ELECTRO VISION' 16

A Publication of the SICET Society of ECE

Department of Electronics and Communication Engineering
SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY
HYDERABAD

VISION

To be a centre of excellence in Electronics and Communication Engineering Education to prepare professionals for ever-growing needs of society.

MISSION

To promote and facilitate student- centric learning
To involve in activities that enable overall development of stakeholders
To provide holistic environment with state-of-art facilitate for students to develop solutions for various social needs
To organize trainings in Embedded Systems with Industry interaction

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1	Graduates with ability to pursue higher studies in reputed institution.
PEO 2	Graduates with ability to apply professional knowledge to develop product or process.
PEO 3	Graduates with excellence in Sciences, Electronics and Communication Engineering.
PEO 4	Graduates equipped with skills in recent technologies and be receptive to attain professional competence through life-long learning abilities.

PROGRAM OUTCOMES (POs)

POS	STATEMENTS
PO1	**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering 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)

The student will have the ability to:

PSOS	STATEMENTS
PSO1	**Basic ECE knowledge**: Apply basic knowledge related to Electronic circuits, Communication systems, Signal processing, Integrated circuits and embedded systems to solve engineering/societal problems.
PSO2	**Design methods**: Design, verify and authenticate electronic functional elements for VLSI, Embedded systems, Communication applications.
PSO3	**Experimentation & Analysis**: Analyze specifications and prototype electronic experiments/projects in Signal & Image processing and advance technologies.

List of Students Awarded in Paper/Poster Presentation

S. NO	NAME OF THE EVENT	VENUE	NAME OF THE STUDENT	AWARDS
1	POSTER PRESENTATION	SICET, IBP	V.MANISH KUMAR	FIRST PRIZE
2	POSTER PRESENTATION	SICET, IBP	V.NITHIN	FIRST PRIZE
3	POSTER PRESENTATION	SICET, IBP	P. VISHNU	SECOND PRIZE
4	POSTER PRESENTATION	SICET, IBP	T. KAVYA	SECOND PRIZE

FACULTY PUBLICATIONS			
S NO	NAME OF THE FACULTY	NO OF PUBLICATIONS	PAPER DETAILS
1	V PRATHYUSHA	1	A LONG TERM EVOLUTION BASED WALSH-HADAMARD PRECODING FOR CIRCULAR FBMC SYSTEM, IJARTET, ISSN 2394-3777, VOL. 4, ISSUE 3, MARCH 2017.
2	B SANDHYA	1	ICI MITIGATION IN OFDM/OQAM SYSTEM WITH A NOVEL NORMALIZED MMSE SUB CHANNEL DECISION FEEDBACK EQUALIZER, IJARTET, ISSN 2394-3777, VOL. 4, ISSUE 3, MARCH 2017.
3	P UDAYASRI	1	NOVEL APPROACH TO REDUCE POWER DROOP DURING SCAN-BASED LOGIC BIST, IJARTET, ISSN 2394-3777, VOL. 4, ISSUE 3, MARCH 2017.
		2	MEASUREMENT OF SPECIFICATIONS OF ULTRACAPACITOR, IJRTER,ISSN 2455-1457, 2017
4	SURESH BALLALA	1	ONLINE MONITORING AND CONTROLLING OF SMART DRIP IRRIGATION SYSTEM USING RASPBERRY PI, IJSETR, ISSN 2319-8885, AUG-16.
		2	WIRELESS DATA TRANSFER AND PRINTING UTILIZING RASPBERRY PI, IJARES, ISSN 2347- 9337, JUN-16
		3	EYE-SENSE MEASURED INDEPENDENT & COST EFFECTIVE SYSTEM TO EXCLUDE THE NEED OF THE SUPPORT, IJSETR, ISSN 2319-8885. AUG-16.
		4	AN EFFICIENT PROPOSAL FOR MANAGING OF AUTOMATED DEVICES BY AN ONLINE SOCIAL NETWORK, IJARES, ISSN 2347- 9337 JUN-16.
		5	TRAVOLUTION-ROAD SAFTEY FOR PASSENGER CAR, IJATIR, ISSN 2348–2370 VOL.08,ISSUE.09. AUG-16
		6	LOW COST HOME AUTOMATION BY ZIGBEE AND

			VOICE COMMANDS USING RASPBERRY PI2 (B+), IJATIR, ISSN 2348–2370, VOL.08,ISSUE.10. AUG-16.
		7	AUTOMATIC TOLL E-TICKETING SYSTEM FOR TRANSPORTATION SYSTEMS, IJEECSE, VOLUME 4, ISSUE 5. OCTOBER, 2017.

List of faculty registered Ph.D

S.NO	AY OF ADMISSION	NAME OF THE FACULTY	NAME OF THE UNIVERSITY	NAME OF THE SUPERVISOR
1	2016-2017	K. RAMMOHAN RAO	OSMANIA UNIVERSITY	DR. N.V. KOTESWARA RAO
2	2016-2017	S. NARSIMULU	OSMANIA UNIVERSITY	DR. NIRANJAN PRASAD

Products Developed

S.NO	PRODUCT DEVELOPMENT	LIST OF COMPONENTS	SPONSORED BY	GRANTS (IN RS.)
1	INTERACTIVE PAINTING CONSOLE	INTERACTIVE PAINTING CONSOLE CAMERA	SICET	25,000
2	AUTOMATED INDUSTRIAL 3D PRINTED ROBOTIC ARM	ARDUINO BOARD, SERVO MOTORS, FLEX SENSORS,	SICET	30,000
3	OXYGEN LEVEL TESTING USING UNDER WATER ROV	ARDUINO MEGA, TOGGLING SWITCHES, DC FANS,	SICET	30,000
4	DIY DRONE 2.0	DRONE PROPELLERS, CONTROL SYSTEMS,	SICET	15,000
5	RF CONTROLLED FIRE FIGHTING ROBOT WITH HIGH PRESSURE WATER SPRINKLER	RF TRANSCEIVERS, DC MOTORS, WATER MOTORS.	SICET	20,000
6	VEHICLE TRACKING SYSTEM USING GPS & GSM	RF TRANSCEIVERS, DC MOTORS, GSM MODULE	SICET	15,000
7	AUTOMATED INDUSTRIAL ROBOTIC ARM	DC MOTORS, ARDUINO BOARD, BLUETOOTH HC-05 MODULE	SICET	25,000
8	IMPLEMENTATION OF RF CONTROLLED ROBOTIC BOAT TO TRAVEL IN WATER	RF TRANSCEIVERS, DC MOTORS, WATER PUMPING MOTORS.	SICET	15,000

5 TECHNOLOGY TRENDS YOU NEED TO KNOW TO WORK IN ANY INDUSTRY

If you've been following the news on exciting tech trends like artificial intelligence, then you're probably aware that emerging technologies are changing the way we work and interact with others. In fact, with things like machine learning and touch commerce becoming increasingly popular across every industry from banking to

healthcare, technology is revolutionizing the way we do business and making high-tech approaches an integral part of our lives. We recently sat down with the team at Deloitte to find out how these trends are reshaping the career space.

Here are the top five technology trends you need to know to work in any industry.

1. Internet of Things (IOT)

One of the biggest tech trends to emerge in recent years is the Internet of Things. Simply put, the Internet of Things (abbreviated IOT) is the idea that all technological devices can be connected to the internet and to each other in an attempt to create the perfect marriage between the physical and digital worlds. How will this impact you? It depends on your industry. For example, for those who work in marketing, advertising, media or business management, IOT could provide a wealth of information on how consumers engage with products by tracking their interactions with digital devices. In turn, this data could be used to optimize marketing campaigns and user experiences.

How it's affecting industries: The really cool thing about IOT is that it's not only changing the way we do business but also the business models we use to do it. For example, according to Deloitte, flexible consumption models (also known as pay-per-use models) are going become increasingly more popular across all industries as new customer data becomes available.

2. Machine learning

Another exciting emerging technology is machine learning, which is essentially a computer's ability to learn on its own by analyzing data and tracking repeating patterns. For example, social media platforms use machine learning to get a better understanding of how you're connected with those in your social network. They do

this by analyzing your likes, shares and comments and then prioritizing content from your closest connections, serving you that content first.

How it's affecting industries: In addition to shaping your day-to-day interactions with friends on social media, machine learning is also changing the way companies do business with customers. According to Deloitte, companies like Google are using machine learning on mobile devices which can continue learning even when offline. The result? Machine learning is reshaping the way businesses interact with their customers in a big way by helping them anticipate and meet customer needs more easily.

3. Virtual reality (VR)

Remember watching movies about virtual reality and thinking how cool it would be if it was actually like that in real life? Well, it's about to be. Although VR has been around since the 1950s, until recently the technology wasn't able to deliver the fully immersive digital experience users have been craving. That's about to change with recent improvements to both hardware and programming, and the effects are going to be felt across almost every industry from retail to education.

How it's affecting industries: Virtual reality has been a popular component of video games for several years and this trend is continuing to expand. In addition to video games, VR is likely to affect companies across the board as they adopt the technology to help them engage customers more effectively and optimize their sales and marketing efforts. It's also a potentially useful tool for learning and is increasingly being adopted by educational organizations.

4. Touch commerce

Being able to buy anything you want with the touch of a finger may have seemed like a fantasy a few years ago, but it's now a reality. Merging touchscreen technology with one-click shopping, touch commerce allows consumers to buy products

easily from their phones. After linking their payment information to a general account and enabling the feature, customers are able to buy everything from clothes to furniture with just a fingerprint.

How it's affecting industries: According to Deloitte, this is one of the biggest things to hit eCommerce in recent years with purchases of this type expected to increase by 150% this year alone and retailers in almost every industry anticipating an increase in sales directly related to this new technology.

5. Cognitive Technology

Cognitive technology is in the same vein as machine learning and virtual reality except that it's a broader concept. For example, the cognitive technology umbrella includes things like natural language processing (NLP) and speech recognition. Combined, these different technologies are able to automate and optimize a lot of tasks that were previously done by people, including certain aspects of accounting and analytics.

How it's affecting industries: Although cognitive technologies have a broad range of applications, Deloitte predicts that the industry sector most affected by this trend initially will be the software sector with 95% of enterprise software companies projected to adopt these technologies by 2020. With emerging technologies changing professional industries including banking, eCommerce, healthcare and education, staying up to date on the latest trends will give you a better understanding of your chosen industry and make you a more competitive candidate. Best of all, this knowledge might open up new doors within your field and others.

PHOTO GALLERY

LIST OF ACTIVITIES

Demonstrations in other Institutes

Teaching Modes

MOBBING ROBOT   EDGE AVOIDANCE ROBOT   GYROSCOPE

MOVING IRON   MOVING COIL   HOMOPOLAR MOTOR
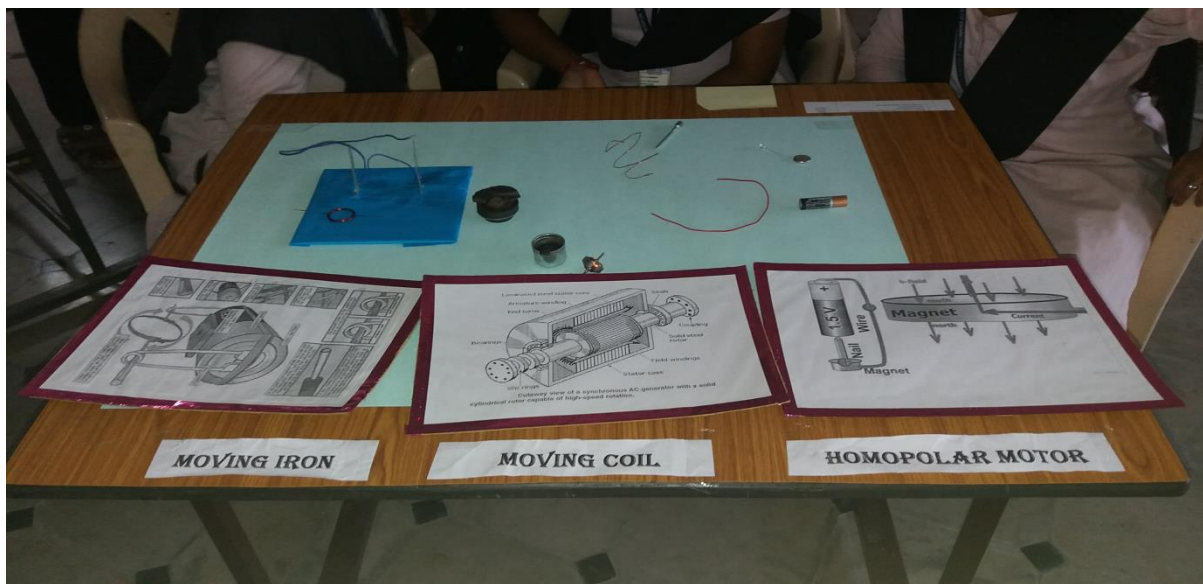
Positive quotes

- Keep your face to the sunshine and you cannot see a shadow-**Helen Keller**
- Yesterday is not ours to recover, but tomorrow is ours to win or lose-**B.Jhonson**
- Pessimism leads to weakness, optimism to power-**William James**
- In everyday there are 1440 minutes. That means we have 1440 daily opportunities to make a positive impact-**Les Brown**
- Attitude is a little thing that makes a big difference-**Winston Churchill**
- If you want happiness for an hour-take a nap. If you want happiness for a day-go fishing. If you want happiness for a year-inherit a fortune. If you want happiness for a lifetime-help someone else-**Chinese Proverb**
- Happy people plan actions, They don't plan results-**Dennis Waitley**
- Happiness is not something readymade. It comes from your own actions-**Dalai Lama**
- A table, a chair, a bowl of fruit and a violin; what tells does a man need to be happy-**Albert Einstein**
- Happiness is nothing more than good health and a bad memory-**Albert Schweitzer**

A READY RECKONER FOR ENHANCING PLACEMENT ACTIVITIES

FREQUENTLY ASKED QUESTIONS (FAQ)

- Tell me about yourself
- What are your long range goals, ambitions, future plans?
- What do you want to be doing 5 or 10 years from now?
- How do you feel that you can contribute to this job?
- What are your hobbies?
- What are your strengths? Your weaknesses?
- What are your big accomplishments?
- What are your special abilities?
- Why you think that you are suitable for this kind of job?
- What is your career goal?
- What do you know about our company?
- Why are you applying for a job with us?
- What salary do you expect?
- Do you have any plans to go back to school?
- What kind of job profile you enjoy the most, the least and why?
- I have interviewed others for this job, why should I give you the job?
- Would you be willing to take an aptitude test?
- Can you tell me anything about yourself that you think I might want to know?
- What is the lowest salary you would accept?
- Can you handle criticism? How do you deal with it?
- Do you have any questions?

H.R. EXPECTATIONS

- Sincerity and honesty in the answers
- Attentiveness in listening to the questions
- Body language: gesture, posture, eye contact and confidence level
- Stress handling capability
- Positive approach in answering the questions
- Exhibition of skills, accomplishments and talents
- Enthusiasm and motivation level
- Command over communication skills
- Willingness and positive approach
- Exhibition of talents and accomplishments

JOB OPPORTUNITIES 2017

Job Title	Dept/Sector	Eligibility	Last Date
Engineering Services Exam	Union Public Service commission (UPSC)	Engineering Degree	23-10-2017
BHEL	Engineer Trainee	B.Tech/B.E	09-01-2017
NLC	Graduate Executive Trainee	B.Tech/B.E	27-01-2017
Junior Engineer	Uttar Pradesh Power Corporation Limited (UPPCL)	Diploma	31-02-2017
BEL	Software Engineer	B.Tech/B.E	13-03-2017
Project Scientists I-II	National Institute of Ocean Technology (NIOT)	Bachelor's Degree/Master's Degree	30-03-2017

Assistant Professor	Tripura Public Service Commission (TPSC)	Master's Degree	04-01-2017
Engineers & Junior Engineers	Telecommunications Consultants India Limited (TCIL)	B.E./B.Tech./MCA	12-02-2017

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