

Cheers Compatriots,

The mesmerizing month of MARCH brings us new freshness for the year. The symbolic flower of this month is Daffodil. This pictures us about forgiveness, trust, honesty and true love.

We have come to an end to say "ADIEU" to our fellow seniors who taught us what the surrounding is actually about! It should be a merry memory when turned back, since we keep running in the sands of time. Water the beautiful garden with utmost love, from where you nourished and blossomed.

$$E = mc^2$$

Engineering = marching up x with courage x and craftsmanship.

Being clay is far better than being a shining pebble. Mould yourself to be the fittest of the survival.

Cheer up the achievers of this magnificent march!

"IF U WANT TO LIVE A HAPPY LIFE TIE IT TO A GOAL BUT NOT TO
PEOPLE OR THINGS" - *Albert Einstein*

Have a mystique experience of reading!!

S. Suriya

Second year



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MARCH!!!

Dear Friends...

A Mighty Month which considers the presence of Mighty WOMEN!!

Since it's a month for women, I would like to remind you friends Great Women... Kalpana Chawla (March 17, 1962-February 1, 2003) was an Indo-American astronaut and the first woman of Indian origin in space. Though her family is against her 'dreams' she persuaded them to chase her dreams.

She said that she always got excited looking into sky and attracted. But it is in her 10th grade that she realized that "This is what I want to do!" She made her goal clear just a mere dream and chased it perfectly.



Thus let's get our path to success from what we dreamt of. It's not too late to set up our career. With the above inspiration I'm positive that we'll make it happen. ALL THE BEST!!!

Thank You,

Raechel Annisha Angel. L (Second Year B)

STAFF ACTIVITIES/PUBLICATIONS/ACHIEVEMENTS

ACTIVITIES:

S.No.	Name of the Staff	Events/Guest Lecture	Topic/Event	Date	College
1.	Dr.M.Willjuice Iruthayarajan, Prof&Head & Dr.L.Kalaivani, Asso. Prof (SG)	Attend World Summit on Accreditation		18.03.2016 to 20.03.2016	NBA, New Delhi
2.	Dr.R.V.Maheswari, Asso. Prof	Chair Person	The International Conference on Circuit, Power and Computing Technologies ICCPCT- 2016	18.03.2016	Noorul Islam University, Kumaracoil, Thuckalay.

PUBLICATIONS:

1. *Mr.R.Madavan* and *Dr.Sujatha Balaraman*, “Failure analysis of transformer liquid - solid insulation system under selective environmental conditions using Weibull statistics method”, Engineering Failure Analysis, Vol.65, pp. 26-38, 2016.
2. *Dr.L.Kalaivani* and *Dr.R.V.Maheswari*, has presented a paper “Gap Analysis and Implications to develop Employability skills A case study of NEC”, in World Summit on Accreditation, New Delhi

DEPARTMENT R&D ACTIVITIES:

1. Anna University, Chennai has approved *Dr. M.Ravindran*, Asso. Prof as supervisor for Research under the faculty of Electrical and Engineering. His areas of specialization are Energy Engineering, Electrical Power Electronics.

DEPARTMENT ACTIVITIES
“HANDS ON TRAINING ON MATLAB TOOLBOXES
HTMT‘16”



A two day workshop on “Hands on Training on MATLAB Toolboxes – HTMT‘16” has been conducted on March 3rd & 4th 2016. The session was handled by experts from M/s.CoreEL Technologies, Bangalore. Around 40 participants from

various colleges were attended the workshop. The topics covered in the workshop are,

- ❖ GUI using MATLAB
- ❖ Applications of MATLAB & SIMULINK in Signal Processing
- ❖ Applications of MATLAB & Simulink in Image Processing
- ❖ Applications of MATLAB on Fuzzy logic & Neural networks & optimization
- ❖ C & HDL code generation
- ❖ Control system simulation

On first day they started with MATLAB simulink and basic numeric computations with MATLAB. Then in afternoon session they started graphical user interface using MATLAB and signal processing applications like signal import & export, signal generation, filter design and analysis etc.

On second day they started with image processing applications using MATLAB like image import & export, Morphological operation on images etc. and control system toolbox like physical modeling with Simscape, modeling electrical system etc. In afternoon session they explained Applications of MATLAB on fuzzy logic & neural networks & optimization.

“EEE ASSOCIATION - ALTANZIA2K16”

ALTANZIA2K16 is devoted to research and education in the theory and applications of all Electrical, Electronics, Digital, Communication, Automation & Embedded Engineering through various technical & non-technical events, also to bring about the knowledge of interdisciplinary teaming of relative Engineering domains.



14th March 2016, the Symposium was inaugurated at the Auditorium of National Engineering College. During Inaugural our Head of department Dr.M.Willjuice Iruthayarajan, Professor in his speech highlighted the importance and objectives of technical symposium. He talked about the projections and organizing such symposium to develop the skill set of the promising engineering students. He extended with the current crisis of Engineering in the society. He stressed upon the importance of participating in such important events and wished every participants. Apart from that he gave suggestions to the students regarding the carrier and also he motivated the students to take the proper decision at proper time

In the Inaugural Speech, Chief Guest, Mr.R. Immanuel, Associate Director, Iwave Technologies Private limited, Bangalore gave away a motivational speech to encourage the Engineering students. He talked about significance of National technical Symposium to enhance the technical skills of the students. He also appreciated the efforts put by the host institute for providing the platform to interact with their fellow students from other part of the region and also it provides an interface to the industrial needs and help in getting internship and placement. He also shared the intellect he gained from his years of experience in. He extended his best wishes to student participants and the host institute for present and future endeavors.

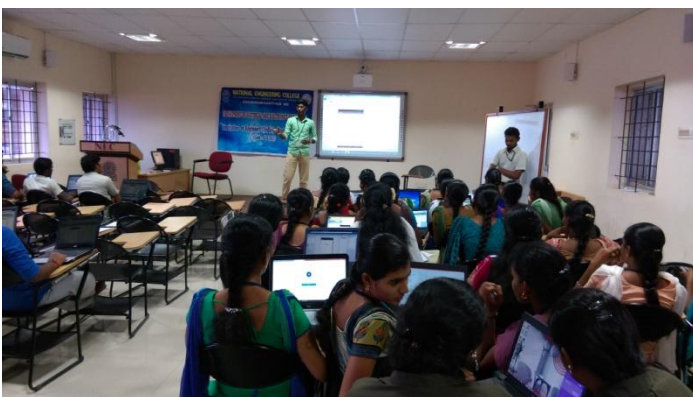
"EVERY GOOD THING HAS TO COME TO AN END, SO DID ALTANZIA 2K16". The National Level Technical Symposium ended with the winners of all the competitions being felicitated with awards and certificates

E-YANTRA ROBOTICS



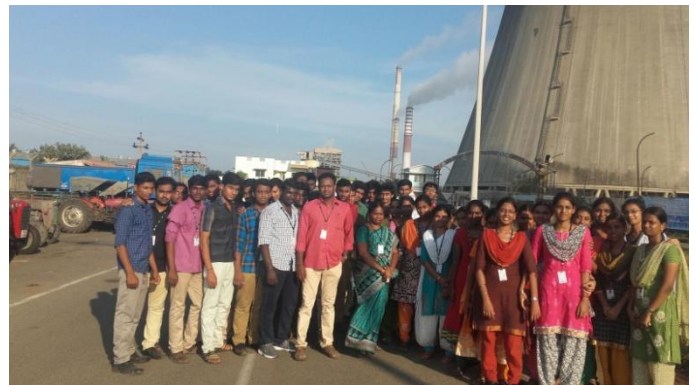
National Engineering College, eYantra-Robotics team conducted a one day workshop on the topic “e-Yantra Robotics” on 19.12.2015 & 20.02.2016 at Networks Laboratory, Dept. of ECE. From our department around 20 students from III year participated in the workshop. In the forenoon session, he gave a brief introduction about ATMEGA-2560 Firebird kit. In the afternoon session, students are given with hands-on session for the experiments, like 1. Buzzer alarm, 2. LCD display, 3. White line tracking, etc. The participated pre-final year students of EEE Dept got their participation certificates from **Dr.M.Willjuice Iruthayarajan, Prof and Head** on 07.03.2016.

INSTITUTE OF ENGINEERS (INDIA) WORKSHOP



On behalf of IE (I) students' chapter, EEE Department, "**Simple Android Development Using App Inventor**" WORKSHOP was organized for second and third year students on 09.03.2016. The workshop was handled by **Mr. Sivaram. S. G, Final year EEE**. Nearly 35 students participated and were benefited. This workshop provided awareness to use the App inventor to develop the simple android applications. This event was held in EEE Seminar hall from 3.30 to 5.30 pm

INDUSTRIAL VISIT



In this semester, we second year **EEE- 'A' section** went on an industrial visit to tuticorin "**Thermal power station**". Being the first time that I have been to a power station, I have been excited a lot and all my excitements have been completely satisfied by our guide who is at a position of SE in the power station.

The motor capacity of the station is said to be $3.5 \mu w$. The overall capable output of that station is $420 \mu w$. He also said that the whole station is controlled by the use of digital controls & sensors.

On being there I have got a lot of useful information which have me the motivation to study more about a thermal power station. As we all know "**Experience is the best teacher**". I suggest all my friends to have a practical experience on the working of the station.

ALUMNI INTERACTION



- ***Immanuel.R, Associate Director, Iwave Systems Tech.pvt.Ltd, Bangalore***

Department of EEE Association organized an Alumni Interaction for our students on 14.03.2016 on 11.30 PM at EEE Seminar Hall. He showed various motivation videos for the students. He provided the details about the job opportunities available. He conveyed the students to join in higher studies and central government job through GATE exams. Students were inspired by his interaction. Finally, the chief guest wished the students to lead a successful life



- ***Mr. M.Muthu Senthil Kumar, Asst Manager R&D, TVS Motor Company Ltd***

Department of EEE organized an Alumni Interaction for our students on 24.03.2016 on 11.30 PM at EEE Seminar Hall. During his interaction, the students acquired knowledge about the requirements that are vital to be placed. He revealed that, "Technical Knowledge should be brought up to date". His guidance made the students crystal clear to identify the right path to get in to job or higher studies. He pointed out the importance of Central and State Government Exams and advised the students to improve their reading habits. The students spent their time worth fully by getting valuable information from the knowledgeable person. Finally, the chief guest conveyed his hearty wishes to the students to lead a successful life.

MOCK INTERVIEW



EEE Association & Department Placement forum combined and organizes a Mock Interview for III Year Students. The ultimate aim of the interview is too bring out the students from fear while facing interviews. The interviews were scheduled as two sessions on 28.03.2016 & 29.03.2016 Totally 5 batches with 2 staff members and 1 final year placed students are in the group. After Completion the students came to an idea of Do's and Don'ts in interview.

Placement Details

On behalf of the Chairman, Managing Director, Director, Principal, Head of the Department and staff members, we heartily congratulates the final year students who placed in *M/s. Infoview Private Ltd., Bangalore, M/s. Axis Global Automation Private Ltd., Coimbatore, M/s. JRA Associates Ltd., Chennai, M/s. Vdart Software Services Private Ltd., Trichy, M/s. CSS corp, Chennai, M/s. Tata Consultancy services(TCS), Chennai, M/s. Seven Hills Cloud Technology Private Limited, Madurai and M/s. Suresoft Private limited, Pondicherry.* Campus drive in our campus during the month of March 2016.

Infoview



Ms. Indhumathy. M



*Ms. Nanthini
Dhanalakshmi. R*



Ms. Muthu Abirami. S



Ms. Thangeswari. P



Mr. Mohamedsuhail. S



Mr. Sam Maxwell. M



Mr. Muthu Karthik. R



Ms. Sathya. M



*Ms. Rashmi
Silvania. A*



Ms. Selvarani. S

AXIS[®]
global automation
Group of Companies



*Mr. Antony Iruthaya Raj
.J*



*Mr. Udhaya vijay.
S.M.K*



*Mr. Ramasubramanian.
S*

JRA Associates



Ms. Soma Sundari. A



Ms. Porchitra. S



Ms. Sangeetha.R.C



Mr. Narayanan. K



*Mr. Saravanan kumar.
R.S*



Ms. Aishwaryaa. A



Mr .Reddy.S.Vijay Sittamallu



Mr. .Atul Krishna. S. P

*SEVEN HILLS CLOUD TECHNOLOGY PRIVATE
LIMITED, Madurai*



Mr. Balachandar. A



Mr. Vignesh. R

- *Total No. of Students Placed : 23 No.s (March Month)*

HEARTY CONGRATULATIONS!!!!!!

Students Achievements/Activities

Students Achievements



Mr.P.Shanmugam, IV year EEE has received IE(I) STUDENTS CHAPTER – BEST STUDENT AWARD for his overall performance in academic, extracurricular activities and involvement in IE Students Chapter activities of our college at “2nd IE(I) Tamil Nadu state centre student’s and technician’s convention” held at Adhiyamaan College of Engineering, Hosur on 19.03.2016.



Mr. S.Prabhu and Mr. P.R.Prakash of II year students bagged second prize for their paper presentation titled “SMART POLLING SYSTEM”, at “2nd IE(I) Tamil Nadu state centre student’s and technician’s convention” held at Adhiyamaan College of Engineering, Hosur on 19.03.2016.

Second Year A

Co Curricular Activities - Paper Presentation

S NO	NAME	TITLE OF PAPER	VENUE	REWARDS	DATE
1	S.Bala abirami	Brain controlled artificial legs.	National Engineering College, Kovilpatti	3-RD PRIZE	10-03-2016 TO 11-03-2016

Technical Events

S NO	NAME	EVENT	VENUE	REWARD S	DATE
1	S.Bala abirami	CIRCUIT DEBUGGING QUIZ	National Engineering College, Kovilpatti	2-ND PRIZE	10-03-2016 TO 11-03-2016

Extra Curricular Activities

S NO	NAME	EVENT	VENUE	REWARDS	DATE
1	R.AJITH	ROPE CLIMBING	National Engineering College, Kovilpatti	2-ND PRIZE	10-03-2016 TO 11-03-2016

Second Year B

Co curricular Activities - Paper Presentation

S.NO	NAME	ORGANIZER	VENUE	REWARDS	DATE
1.	P.R.Prakash S.Prabhu	IE(I) Students chapter (2 nd IE(I) TamilNadu state center students' and technicians' convention)	Adhiyamaan Engineering College, Hosur	2 ND	18&19-03-2016

Projects

S.NO	NAME	ORGANIZER	VENUE	REWARDS	DATE
1.	R.Narain Krishna B.MathanaGopal P.R.Prakash	IEEE(SIPRO)	EEE, National Engineering College	3 rd	25-03-2016

Extra Curricular Activities

S.NO	NAME	EVENT	ORGANIZER	VENUE	REWARDS	DATE
1.	S.Maheshwari M.MaragathaValli	Slogan writing	NSS (on behalf of Election Commission of India)	National Engineering College, Kovilpatti	1 st	21-03-2016
2.	R.Narain Krishna	Quiz			2 nd	

Second Year C
Extra Curricular Activities

S.NO	NAME	EVENT	ORGANIZER	VENUE	REWARD S	DATE
1.	P.Rama Chandra Bharathi	Slogan writing	NSS (on behalf of Election Commission of India)	National Engineering College, Kovilpatti	2 nd	21-03-2016
		Elocution			1 st	
		Quiz				

Third Year A
Paper Presentations

S.NO	NAME	VENUE	REWARDS	DATE
1	S.Kirthika	National Engineering College, Kovilpatti	1 ST	10.03.2016 and 11.03.2016

Technical Events

S.NO	NAME	EVENTS	VENUE	REWARDS	DATE
1	S.Kirthika	Circuit	National Engineering College, Kovilpatti	2 ND	10.03.2016 and 11.03.2016
		Debugging			
		Quiz			

Final Year B

S.NO	NAME	EVENT	DATE	VENUE	AWARDS
1	G.Besil Bal Chandru	Volley Ball	12.02.2016	NCC SPORTS DAY	1 st prize
2	M.S.Pranava	4*400m Relay			2 nd prize
	Kartikeyan	Rope Climbing			2 nd prize
3	P.Shanmugam	4*400m Relay			2 nd prize

NCC ANNUAL DAY 2016

- | | |
|---------------------------|----------------------------------|
| 1. G.Besil Bal Chandru | – Best Designer |
| 2. M.S.Pranava Kartikeyan | – Best Camp Senior |
| 3. P.Sathyanathan | – Best Organizer (Polio Camp) |
| 4. P.Shanmugam | – Best Coordinator
Best Firer |

Students Activities

Second Year A

COCURRICULAR ACTIVITIES - PROJECT PRESENTATION

S NO	NAME	PROJECT TITLE	VENUE	CLUB	DATE
1	S.Arun Jeyakumar M.Abdul kader riyaz J.R.Abishek jayanth	ENERGY CONSERVATION	National Engineering College,Kovilpatti	IEEE	25-03-2016
2	M.Dhanu Makeswara C.Barath Mari A.Ashik	DIGITAL MENU CARD		IEEE	25-03-2016
3	M.Abdul Hameed Sharik M.Aswanth Navamani	BATTERY STATE INDICATOR		IEEE-	25-03-2016
4	G.Gowsalya Devi S.Divya Prithi K.Koodammal	MOBILE PHONE DETECTOR		ISOI	23-03-2016

PAPER PRESENTATION

S NO	NAME	TITLE OF PAPER	VENUE	CLUB	DATE
1	I.Anjana M.Krishnashini	Sensor harvesting power from a body	National Engineering College, Kovilpatti	ISOI	10-03-2016

TECHNICAL EVENTS

S NO	NAME	EVENT NAME	VENUE	CLUB	DATE
1	S.Bala Abirami A.Dhanushya N.Deepa	CIRCUIT DEBUGGING	National Engineering College, Kovilpatti	ISOI	23-03-2016

WORKSHOPS

S.NO	NAME	TITLE OF WORKSHOP	VENUE	DATE
1.	S.Arun Jeyakumar V.Jagadish A.Ashik K.karthick	MATLAB	National Engineering College, Kovilpatti	5.3.2016

	G.Ajithkumar A.Karthik C.Aravind kumar M.Ajith kumar			
2.	M.Abdul Hameed Sharik M.Hari haran M.Kandha lakshmi S.Jerin lincy	Entrepreneurship Development		8.3.2016 to 10.3.2016

EXTRA CURRICULAR ACTIVITIES

S NO	NAME	CAMP	VENUE	CLUB	DATE
1	D.FRANKLIN	Trekking	SATHURAGIRI	NSS	05-03-2016

SECOND YEAR B - COCURRICULAR ACTIVITIES
PROJECT

S NO	NAME	ORGANIZER	VENUE	DATE
1	A.Rajasekar	IEEE(SIPRO)	National Engineering College, Kovilpatti	25-03-2016
2	S.MadhuPriya S.Kumari			

EXTRA CURRICULAR ACTIVITIES

S.NO	NAME	EVENT	ORGANIZER	VENUE	DATE
1.	S.Maheshwari M.Maragatha Valli R.Narain Krishna	Elocution	NSS(on behalf of Election Commission of India)	National Engineering College, Kovilpatti	21-03-2016

SECOND YEAR C - COCURRICULAR ACTIVITIES
WORKSHOP

S.NO	NAME	WORKSHOP	VENUE	DATE
1.	P.Rama Chandra Bharathi F.Sam Christopher Ponraj M.Sri jawahar	SIPRO-AUTOMATED CAR ROBOT	National Engineering College, Kovilpatti	25-3-16

EVENTS

S NO	NAME	EVENT NAME	VENUE
1	N.Selva Karthika S.Vigneshwari	Field Instrument Survey	National Engineering College, Kovilpatti
2.	S.Sathya K.Soundharya	Idea Presentation	National Engineering College, Kovilpatti
3.	A.Suvetha M.Muthuselvi	Project Expo	National Engineering College, Kovilpatti

EXTRA CURRICULAR ACTIVITIES

S.NO	NAME	EVENT	ORGANIZER	VENUE	DATE
1.	A.Sangeetha N.Shameema Farhana M.Sri jawahar F.Sam Christopher Ponraj	Elocution	NSS(on behalf of Election Commission of India)	National Engineering College, Kovilpatti	21-03-2016
		Slogan writing			
2.	S.Sathiya Bamaa S.Suriya	Debate and turn court	Literary Club		07-03-20 16

THIRD YEAR B - COCURRICULAR ACTIVITIES PROJECT

S NO	NAME	ORGANIZER	VENUE	DATE
1	M.Muthuselvi A.Suvetha	ProEKTO-2k16	National Engineering College, Kovilpatti	25-03-2016

PRESENTATION

S NO	NAME	TITLE OF PAPER	VENUE	DATE
1	G.Saravanakumar	Nano-Contact Lens	Muthayammal Engineering College,Rasipuram,Namakkal	17/02/2016
		Fuel Cell	Einstein college of Engineering	05/03//2016

WORKSHOP

S.NO	NAME	TITLE	VENUE	DATE
1.	G.Saravanakumar	Solar Technology And Power Converter Design	National Institute of Technology, Trichy	07/03/2016

FINAL YEAR A - WORKSHOP

S.NO	NAME	TITLE	VENUE	DATE
1.	G.K.Archana Dharsini Angala Parameshwari M.Manikandan A.Anto Sharon Prakash	Hands on Training on MATLAB Toolboxes	National Engineering College, Kovilpatti	3.3.2016 and 4.3.2016

TIME TO KNOW OUR ALUMNI

MR. SENTHIL KUMARAN

PASSED OUT: 2008

CURRENT WORKING STATUS:

*MAS Constructions & Engg Pvt Ltd – Project Engineer
2015 – Present*

PREVIOUS WORKING STATUS:

*2008-2010 Voltech Engineers Pvt Ltd (Chennai)– Junior Engineer
2010-2011 Tele Power Tech Solutions Pvt Ltd-Electrical Supervisor
2012-2013-MAS Construction & Engg Pvt Ltd-Engineer/Electrical Supervisor
2013-2014-Pan Electrics Pvt Ltd –Project Engineer*



PROFILE SUMMARY

Education

National Engineering College, Kovilpatti – B.E – EEE – 2004 – 2008

Summary

- Started his career in testing and commissioning upto 132 KV indoor /outdoor substation and substation equipments, commissioning of transformers CT's & LVAC breakers, testing of auxiliary & tripping relays, developing the testing procedure and technique for every protection.
- Expert in interpreting drawings, specifications and field issues, designing and building web pages.
- More than eight years of experience in conducting site inspection, preparing progress report, initiating and contributing for the improvements in site safety and reliability.
- Efficient in prioritizing jobs and work under tight time constraints and within tight deadlines and supervising, organizing and reviewing the working professionals
- Stronger in project management, team work and perseverance

TECHNICAL ARTICLE BY STAFF MEMBER

Matrix Converter

Ms.D.Kavitha

Assistant Professor

Department of Electrical and Electronics Engineering

INTRODUCTION

The main advantage of matrix converter is elimination of dc link filter. Zero switching loss devices can transfer input power to output power without any power loss. But practically it does not exist. The switching frequency of the device decides the THD of the converter. Maximum power transfer to the load is decided by nature of the control algorithm. Matrix converter has a maximum input output voltage transfer ratio limited to 87 % for sinusoidal input and output waveforms, which can be improved. Further, matrix converter requires more semiconductor devices than a conventional AC-AC indirect power frequency converter. Since monolithic bi-directional switches are available they are used for switching purpose. Matrix converter is particularly sensitive to the disturbances of the input voltage to the system. This can be attenuated by intelligent control technique and the fuzzy controller has a least effect due to input side disturbance.

Features

- Direct frequency conversion—high efficiency can realize good input and output waveforms, low harmonics, and nearly unity displacement factor
- Bidirectional energy flow, easy to realize 4- quadrant operation
- Output frequency is not limited by input frequency
- No need for bulk capacitor (as compared to indirect frequency converter)
- Very complicated—too many power semiconductor devices
- Output voltage magnitude is a little lower as compared to indirect frequency converter.

THREE PHASE MATRIX CONVERTER

The matrix converter replaces the multiple conversion stages and the intermediate energy storage element by a single power conversion stage, and uses a matrix of semiconductor bidirectional switches connecting input and output terminals.

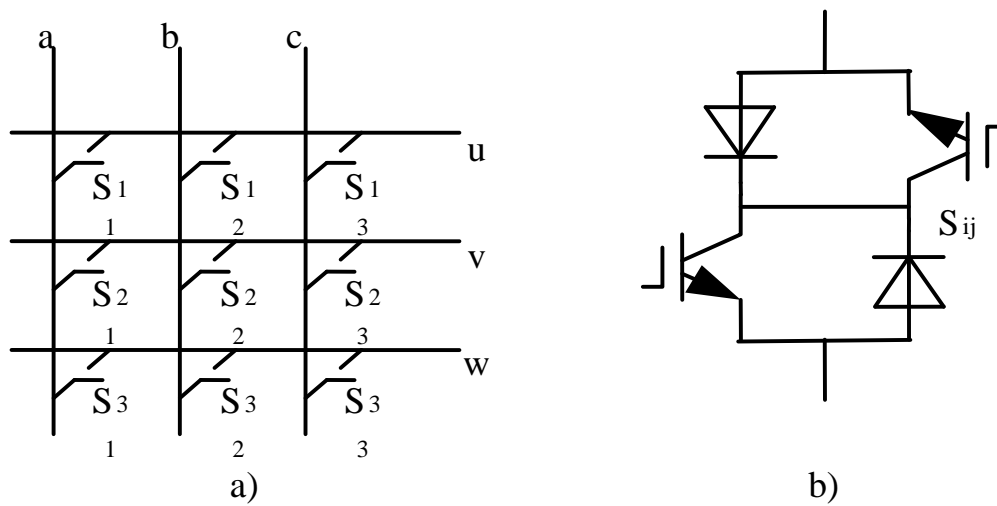


Figure 1: Circuit Configuration

Figure 1 shows the circuit configuration of three phase matrix converter. With this general arrangement of switches, the power flow through the converter can reverse. Because of the absence of any energy storage element, the instantaneous power input must be equal to the power output, assuming idealized zero-loss switches. However, the reactive power input does not have to equal as power output. It can be said again that the phase angle between the voltages and currents at the input can be controlled and does not have to be the same as at the output. Three phase matrix converter consists of nine bidirectional switches. It has been arranged into three groups of three switches. Each group is connected to each phase of the output. These arrangements of switches can connect any input phase. In the Figure 2 filled circle shows a closed switch. These 3X3 arrangements can have 512 switching states. Among them only 27 switching states are permitted to operate this converter. For safe operation, it should follow the given rules.

- Do not connect two different input lines to the same output line(input short circuited)
- Do not disconnect the output line circuits (output open circuited)

Figures 2 to 4 are showing different operating states of matrix converter. Here A, B and C are input phase voltage connected to the output phase. Figure 2 shows synchronous operating state vectors of three phase matrix converter. It shows that the converter switches are switched on

rotational basis. In this case no two switches in a leg are switched on simultaneously. These states will not generate gate pulse when one phase of the supply is switched off.

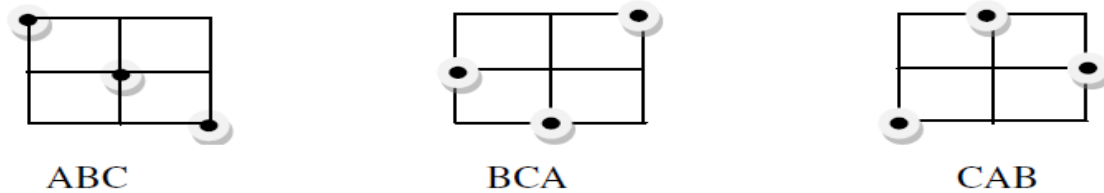


Figure 2: Matrix Converter Rotating Vectors (Synchronous Vectors)

Figure 3 shows inverse operating state vectors of three phase matrix converter. In this any one phase is rotated in such a way that it connects all the output phase in a cycle of operation. This operation may be selected during reverse operation of induction motor.

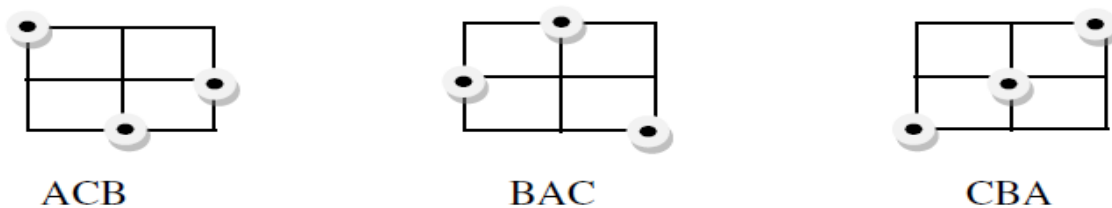


Figure 3: Matrix Converter Rotating Vectors (Inverse Operation)

Figure 4 shows zero vector of the matrix converter. Here all the output phases are connected in a single input line. It leads to damage to the device. Because three phase loads are directly connected to the single phase line.

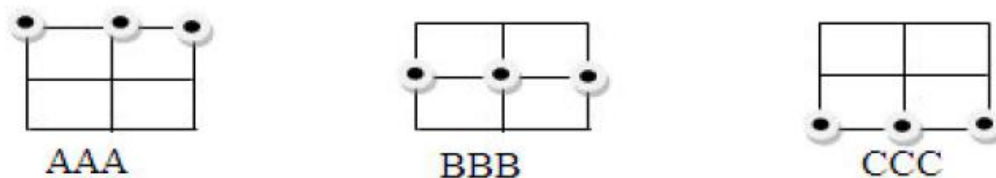


Figure 4 Matrix Converter Zero Vectors

Figure 5 shows active vectors of the matrix converter which are the operating states in direct conversion. There are 18 operating states are available. We can select any combination for the operation of matrix converter.

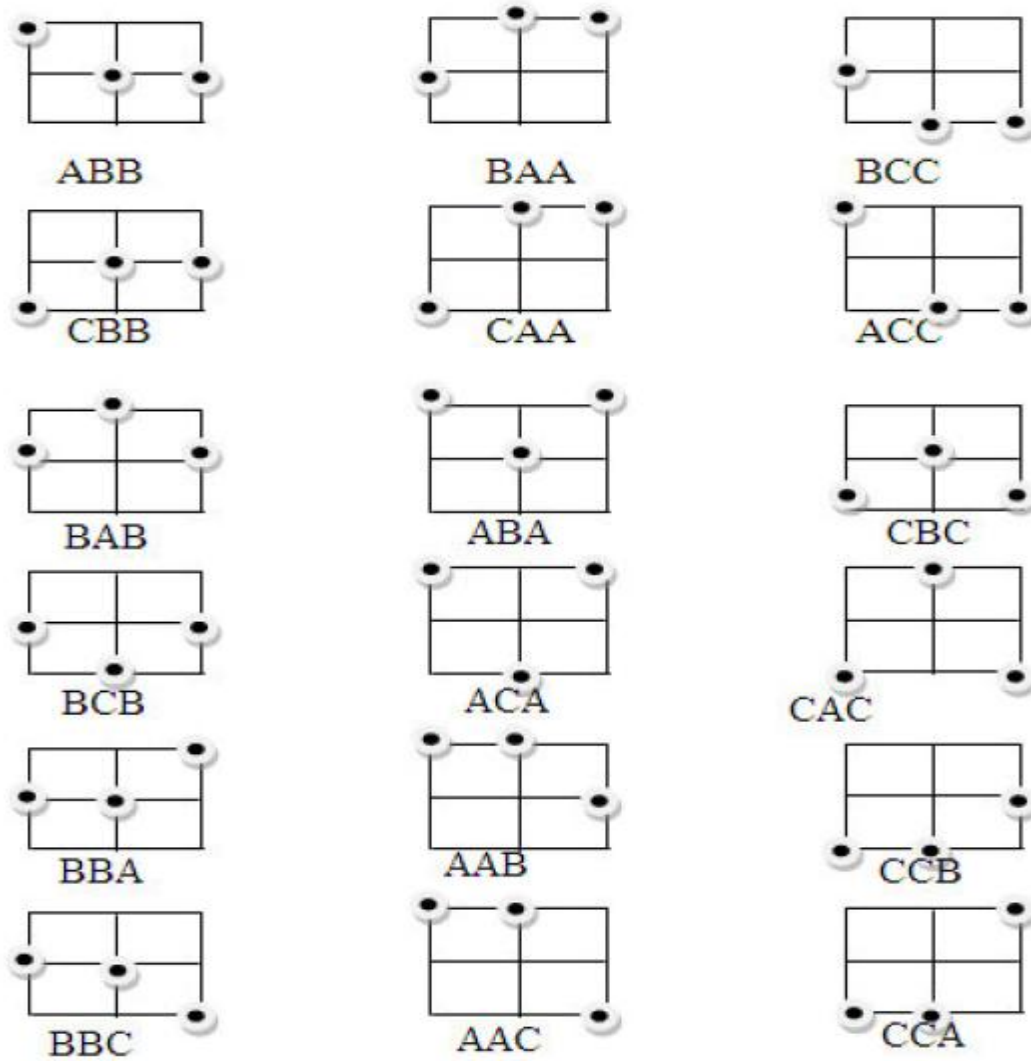


Figure 5: Matrix Converter Active Vectors (Pulsating)

STUDENT ARTICLES

LILY CAMERA

Lily, however, is the world's first autonomous, smart "flying camera" that doesn't rely on any human intervention, as it uses computer vision technology and GPS to track its user.

The Lily Camera is an early example of what's to come: Autonomous flying cameras will get smaller. But it's the technology that controls the Lily Camera that's fascinating. Although the user never has to control the robot, he or she does need to hold or wear a small tracking device that relays the user's position, distance, and speed (via Wi-Fi). In conjunction with its onboard sensors and computer-vision algorithms, the tracker determines how close or high to fly, as well as where to follow and circle the user. And because it knows the user's exact positioning, the Lily Camera can take off and land on the user's hand.



For safety, the Lily Camera has a maximum speed of 25 miles per hour, won't fly higher than 50 feet or more than 100 feet away from the user, and, using its camera sensors, it won't ever get too close to objects or subjects (there's a 5-foot minimum distance). While it operates autonomously, the user can tell it where to be exactly (to the side, or circle 360 degrees) and zoom in or out, using the tracking device. In case it goes out of range or the battery gets low, it has a failsafe-landing feature. There's also a kill-switch on the remote, if that ever becomes necessary.

Using the Lily Camera is simple. Blue lights, which resemble a smiley face (too cute!), indicate it's on.

The Lily Camera will also come with companion apps for either iOS or Android. Using a smartphone gives the user a live view of what Lily is recording, as well as other basic adjustments and the ability to create flight paths.

Photos and videos can be recording onto the 4GB internal memory, or a removable SD card. Unfortunately, like most quadcopters, the Lily Camera only has a flying time of 20 minutes.

Ms. S.Divyapriithi, Second year EEE

THE SPHERICAL SUN POWER GENERATOR

German Architect Andre Broessel believes he has a solution that can “squeeze more juice out of the sun”, even during the night hours and in low-light regions. His company Rawlemon has created a spherical sun power generator prototype called the beta.ray. His technology will combine spherical geometry principles with a dual axis tracking system, allowing twice the yield of a conventional solar panel in a much smaller surface area. The futuristic design is fully rotational and is suitable for inclined surfaces, walls of buildings, and anywhere with access to the sky. It can even be used as an electric car charging station. Scroll down for photos and videos...



“The beta.ray comes with a hybrid collector to convert daily electricity and thermal energy at the same time. While reducing the silicon cell area to 25% with the equivalent power output by using our ultra transmission Ball Lens point focusing concentrator, it operates at efficiency levels of nearly 57% in hybrid mode. At nighttime the Ball Lens can transform into a high-power lamp to illuminate your location, simply by using a few LED’s. The station is designed for off grid conditions as well as to supplement buildings’ consumption of electricity and thermal circuits like hot water.”

The modular collector system charges and stores energy during daylight hours and can even collect energy from the moon during night hours

Ms. G.Gowsalya Dev, Second year EEE

FLOURISH YOUR SOFT SKILLS!!!!

- *R.Uma Maheswaran, Final Year*

This edition we are going to see an important and vital part of soft skill, 'Personal Skill Development'. "Only a man's character is the real criterion of worth", says Eleanor Roosevelt. It is the fact that development of personality and character of a man are necessities factors in a society. This edition's column is going to bring out some points on the bubbling topic.

Personality Skills for Body and Mind:

Perhaps the most fundamental of all skills are those concerned with self-preservation - that is, staying healthy in both body and mind. Without good personal (or intra-personal) skills, you are less likely to be able to develop good interpersonal, presentation or leadership skills.

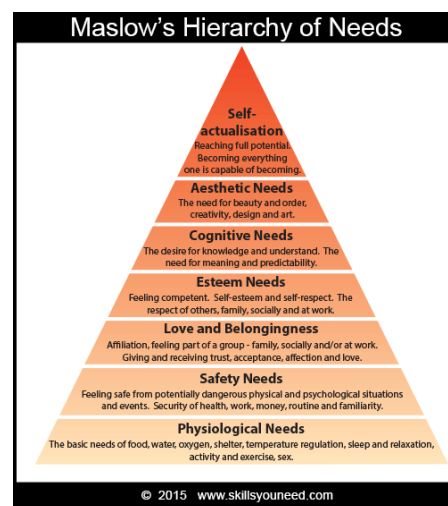
Personal Development:

Personal development is a lifelong process. It's a way for people to assess their skills and qualities, consider their aims in life and set goals in order to realise and maximise their potential. Although early life development and early formative experiences within the family, at school, etc. can help to shape us as adults, personal development should not stop later in life.

Personal Development' and 'Personal Empowerment' are two areas that overlap and interweave, it is recommended that you read this page in conjunction with our page: Personal Empowerment

A Theory of Personal Development

There are many ideas surrounding personal development, one of which is detailed below - Abraham Maslow's process of Self Actualization



Practical Steps to Personal Development

Practical steps can be taken to enhance personal development, including:

- Organising your time.
- Producing a personal CV or résumé.
- Undertaking a skills appraisal.
- Looking at your transferable skills.
- Overcoming barriers to learning a new skill.

Personal Empowerment:

Personal empowerment is about looking at who you are and becoming more aware of yourself as a unique individual. A person aiming for empowerment is able to take control of their life by making positive choices and setting goals. Developing self-awareness, an understanding of your strengths and weaknesses - knowing your own limitations is key to personal empowerment.

Dimensions of Personal Empowerment:

Self-Awareness: Self-awareness involves understanding our individual character and how we are likely to respond to situations.

Values: Values are opinions or beliefs that are important to us but of which we are not always aware.

Skills: An individual's skills are the main resource which enables them to achieve their desired goals. Skills can be gained through experience, practice, education and training.

Information: Knowledge or information is necessary in the development of self-awareness and skills. It is an essential skill in itself to know where to find appropriate information.

Goals: Setting goals is a means by which an individual can take charge of his/her life. The process of setting a goal involves people thinking about their values and the direction that they would like their lives to follow.

Developing Personal Empowerment:

- Develop trust.
- Understand our strengths, weaknesses and limits.
- Develop confidence and self-esteem.

[Keep on Flourishing.....]

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