM, The future of VR

Simultaneous Localization and Mapping (SLAM) is the biggest focus when it comes to development at the minute: this technology is able to instantly translate data from the real world (by using sensors) into the virtual one and vice-versa. This avenue is currently studied by many different mobile app development companies, given the fact that Niantic based its success on a very embryonic version of SLAM, which was translating the surroundings into the app by using a floor algorithm

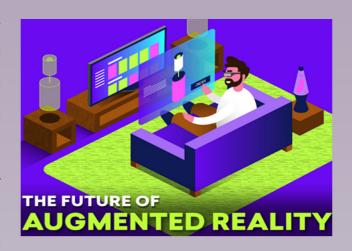


Simultaneous Localization and Mapping is currently used in TESLA's autopilot and summon, two core elements of the car's technology that let the vehicle process the surroundings in order to avoid crashes, understand how much battery is left and other vital pieces of information



# Simulation Is Reaching the Next Level

Flight simulator, the popular game for Windows, recently announced that an entire VR-based version will come in the future, providing an experience close to the actual pilot training which is currently done by many different companies such as British Airways and Turkish Airlines. By stating that, we can easily say that the future of such simulations will be relying on Virtual and Augmented Reality combined and not just in a video game-related scenario.



By combining physical peripherals and VR ones like Oculus Rift or HTC Vive, the user will be fully absorbed in an experience which will lead him to a better understanding of the experience itself. It's no secret that Google always wanted to explore the VR world. What we can expect in the near future is the combination of floor AR (the one used in order to present 3D maps in the current Google Maps application) and SLAM, in order to present a realistic projection of the surroundings in order to boost the user experience.

Maps will surely be VR focused in the near future, that is not a secret, we just have to wait and see how this will evolve in the near future.

# The future of AR

Augmented reality captures our imagination like no other technology can. AR advancements in gaming and entertainment have given a lot of steam to the industry and other markets are taking notice. Virtual and augmented reality technology has a lot to offer other industries, not just entertainment.

By 2025 the healthcare revenue from augmented and virtual reality will be around \$5 billion and some technology insiders expect to see the most advancements of AR technology in the healthcare industry. Already there is AR at work in hospitals and doctor's offices.

S. SELVAPRAKASH

# Facts of Tamil Nadu

- 1. The First Chief Minister in Tamil Nadu is Shri Subbarayalu Reddiyar.
- 2. The State Sport in Tamil Nadu is Kabadi.
- 3. Tamil Nadu is the 11th Largest State and Sixth in population.
- 4. Kolattam, Karagattam and Mylattam are the famous Folk Dance of this State.
- 5. Vivekanandar Rock Memorial is the most famous tourist destination of Tamil Nadu.
- 6. Tamil Nadu is created on 26 January 1950.
- 7. Dr.M.S.Swaminathan who is called as father of Green Revolution of India belongs to this State.
- 8. The Symbol of Tamil Nadu Government Seal is Srivilliputhur Andal Temple.

# **Fun Facts**

- 1. Earth has travelled more than 5,000 Miles in past 5 minutes.
- 2. 10% of the world population is left handed.
- 3. Chewing gum while you cut an onion will help keep you from crying.
- 4. Ketchup was used as a medicine back in 1930's.
- 5. A hard boiled egg will spin but a soft boiled egg will not.
- 6. The gorilla burp when they are happy.
- 7. Chorophobia is the fear of fun.
- 8. Individual human being breathe an average about 8,000,600 times a year.

V. Saravana Kumar III EEE 'B'

# **Technical Facts**

- 1. The very first Apple Logo Feature Sir Issac Newton sitting underneath a tree with an apple around to hit his head.
- 2. On an average work day, a typist's fingers travel about 12.6 miles.
- 3. On 1st April 2005, NASA pull the prank telling the world that they had found water on MARS.
- 4. If you were to have your picture taken by the very first Camera, you'd need to sit still for 8 hours.
- 5. The first alarm clock could only ring at 4 A.M.
- 6. The first country to build drones was Israel, with Israel aerospace industries heading the charge items of export numbers.
- 7. In 1984, the number of Internet devices reached 1000. By 1992, it reached 1 Million and in 2008, the number of Internet devices reached 1 Billion.
- 8. The first word that was ever auto connected was "teh" to "the". You corrected it by pressing the left arrow and F3.
- 9. The word "ANDROID" means a human with a Male robot appearance.
- 10. Face book has blue colour scheme because the creator, MARK ZUCKERBERG cannot see the colour red and green.
- 12. Spending 1 hour a day on social media reduces the probability of a child being completely happy with their life by 14%.
  - P. Bavithra
  - D. Indhirani
  - I. Infranta Merlin

III EEE 'A'

# பெற்றோர்

வாழ்க்கை என்னும் விலை உயர்ந்த செல்வத்தை கொடுப்பவர் பெற்றோர் உணவுடன் அறிவு, பாசம் மற்றும் நற்கருத்துக்களை சேர்த்து ஊட்டுபவர் பெற்றோர் நம்மைப்பற்றி நினைப்பதும், நமக்காகவே வாழ்வதும் என்றிருப்பவர் பெற்றோர் உடும்பைப் போல உறுதியான பிடிகொண்டது பெற்றோரின் உறவு படகு துடுப்பினைப்போல நம் வாழ்க்கையை முன்னேறச்செய்வது பெற்றோர் பெற்றோரின் ஆசிகள், ஆயிரம் தெய்வங்களை வழிபடுவதற்கு சமம் தெய்வம், ஆசிரியர் மற்றும் நட்பு என்ற பல உறவுகளின் உருவம்தான் பெற்றோர் வாழ்க்கை என்னும் பயணத்தில் இறுதிவரை தூண்டுகோலாய் இருப்பது பெற்றோர்



# கல்வி



மயிலுக்கு அழகு தோகை மனிதனின் வாழ்க்கைக்கு அழகு கல்வி !
பயிரை செழிக்க உதவுவது உரம் மனிதனின் வாழ்க்கை செழிக்க உதவுவது கல்வி !
சமுதாயத்தை புரட்டிப்போடும் வல்லமை பெற்றது கல்வி !
யூட்டிற்கு தேவை திறவுகோல் மனிதன் வாழ்க்கைக்கு தேவை கல்வி !
மனிதன் வளரத் தேவையானது உணவு அறிவு வளரத் தேவையானது கல்வி !
பணம் கொடுத்தாலும் வாங்க முடியாத ஒரே செல்வம் கல்விச்செல்வம்
மதுரைக்கு அழகு மீனாட்சியம்மன் கோயில் மனிதனுக்கு அடையாளம் கற்ற கல்வி கல்வி செல்வாக்கிற்கு மட்டும் அல்ல மனிதனை சீர்திருத்துவதற்கும் தான்

வே.சரவணக்குமார்

மூன்றாம் ஆண்டு மின்னியல் மற்றும் மின்னணுவியல்



# நண்பன்

பெற்றோர்க்கு அடுத்த ஸ்தானத்தை இடம்பெறுபவன் நண்பனே !
பெற்றோர்க்கு இணங்க சம உரிமை பெற்றவன் நண்பனே !
பாசத்திலும் நேசத்திலும் பெற்றோரை மிஞ்சியவன் நண்பனே !
நம் இன்பத்துன்பங்களை பகிர்ந்து கொள்பவன் நண்பனே !
பலனையும் வேறுபாட்டையும் பார்க்காமல் பழகுபவன் நண்பனே !
தன்னைப் பாராமல் தன் நண்பனின் நலத்தினை பார்ப்பவன் நண்பனே !
உதவி என்றால் திரண்ட வெள்ளம் போல் வருபவன் நண்பனே !
நண்பர்களோடு இருக்கும் நாட்கள் சொர்க்கத்திற்கு ஈடாகாது !

வே.சரவணக்குமார்

மூன்றாம் ஆண்டு மின்னியல் மற்றும் மின்னணுவியல்

# வெற்றி நிச்சயம்

வாரித் தருகின்ற

வள்ளல் இருக்கின்றான்

வாருங்கள் இளைஞர்களே!

முயற்சியின் வாசலுக்கு !

கோட்டை அகழியில்லை

கொல்லவரும் காவல் இல்லை

பூட்டும் கதவையும் இல்லை

புறப்படுங்கள் போய் வருவோம்

வெற்றியின் வாசலுக் கே !

இளமை செழித்திடவே

ஏற்ற பொருள் பெறலாம்

வளமை கொழித்திடவே

வாய்ப்புகள் கதவைத் தட்டலாம்

முயற்சி செய் இளைஞனே

வெற்றி உனக்கு நிச்சயமே !

ஏறிவந்த ஏணிப்படியை

உதைத்து தள்ளாமல்

மனதிலே அதனைக் கொண்டு

உழைக்கும்போது

உனக்கு வெற்றி நிச்சயமே !

மாணவ சமுதாயமே

உனக்கு வெற்றி எப்போது ?

படிப்பினையே வெறியாய்க் கொண்டு

கவனத்தை குறிக்கோளாய்க் கொண்டு

விடாமுயற்சியாய் படிக்கும்போது

உனக்கு வெற்றி நிச்சயமே !

முயற்சியின் கடைசி

படிதான் வெற்றி

தோல்வியின் முதல்

படிதான் வெற்றி

எதிர்காலத்தின் ஒளிவிளக்குகள்

வருங்காலத் தூண்கள் என

வர்ணிக்கப்படும் மாணவச் சமுதாயமே

விழித்துக் கொள் !

உனது செயலை

உயிர் மூச்சாகக் கொண்டு

கடும் முயற்சி செய்

உனக்கு வெற்றி நிச்சயம் !

மாணவ சமுதாயமே

நீ மண்புழுவல்ல

நீ மனது வைத்து முயன்றால்

கருங்கல் பாறையும்

நொறுங்கிவிடும்

உனது கைகளில்

பூமி பந்து தானே

சுழன்று வரும்.

வெற்றிக் கனியை

நீ பறிக்கும்போது

உனது கவலையெல்லாம்

பாறாங்கல் மீது விழும்

மழைநீர் போலாகும்

பளிச்சென்று உன்

துன்பம் தானே

பறந்து போகும்.

சிந்தனைகள் ஒன்றுபட்டால்

செயல்த்திட்டம் உருவெடுத்தால்

நிந்தனைகள் ஒதுக்கிவிட்டால்

நெஞ்சுறுதி கொண்டுவிட்டால்

வந்தனைக்கு மயங்கிடாமல்

வருந்துயர்கள் எதிர்த்து நின்று

மந்தமில்லாச் செயல்கள் செய்ய

வருங்காலம் உனக்கு

வெற்றி நிச்சயமே !

ம வைசாலி

இரண்டாம் ஆண்டு மின்னியல் மற்றும் மின்னணுவியல்

# Next-Generation, Miniature High Voltage Power Modules

# The Low Voltage Revolution

The wide availability of miniature low voltage power modules has witnessed a drastic change in the architecture of power distribution sector. The inventions of small, lightweight modules mounted right at the devices are the energizing factors in recent years. To build a main power supply subsystems which is capable of providing different voltages and power are no longer required. This required long runs of power wire sized for the total needs of the system, one set for each voltage. The modularized approach enabled using a single isolated DC bus with a standard supply feeding each circuit

# High Voltage Faces the Same Challenge

High voltage quickly moved to modular localized solutions. On the other hand, the high voltage has to be treated very differently. In a high voltage power supply, the designer faces the same problems as low voltage designers. However, the additional constraints of physics, chemistry, and topology are added here. In the past, this task was left to specialists who usually had to create a new design for each application where there was very little standardization. In case of high voltage supplies, designs tend to be oversized for their power rating in order to allow for extra spacing of the internal wiring and components. Further, there was the problem of safely routing the high voltage output to its load. As the number of applications requiring high voltage grew, there was pressure to change this early design strategy.

To meet this challenge, high voltage power supply manufacturers designed proprietary methods to build off-the-shelf modules in very small standard packages that could be used in much the same way as low voltage power modules. Producing high voltage requires a transformer plus rectifiers and capacitors. At 60 Hz, these components have to be large. The first generation high voltage module designers therefore understood that the key to significantly reducing size was to work at relatively high frequencies rather than 60 Hz. Their approach was to start with low voltage DC, typically in the range of 12 to 28 VDC, and then to use an oscillator-based inverter circuit to produce a low voltage, high-frequency input for the transformer.

High frequency enabled extreme reductions in size, especially for the transformers and capacitors. However, high voltage engineers were still faced with a serious problem that low voltage engineers didn't have to worry about — the possibility of arcing between high voltage points and between high voltage and ground. This meant that there were limits to how small these supplies could be made, and still ensure reliable operation. High voltage never stops looking for, and creating, pathways to escape being confined; therefore unique topologies were developed to achieve the long-term reliability demanded by end users. Another part of the solution to that problem was in developing encapsulation techniques that enabled the spacing for high voltages to be significantly reduced, while at the same time allowing for adequate heat dissipation.

# Toward the next horizon of Industry 4.0

We appear on the cusp of a fourth Industrial Revolution, also known as Industry 4.0. Enabled by the concurrent development and integration of digital and physical technologies, Industry 4.0 could transform the manufacturing ecosystem and many other sectors and industries beyond. As these waves of change reshape the competitive landscape, organizations should think strategically when determining where to focus and invest, to build their capabilities and coloborating with external partners.

While collaborations in general can bring benefits to all sides, enabling each to gain from the expertise of the other. This can play a crucial role in offering some unique and diverse solutions that help define this fourth Industrial Revolution.

# THREE HORIZONS OF INDUSTRY 4.0

Process optimization: In this phase, companies look inward to improve current processes. Initiatives in this phase typically target a specific need and have a clearly visible Return on Investment (RoI). These types of activities can represent the easiest step for organizations to take, as they represent cost savings, rather than the uncertainty of new processes.

Process flow and quality: Companies working on the second horizon increase their level of connectivity to improve process flow and upgrade quality. In this phase, organizations can seek to evolve their supply chains toward digital supply networks,6 in which information flows throughout all stages of the interconnected value chain, enabling greater responsiveness and more informed decision-making.

New business models: In the third horizon, new business models are created. This can consist of new products, increased product personalization, or entirely new revenue models. While a great deal of companies can agree that truly transformative value lies in this horizon, many still struggle to formulate how to successfully realize an effective model.

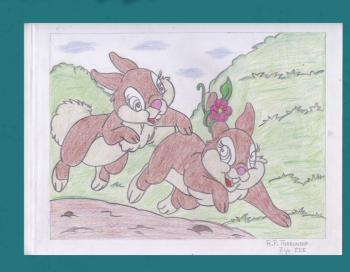
# Getting started: Start small, think big:

The technological advancements brought on by Industry 4.0 have disrupted the ways in which business is conducted. Companies, especially manufacturers, should actively seek to enhance their systems and products to remain competitive. No longer will problems likely be solved simply by looking inward, but rather by tapping into the expertise of others, forming partnerships to create new and innovative solutions.

Dr. V. Kumar Chinnaiyan Prof. / EEE

# ART GALLERY

















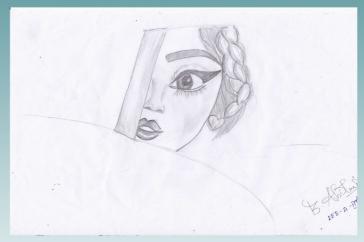










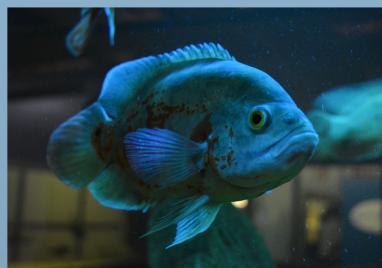


# **Photo Gallery**











Photographs By
Aravinth R.

III EEE 'A'

# Photo Gallery

Industrial Visit - Kaynes Technology, Mysore





# Articles / Events in Newspaper

# THE NEW INDIAN EXPRESS

# **ENGAGEMENTS**

Kovai Kalaimagal college of arts and science: field work at Jakirnaickenpalayam village at 10am

KG college of arts and science: international research conference at 10 am

Sree Narayana Guru College: seminar at 10:30am

Sri Ramakrishna college of arts and science for women: conference at the college premises at 9:45am

Tamil Nadu agriculture university: training programme at Chembukarai at 10 am

The Indian Chamber of commerce and industry: meeting at 5:30pm

Maruthi physical education college: sports day at the college premises at 2:30 pm

KPR institute of engineering and technology: workshop at the college premises at 9am

Dr RV arts and science college: association meeting at 2:30pm

# THE HINDU

# COIMBATORE TODAY

### RELIGION

Arsha Avinash Foundation: Talkon Tattva Bodha by Ponmani Avanashilingam, 104, 3rd street, Tatabad, 6 pm

## CULTURE

Kalanjali: All India Handicraft and Handloom Exhibition, JJ Hall, near Taj Vivanta, Race Course, 10 a.m.

## GENERAL

Government College of Technology: Annual Alumni Meet, GCT Alumni Centre, 9 a.m.

Coimbatore Productivity Council: Productivity Week Celebrations, Valediction and Prize distribution, Council conference hall, Race Course, 5.30 p.m. AJK College of Arts and Science: Two-day conclave of Young Chef, AJK Campus, 9.30 a.m.

Kovai Kalaimagal College of Arts and Science: NSS - Field work, Jahirnaickenpalayam, 10 a.m.; Tamil Department: Workshp on Tamil Literature, 10 am

KPR Institute of Engineering and Technology: One-day workshop on Restructuring of Power system - Need for renewable and energy storage, Veena Hall, 9.30 a.m.

Avanashilingam Institute for Home Science and Higher Education for Women: National Conference on Home Science Towards Young India, 9.30 a.m.

Committee of Hosts: Felicitations to Yoga exponent 98-year old Padmashree Nanammal, BMN Mandapam, Kavundapalayam, 5 pm

Sree Narayana Guru College: Seminar, 10.30 a.m.







## கோவை

- இந்திய தொழில் வர்த்தக சபை, ஃபிக்கி அமைப்பு: கருத்தரங்கு, சேம்பர் டவர், அவிநாசி சாலை, மாலை 5.30.
- கே.பி.ஆர். பொறியியல் மற்றும் தொழில்நுட்ப கல்லூரி: கருத்தரங்கு, அரசூர், காலை 9.30.
- அவிநாசிலிங்கம் மகளிர் நிகர்நிலை பல்கலைக்கழகம்:
   தேசிய அளவிலான கருத்தரங்கு, பாரதி பார்க் சாலை,
- இ.ஆர்.டி. மேலாண்மைப் பயிலகம்: தூய்மை பாரத இயக்க நிகழ்ச்சி, அவிநாசி சாலை, காலை 6.00
- டாக்டர் என்.ஜி.பி. கலை, அறிவியல் கல்லூரி: 20–வது விளையாட்டு விழா, காளப்பட்டி சாலை, காலை 8.30.
- கோவை மாவட்ட சிறு தொழில்கள் சங்கம்: சிறு தொழில்கள் வளர்ச்சிக்கான சேவைக் கூட்டம், கொடிசியா கூட்ட அரங்கு, ஹுசூர் சாலை, அண்ணா சிலை அருகில், மதியம் 3.00.
- பி.எஸ்.ஜி. தொழில்நுட்பம் மற்றும் பயன்சார்
   ஆராய்ச்சிக் கல்லூரி: கருத்தரங்கு, நீலாம்பூர், அவிநாசி
   சாலை, காலை 9.00.

# HE HINDU

## GENERAL

Nehru Institute of Information **Technology and Management:** conferene on Innovations in

Information Technology and Management, Thirumalayampalayam, 9.30 a.m.

**GRG School of Management** Studies: Silver Jubilee celebrations, and book launch, 4.30 p.m.

KPR Institute of Engineering and Technology: National Science Day Tech Science, 9 a.m.

Dr. NGP Arts and Science College: Exhibition, Paavai Arangam, 10 a.m. Sri Ramakrishna College of Arts and Science: National Science Day, SNR Auditorium, Nava India, 10 a.m.

KSG College of Arts and Science: conference on Developing Advance Research and Computer Technology, 10 a.m.

Sri Ramakrishna Engineering College: Inter collegiate meeting,



# அவிநாசிலிங்கம் மகளிர்

நிகர்நிலை பல்கலைக்கழகம்: தேசிய அறிவியல் தின விழா பாரதி பார்க் சாலை, காலை 11.00.

இந்து

**BLUU** 

- டாக்டர் என்.ஜி.பி. கலை, அறிவியல் கல்லூரி: தேசிய அளவிலான கருத்தரங்கம், காளப்பட்டி சாலை, காலை 9.30.
- கே.பி.ஆர். பொறியியல் மற்றும் தொழில்நுட்பக் கல்லூரி: தேசிய அறிவியல் தின கொண்டாட்டம், அரசூர், காலை 9.00.
- கே.எஸ்.ஜி. கலை, அறிவியல் கல்லூரி: கருத்தரங்கம், வரதராஜபுரம், காலை 10.00.
- சத்வித்யா சன்மார்க்க சங்கம்: சங்கத்தின் 104–ம் ஆண்டு விழா, சாந்தலிங்க அடிகளார் குருபூஜை விழா, இலக்கிய மன்ற விழா, பேரூர், காலை 9.30.
- ஸ்ரீகிருஷ்ணா கலை, அறி வியல் கல்லூரி: நாட்டு நலப் பணித் திட்ட முகாம், நாதேக வுண்டன்புதூர், காலை 10.00

Wed, 28 February 2018

# ENGAGEMENTS

Bharathiar University: Nobel lectures, 10 am

Kovai Kalaimagal College: Sports day, 9.30 am

Sree Narayana Guru College: National science Day, 10,30 am

Sri Ramakrishna College: National Science Day, 10 am

Avinashilingam Institute: Nat'nl Science day, research convention, 11 am

Nehru Institute of IT and Management: Conference on innovations in IT & management

KSG College of Arts and Science: Int'l Conference, 10 am

SREC Business school: CREZILS' 18, 9,45 am

Dr NGP College: Conference on banking sector, 9.30 am

**KPR Institute of Engineering** and Technology: National Science day celebrations, 9 am

SNS Rajalakshmi College: Conference on rejuvenation of Banking Industries in India, 10am

# නිගාගගම



ஆராய்ச்சிக்கான விஞ் ஞானப் பூர்வமான உத்திகள் மாநாடு: அவினாசிலிங்கம் பல்க லைக்கழகம், வேந்தர் பி.ஆர்.கி ருஷ்ணகுமார் பங்கேற்பு, காலை 9. தேசிய அறிவியல் தின விழா, காலை 11.

தேசிய அறிவியல் தின விழா: ஸ்ரீராமகிருஷ்ணா கலை, அறிவி யல் கல்லூரி, கல்லூரி வளாகம், காலை 10

தேசிய அறிவியல் தினம்: கே.பி. ஆர். பொறியில் மற்றும் தொழில் நுட்பக் கல்லூரி, கல்லூரி வளா கம், காலை 9

நவீன ஆராய்ச்சி மற்றும் கணி னித் தொழில்நுட்ப சர்வதேசக் கருத்தரங்கம்: கே.எஸ்.ஜி. கலை, அறிவியல் கல்லூரி, காலை 10.

கல்விக்கண்காட்சி: டாக்டர் என். ஜி.பி. கலை, அறிவியல் கல்லூரி, காலை 10:

கல்லூரி தின விழா: ஸ்ரீகுமரன் கலை, அறிவியல் கல்லூரி, கார மடை, காலை 9.30.

# *ூ*ன்றைய நிகழ்ச்சி

# ஆன்மிகம்

# அபிஷேக பூஜை

அரங்கநாதர் கோவில், மேட்டுப்பாளையம் ரோடு, காரமடை. • காலை 5:30

ஈச்சனாரி விநாயகர் கோவில், பொள்ளாச்சி ரோடு, காலை 6:30 மணி.

வனபத்ரகாளியம்மன் கோவில், தேக்கம்பட்டி

ரோடு, மேட்டுப்பாளையம். காலை 5:00 மணி.

செல்வ விநாயகர் கோவில், வடவள்ளி. • காலை 4:30 மணி.

பட்டிசுவாசுவாமி கோவில், பேரூர். • காலை 8:30 மணி.

# சொற்பொழிவு

சாதனா சதன், மாதவ் நகர், வடவள்ளி. • மாலை 5:30 மணி. தலைப்பு: தேவார இசை வழிபாடு.

# வெள்ளி விழா

ஜி.ஆர்.ஜி., மேலாண்மை கல்லூரி, பீளமேடு. காலை 10:00 மணி.

# தேசிய கருத்தரங்கு

நேரு தொழில்நுட்ப மற்றும் மேலாண்மை கல்லூரி, கிருமலையாம்பாளையம். ക്നെலെ 9:30 ഥങ്ങി.

# பயோ – புதுமைகள்

என்.ஜி.பி., கலை அறிவி யல் கல்லூரி, காளப்பட்டி ரோடு. • காலை 9:30

# தேசிய அறிவியல் தினம்

கே.பி.ஆர்., பொறியியல் மற்றும் தொழில்நுட்ப கல்லூரி, அரசூர். • காலை 9:00 ഥഞ്ഞി.

# நாராயணகுரு கல்லூரி,

க.க.சாவடி. • காலை 10:30 மணி.

**B.E. Programmes** CIVIL | CSE | ECE EEE | MECH | Biomedical

**B.Tech. Programmes** Chemical\*

M.E. Programmes CAD/CAM | CSE Structural | VLSI

Ph.D. Programmes CIVIL | CSE | ECE | MECH Physics | Chemistry





# Contact:

The HOD / EEE

Department of Electrical and Electronics Engineering KPR Institute of Engineering and Technology Arasur, Coimbatore - 641 407 hod-eee@kpriet.ac.in

85+ **Companies Visited** 

500+ **Offers** 

**Highest Salary** 10l

**Average Salary** 















































































































