



# ELECTRO VISION' 18

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

**VISION**

**To be a premier Institution in Engineering & Technology and Management with competency, values and social consciousness.**

**MISSION**

**IM1: Provide high quality academic programs, training activities and research facilities.**

**IM2: Promote continuous Industry-Institute interaction for employability, entrepreneurship, leadership and research aptitude among stakeholders.**

**IM3: Contribute to the economical and technological development of the region, state and nation.**

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**DEPARTMENT OF  
ELECTRONICS & COMMUNICATION ENGINEERING**

**DEPARTMENT VISION**

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

**DEPARTMENT MISSION**

**DM1: To promote and facilitate student-centric learning.**

**DM2: To involve in activities that enable overall development of stakeholders.**

**DM3: To provide holistic environment with state-of-art facilities for students to develop solutions for various social needs.**

**DM4: Organize trainings in embedded systems with Industry interaction**

**PROGRAM EDUCATIONAL OBJECTIVES (PEOs)****PEO 1: Higher Degrees & Professional Employment:**

Graduates with ability to pursue career in core industries or higher studies in reputed institution.

**PEO 2: Domain Knowledge:**

Graduates with ability to apply professional knowledge/skills to design and develop product or process.

**PEO 3: Engineering Career:**

Graduates with excellence in Electronics and Communication Engineering along with effective inter-personnel skills.

**PEO 4: Lifelong Learning:**

Graduates equipped with skills in recent technologies and be receptive to attain professional competence through life-long learning.

**PROGRAM SPECIFIC OUTCOMES (PSOs)****PSO 1: Basic Electronic and communications knowledge:**

Apply basic knowledge related to electronic circuits, VLSI, communication systems, signal processing and embedded systems to solve engineering/societal problems.

**PSO 2: Design Methods:**

Design, verify and authenticate electronic functional elements for different applications, with skills to interpret and communicate results.

**PSO 3: Experimentation & Communications:**

Engineering and management concepts are used to analyze specifications and prototype electronic experiments/projects either independently or in teams.

POS	PROGRAM OUTCOMES STATEMENTS
PO1	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	<b>Design/development of solutions:</b> 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	<b>Conduct investigations of complex problems:</b> 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	<b>Modern tool usage:</b> 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	<b>The engineer and society:</b> 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	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	<b>Communication:</b> 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	<b>Project management and finance:</b> 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	<b>Life-long learning:</b> 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.

# STUDENT ACHIEVEMENT

## PLACEMENT ACTIVITIES

S. No.	Student Name	Student ID/No.	Employer	Date of offer / Appointment
1	AKHIL	14D41A0403	WISEXCEL IT SOLUTIONS PVT. LTD	01-08-2018
2	PANITH RAMANNAGARI	14D41A04G7	COGNIZANT TECHNOLOGY	29-08-2018
3	K. MEENAKSHI	14D41A0497	TRIGO	31-10-2018
4	VENKATESH	14D41A04M6	PEOPLE TECH GROUP	17-09-2018
5	NARENDRA KUMAR	14D41A04D8	IIHT	15-06-2018
6	M. MANASA	14D41A04D5	HCL	21-09-2018
7	R BANDI POOJA	14D41A04H3	HCL	21-09-2018
8	SAMA SHAILAJA	14D41A04J3	HCL	21-09-2018
9	NASKANTI SHIVA SAI	14D41A04E6	[24]7.ai	14-09-2018
10	NANVESH REDDY	14D41A04H1	FOLIK TECHNOLOGIES	09-07-2018
12	TALLOJU KRISHAN	14D41A04K4	ADP	27-08-2018
13	A NAVANISH	14D41A0408	ADP	27-08-2018
17	ALLA PRUDVI	14D41A04G3	FOIWE INFO GLOBAL SOLUTIONS	20-08-2018
18	KONDA PALLAVI	14D41A04A0	MIND TREE	25-07-2018
19	D. NAVITHA	14D41A0446	LSN SOFTWARE SERVICES PVT LTD	19-07-2018
34	K ANVESH	14D41A04A2	C3I	31-08-2018
35	APPALA ADITYA	14D41A0411	INFOSYS	31-08-2018
42	B RAHUL BABU	14D41A0418	PEOPLE TECH GROUP	17-09-2018
44	T. NARESH	15D45A0414	UDS DOMOR FACILITY SERVICES	19-08-2018
45	B DEERAJ GOUD	14D41A0432	Accenture Solutions Pvt.	22/11/2018

			Ltd.	
46	BORRA PRASHANTH	14D41A0433	Accenture Solutions Pvt. Ltd.	22/11/2018
47	BYRI HAREESH	14D41A0434	Accenture Solutions Pvt. Ltd.	22/11/2018
48	CH SAI SANTHOSH	14D41A0435	Accenture Solutions Pvt. Ltd.	22/11/2018
49	CH LAKSHMI PRASANNA	14D41A0436	Accenture Solutions Pvt. Ltd.	22/11/2018
50	CHALLA MURALIDHAR REDDY	14D41A0437	Accenture Solutions Pvt. Ltd.	22/11/2018
51	CHAMALA SHRAVANI	14D41A0438	Accenture Solutions Pvt. Ltd.	22/11/2018
53	CHILPA SAIRAM	14D41A0440	Wells Fargo(india) Pvt. Ltd.	29-10-2018
54	CH SANDEEP REDDY	14D41A0441	Tech Mahindra	20-11-2018
56	CHIRRA DINESH	14D41A0443	Unicsol	05-10-2018
57	DODDAPANENI SAMPATH SAI	14D41A0449	ALIENS DEVELOPERS	05-10-2018
58	EDIGA MANISHA	14D41A0450	Unicsol	05-10-2018
60	E PRANEETH REDDY	14D41A0452	Tech Mahindra	20-11-2018
61	EDULAKANTI TEJASWINI	14D41A0453	Unicsol	05-10-2018
62	G GANESH	14D41A0454	SIA	21-04-2018
63	A SHIVASHANKAR CHARY	14D41A0455	Unicsol	05-10-2018
64	BANALA SANDHYA	14D41A0456	NebuLogic	01-02-2019
65	G SRAVAN KUMAR	14D41A0475	Wells Fargo(india) Pvt. Ltd.	29-10-2018
66	GUNTA VINNUBABU	14D41A0476	GENPACT	09-02-2018
67	GUNTAKALA ANJALI	14D41A0477	Tech Mahindra	20-11-2018
68	KURUVA	14D41A04A4	GENPACT	09-02-2018

	SRAVANTHI			
69	G RAHUL KUMAR	14D41A0479	Unicsol	05-10-2018
74	J PRASHANTH	14D41A0483	Unicsol	05-10-2018
75	JAVVAJI VISHAL KUMAR	14D41A0484	Wells Fargo(india) Pvt. Ltd.	29-10-2018
76	JEELUGULA SRUTHI	14D41A0485	Tech Mahindra	20-11-2018
79	G SAI BHARGAV	14D41A04B0	Tech Mahindra	20-11-2018
83	A ABHINAY KUMAR	14D41A04B4	Unicsol	05-10-2018
88	M RAJESH	14D41A04B9	Tech Mahindra	20-11-2018
90	M VAISHNAVI	14D41A04C1	Wells Fargo(india) Pvt. Ltd.	29-10-2018
93	NARALA PRASHANTH	14D41A04E0	Tech Mahindra	20-11-2018
100	PARANDA MURALI	14D41A04F2	Tech Mahindra	20-11-2018
103	PASUNURI NEERAJ	14D41A04F5	Tech Mahindra	20-11-2018
104	P SNEHA REDDY	14D41A04F6	Unicsol	05-10-2018
105	P JAYADEEP	14D41A04F7	Tech Mahindra	20-11-2018
107	RAVIPATI M PRIYAA	14D41A04H8	Unicsol	05-10-2018
108	V MANISH KUMAR	14D41A04L5	Wells Fargo(india) Pvt. Ltd.	29-10-2018
109	VASAVI SRIKANTH	14D41A04L6	Tech Mahindra	20-11-2018

### TECHNICAL EVENTS ORGANIZED

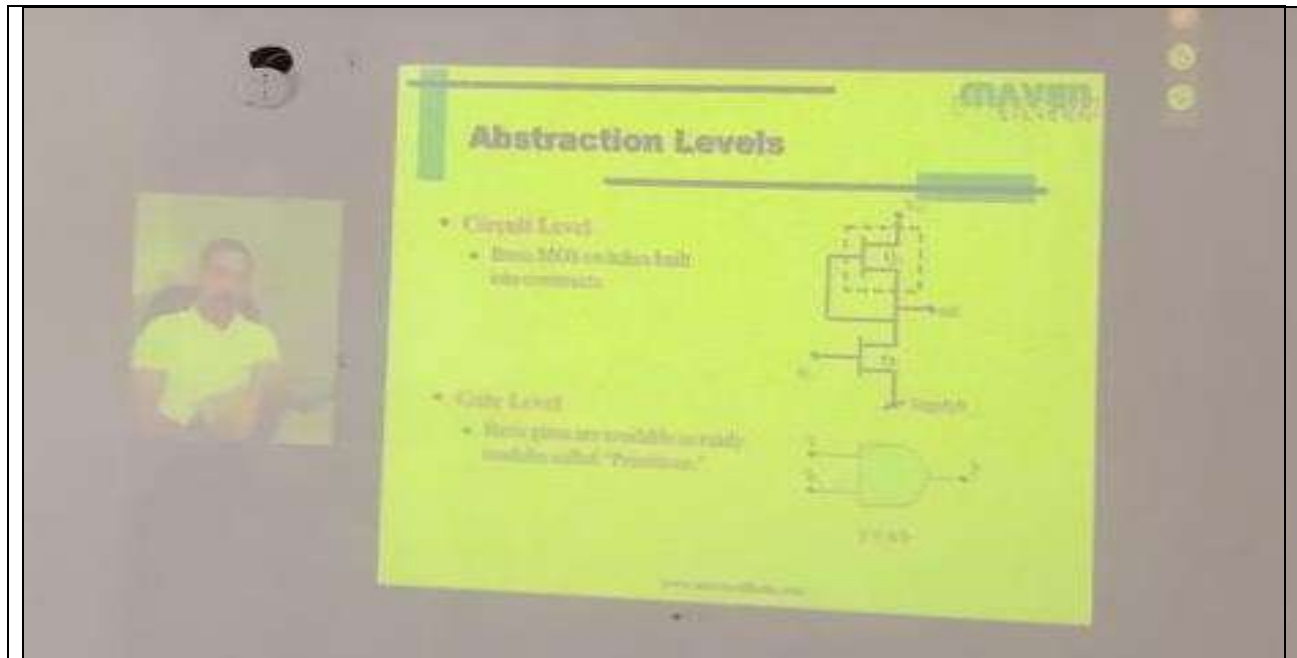
S. No	Event	Date	Resource Person with Designation	No of students participated
1	Guest Lecture	15/12/2018	Mr.V.Diwakhar Assistant Manager- HR KOSTAL India Pvt	85
2	Workshop	05/12/2018	M. Shiva Prasad RoboInSci Technologies	50

3	Webinar	11/08/2018	Maven Silicon Bangalore	91
4	Guest Lecture	26/07/2018	Dr. N. Suresh ECE Prof. Sphoorthy Engg clg	90
5	Workshop	07/07/2018	Mr. Karthik IMPATA	120

### PRODUCTS DEVELOPED

S. N O	PRODUCT DEVELOPMENT	LIST OF COMPONENTS	SPONSORED BY	GRANTS (IN RS.)
1	IOT BASED DRONE FOR IMPROVEMENT OF CROP QUALITY IN AGRICULTURE FIELD	SERVOMOTOR, IRRIGATION SENSORS, DRONE PROPELLERS,	SICET	30,000/-
2	FPGA BASED KEY LESS CODED HOME LOCK SYSTEM	HDL SOFTWARE, FPGA KIT	SICET	20,000/-
3	HOME SECURITY SYSTEM USING RASPBERRY	RASPBERRY PI, WEB CAM, TEMPERATURE SENSOR,	SICET	25,000/-
4	FIRE FIGHTING ROBOT	ARDUINO BOARD, IR SENSORS, ULTRASONIC SENSORS, TEMPERATURE SENSORS, DC MOTORS,	SICET	17,000/-
5	AN IOT APPROACH FOR MOTION DETECTION USING RASPBERRY PI	RASPBERRY PI, NODE MCU, IRRIGATION SENSORS	SICET	23,000/-
6	INDUSTRIAL ARM	DC MOTORS, ARDUINO BOARD, BLUETOOTH HC-05 MODULE	SICET	20,000/-

**PHOTO GALLERY**  
**LIST OF ACTIVITIES**



Arranged Webinar program on “RTL Design and Functional Verification” by MAVEN Silicon Pvt Ltd, Bangalore



Receiving First Prize Award With **Central Minister Hansraj garu** in State Level Technical Symposium Held in Karimnagar

With Anil Sahasrabudhe  
Chairman of the All India Council for  
Technical Education





**At AICTE,NEW DELHI**

One of the greatest achievements by our team. We are the only team from Telangana to be part of “AICTE startup and mentorship program”. Only top 26 projects were selected for the summit throughout the country.



**At Technoxian18,New Delhi**

It was one of the milestones for our team, as we secured second prize in the world robotics challenge.



Receiving First Prize Award At Manakula Vinayagar Institute with Vinayaka Babu



Receiving First Prize Award At Bannari Amman, Coimbatore



Receiving First Prize Award at JNTU-Sultanpur



Receiving First Prize Award At St.Martins College,Hyderabad



Receiving First Prize Award At TKR college, Hyderabad



Receiving First Prize Award At St.Marrys college, Hyderabad



Receiving First Prize Award At NIT-Warangal, with Vice Chancellor



Receiving First Prize Award At Gitam University,Hyderabad



After Receiving First Prize Award At

After Receiving First Prize Award at Sri

<p>BITS-Pilani,Hyderabad</p>	<p>Venkateshwara Perumal College, Tirupathi, A.P (State)</p>
	
<p>At Technotsav2k18, Sri Indu College</p>	<p>During Project Expo at NIT Warangal, Telangana</p>
	
<p>During Techfest at JNTU-H</p>	<p>During Tech-Fest At NIT-Warangal.</p>

# TECH ALK

## Floating Cell Towers Are the Next Step for 5G

Terrestrial 5G networks will support high-altitude balloons and drones, and could someday merge with them



As the world races to deploy speedy 5G mobile networks on the ground, some companies remain focused on floating cell towers in the sky. During the final session of the sixth annual Brooklyn 5G Summit on Thursday, Silicon Valley and telecom leaders discussed whether aerial drones and balloons could finally

begin providing commercial mobile phone and Internet service from the air.

That same day, Alphabet subsidiary Loon, a balloon-focused graduate of the Google X research lab, unveiled a strategic partnership with Softbank's HAPSMobile to leverage both solar-powered balloons and drones to expand mobile Internet coverage and

aid in deploying 5G networks. No high-altitude network connectivity services have taken off commercially so far, but some Brooklyn 5G Summit speakers were optimistic that it would happen soon.

“The opportunity is in our hands in terms of truly leveraging 5G in conjunction with the massive paradigm shift when it comes to UAS—drones—and also satellites,” said Volker Ziegler, CTO at Nokia Bell Labs.

Nobody expects the high-flying Loon balloons and HAPSMobile’s drones to compete directly with ground-based 5G networks in the near future. Until recently, it hasn’t been easy to develop a balloon or drone platform that is cost-effective enough to even consider using for telecommunications, said Salvatore Candido, principal engineer at Alphabet and CTO of Loon. But such high-flying platforms may help fill the gaps when coverage is lacking in rural or otherwise under-served communities. (Even rural parts of the United States may miss out under current 5G network deployment plans.)

Fleets of balloons and drones could also provide coverage on a temporary basis, such as during a major pre-planned event like the Super Bowl or in the wake of a natural disaster. Nokia previously partnered with Alphabet’s Loon when the latter deployed its experimental balloon fleet to provide basic Internet service

to 200,000 people in Puerto Rico after the U.S. island territory was left devastated by Hurricane Maria in 2017. The balloons carried LTE technology from Nokia as part of a broader coalition involving AT&T and T-Mobile.

“There’s a billion people in the world who don’t have sufficient connectivity, whether that’s temporary because of a hurricane or just because of where they live,” Candido said. “I think all these new technologies coming together makes it possible to create networks that might begin to cover huge numbers of those people.”

Loon has not yet begun deploying 5G equipment on its balloons—though the partnership with Softbank’s HAPSMobile suggests that could someday be possible. But the advent of terrestrial 5G networks could also make it easier for companies to deploy Internet drones or Internet balloons. Nokia’s Ziegler pointed out that 5G offers advantages over 4G LTE when implementing a relay system that bounces the signal around between groups of balloons or drones to extend coverage well beyond the ground station where the signal originates.

*“There’s a billion people in the world who don’t have sufficient connectivity.” —Salvatore Candido, Loon*

The availability of 5G network technology could also make it easier from an air traffic control standpoint, to track and manage a large group of drones, said Giuseppe Loanno, an assistant professor in electrical and computer engineering at the New York University and director of the Agile Robotics and Perception Lab.

When the time comes, it will be important for telecommunications companies to create demand for high-flying mobile phone and Internet services by showing what they can do for communities or customers, said Dallas Brooks, director of the Raspert Flight Research Laboratory at Mississippi State University and associate director of the ASSURE FAA UAS Center of Excellence. He invited Brooklyn 5G Summit attendees to collaborate with him and other universities participating in the Federal Aviation Administration's research and testing program for integrating drones into U.S. national airspace.

Loon may be among the first to take that advice with its balloons—even if they won't deliver 5G service in the beginning. The company's stratospheric balloons have already won their first commercial contract with Telkom Kenya to provide mobile phone service for some of Kenya's almost 50 million citizens. But Loon certainly won't be alone in trying to make such

projects work in the 5G era. "There is no shortage of people trying to create pseudosatellites in the stratosphere," Candido said.

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