iCERYX

The Voice Of ICE

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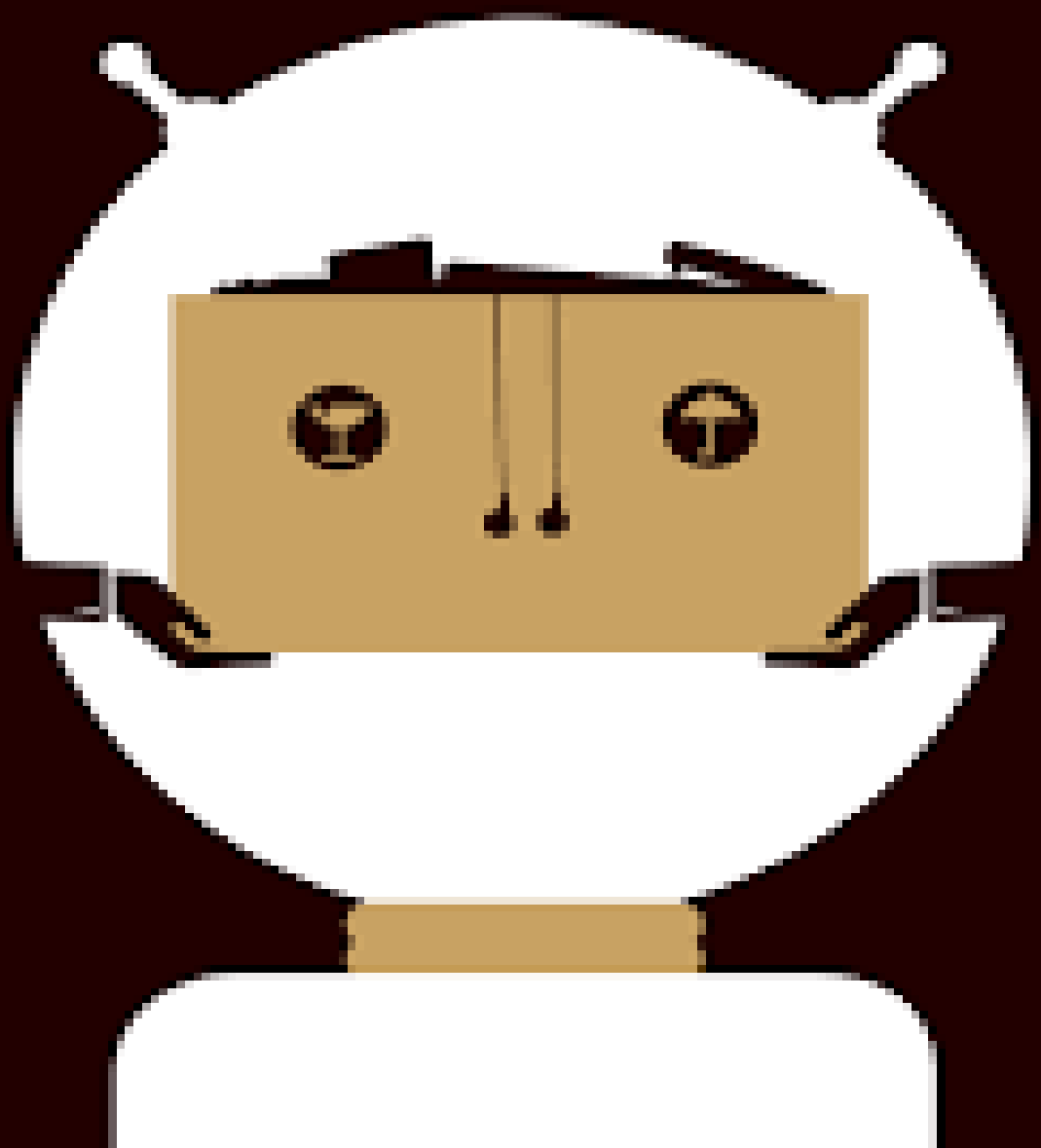
JULY-AUGUST 2018



Forward:

The development of the department is purely based on the student's development.Thus,the department concentrates on two specific areas for the students refinement.The first is taking up projects and working on it and the second is improvement on students academic results.Time management is one of the essential skill that every student must develop and every student must dig deeper and enlighten their knowledge to shine in their field.

- Dr. S.M. Girirajkumar,
HoD/ ICE.

From The Editorial Board:

It is a pleasure to the PR Team to bridge the gap between the students and the department activities.The development of the department is based on the active participation of students in various events both academic and non-academic..The support from the faculty members is eminent for the student activities.Last but not least ,we are what we repeatedly do,excellence is not an act but a habit and we the students of ICE always go beyond our horizon

PRTeam:

B.IRFHANNA AMEER,PRE FINAL YEAR.
R.MILAN PATEL, PRE FINAL YEAR.
G.SUBBIAH SRINIVASAN, PRE FINAL YEAR.
S.NISHA FRANCY,SECOND YEAR
S.P. MAHALAKSHMI,SECOND YEAR
V.KIRTHIKA,SECOND YEAR
R.AKASHSAMI,SECOND YEAR
S.SURYA,SECOND YEAR

CONTENTS:

DEPARTMENT ACTIVITIES:

NBA RESULTS:

The department of Instrumentation and Control Engineering has been successfully accredited by the NBA for a period of three years NBA results declared on 11.06.2018. ICE Scored 664/1000 marks in NBA.

E-yantra COMPETITION:

- 13 Batches from ICE Participated in e-Yantra online Competition 2018.
- Students of ICE have success¬fully cleared stage1 in e-Yantra Ideas Competition (eYIC)-2018., Finalist teams will be selected and they will demonstrate their working prototype in an exhibition during the e-Yantra symposium (eYS-2018)at IIT Bombay.

The following teams and their members have been qualified for the competition:

1. Automatic Irrigation system
   - Kirthika.G/ICE
   - Irfhanna Ameer.B/ICE
   - Anitha.S/ICE
   - Logeshwari.S/ICE
2. Smart Mobile Dustbin
   - Akshaya.B/ICE
   - Barakath Nisha/ICE

WORKSHOP/FDP ORGANISED

Two days workshop organized by Department of ICE on "INTELLISUITE SOFTWARE"conducted by Dr.M.Shhanmugavalli on 30th & 31st August 2018.

30 students from II &III Year participated.

GUEST LECTURE ORGANIZED BY ICE DEPARTMENT:

III Year students handle session for II year students related to the attributes of the department on 13.07.2018

On the date 30.07.2018 Mr. DIWAKAR CHANDRASEKARAN,Babcock and Wilcox Company,USA handled a session on the topic Trends and Opportunites for Instrumentation and Control Engineers for II,III & IV Year Students.

LABORATORYEQUIPMENTS PURCHASED:

The department has made purchases worth Rs.9,378 worth Hall Effect Transducer and also purchased Rs.14,418/- worth Load Cell from HITECH ELECTRONICS Chennai, in order to fulfill the requirements of Anna university regulation 2017 in the transducer lab.

WORKSHOP ATTENDED

NAME OF THE STUDENTS	TITLE	PLACE	DATE
1. Manoj Kumar 2. Atchaya.G 3. Divya Praba.M	Kaashiv Infotech work-shop	Infotech,Chennai	18.06.2018
1. Surraj.N.S 2. Shri Hari.S 3. Karthick.K 4. Surya.S 5. Sam Andrew.B 6. Naresh.V 7. Felix Nirmaldoss.M 8. Sivasubramanian.V 9. Arawinthan.R 10. Akashsami.R 11. Fahad.M 12. Sharvin Shakesh.P 13. Mahalakshmi.S.P 14. Kirthika.S 15. Gowri.R 16. Hariharan.P 17. Akash.T 18. Ahamed Zuhoor.A.G	Work-shop on "IoT and its Applica-tions	IIT,Madras,	30.07.2018

5 ICE Students	EDC Work-shop	Saranathan College of Engineering,Trichy.	03.07.2018
Karthikeyan-IV Year	Two days EDC work-shop		18.07.2018

TRAINING & PLACEMENT

48- III Years & 19- IV years take test for CELCOM o 30.07.2018 (16 Students shortlisted for CELCOM)

EXCLUSIVE VALUE ADDED TRAINING FOR STUDENTS

In the month of june 39 students from IV year attended CLAD Exam Training, by Mr.Rajasekar Application Engineer,National Instruments (Representative - Optithought)

MINI PROJECT:

Our II, III ICE students are doing mini projects and reviews were conducted by the respective coordinators.

SPORT ACTIVITIES (IN NATIONAL / DISTRICT, &INTERCOLLEGIATE EVENTS)

s.no	Student Name	yr	Event date College name	PRICE
1	M.Karthikeyan	II	Kamaraj College of Enigneering & Technology, Virudhunagar 16.06.2018- 17.06.2018	Silver
2	A.Ganesh Kumar	II	Kamaraj College of Enigneering & Technology, Virudhunagar 16.06.2018- 17.06.2018	Silver

TECHNICAL ACTIVITIES OF FACULTY IN ICE DEPARTMENT FDP/WORKSHOP ATTENDED:

The faculty of ICE, have participated in number of FDPs/Seminars/Worhshops/Conferences, that covers technical, research areas, and it includes the organizers from NIT, AICTE sponsored etc. Most of the staff in the department of ICE, have attended external programs. The details are as follows

Sl. No	Name of the Staffs Attended	Workshop/FDP/ Seminar Attended	organizer	Date/Venue
1	Dr.M.Shanmugavalli	QIP Short term course on "Analog Integrated Circuits : Fabrication Process and Applications"	IISC Bangalore	13.08.2018 to 17.08.2018
2	Mr.P.Thirumurugan	Workshop on 10 attributes to be a good teacher	ICT Academy	10.08.2018-11.08.2018
3	Mr.R.Seetharaman			
4	Ms.A.Christy Arockia Rani			

TRAINING & PLACEMENT:

The total strength of the final year students in the batch 2018 was sixty four. Out of the sixty four students 46 students are interested to attend the campus out of these 6 students have job offers in hand.

1..Zentron:
Drive date: 31/08/2018
Round 1: Online Aptitude &Labview/Electronics Test,
Students attended: 32
Shortlisted students: 9

2.Vuram Technologies:
Drive date: 17/08/2018 (K.Ramakrishnan College of Engineering,Trichy)
Round 1: Aptitude, technical, essay writing & programming,
Students attended: 12
Shortlisted students: 6
Round 2: Technical Round (computer science related)

INTERNSHIP ATTENDED:

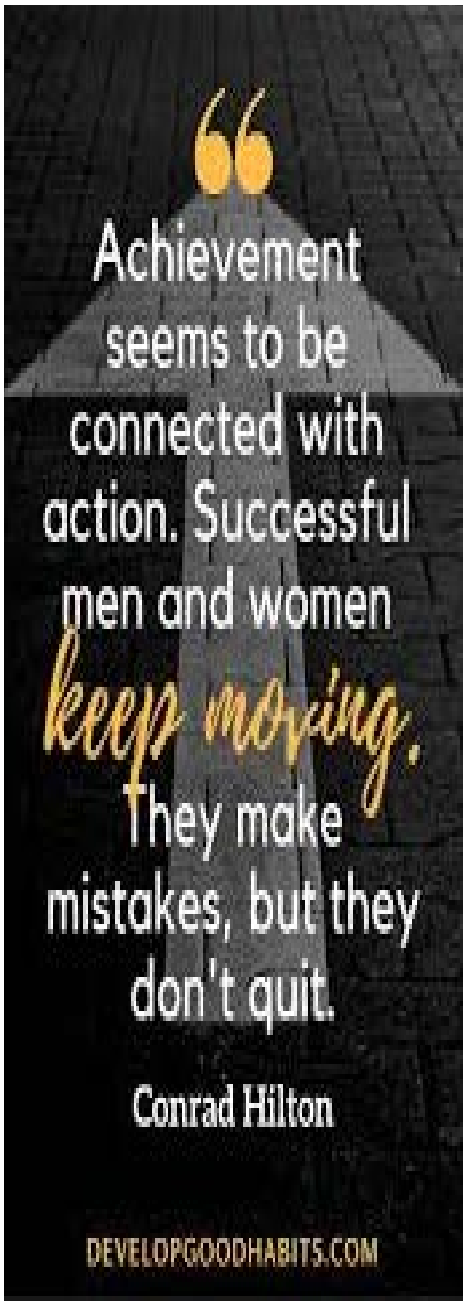
Milan Patel of III rd year attended Internshala Student Partner(Internship) conducted by Internshala in the month of July and August 2018.

CO- CURRICULAR ACTIVITIES

The following students of second year have Participated. in Madurai Quiz Regionals – TN Chamber conducted on 27.07.2018, Tamil Nadu Chamber of Commerce, Madurai.

List of students participated;

1. Ahamed Zuhoor.A.G
2. Ravikiran.B
3. Rahul.J
4. Renuga.S
5. Karthikeyan.M
6. Karthikeyan.S
7. Charukanth.M.S

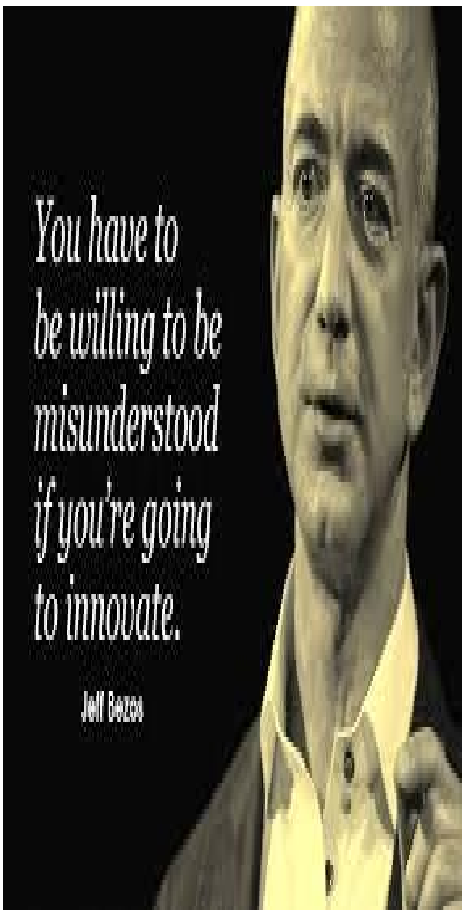


CLAD CERTIFICATION:

National Instruments, a US based Multinational Core Company that specializes in Virtual Instrumentation, certifies students and working professionals on its award winning System Design software – Lab VIEW. 22 students from Final Years have been accredited with the title of CLAD. The Certified Developers are listed on the National InstrumentsGlobalWebsite(http://www.ni.com/services/certified_labview_associate_developers.htm) as part of the list of International Certified Developers with a validity of 2 years to stay at par with the ever-advancing field of instrumentation. Clad Mock Exams conducted for final years 09.08.2018.

FUNDING PROPOSALS

13 TNCST Funding proposal from final year was submitted to TNCST on 28.08.2018. Hope for the positive response.



Parker Solar Probe - A Mission to Touch the Sun (By NASA)

Parker Solar Probe Mission Quick Facts

Launch Date: Aug . 11, 2018 (Successfully launched)

Launch Site: Space Launch Complex 37, Cape Canaveral Air Force Station

Launch Vehicle: United Launch Alliance Delta IV Heavy rocket

Launch: Targeted for 3:48 a .m . EDT (approximately 45-minute window)

Spacecraft Separation: Targeted for approximately 36 minutes after launch

Orbit: Elliptical orbit around the Sun at 3 .4 degree inclination from the ecliptic plane

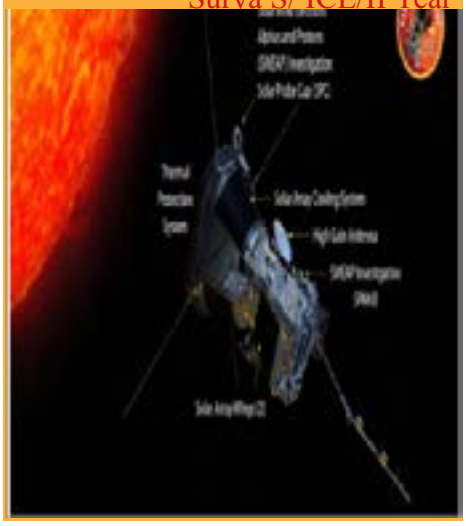
Orbital Period: 88 days for final orbits with closest approach

Mission Duration: Baseline seven-year science mission

Operations: The Johns Hopkins University Applied Physics Lab in Laurel, Maryland, will perform ground commanding, flight operations and data telemetry, as well as data processing and archiving .

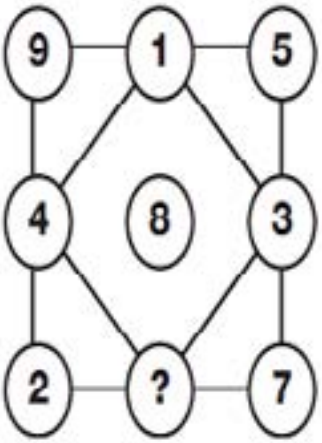
Ground Data Passes: Parker Solar Probe will transmit data via NASA's Deep Space Network .

-by,
Surya S/ ICE/II Year

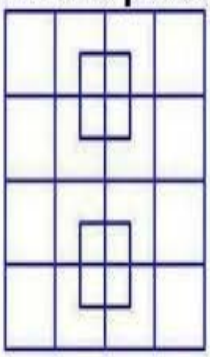


PUZZLES

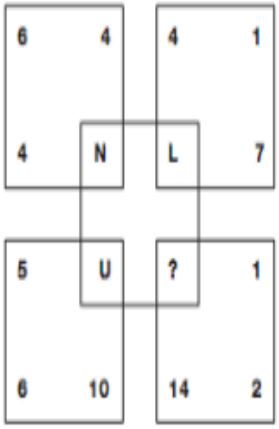
Which letter replaces the question mark?



How many squares are in this picture?



Which letter replaces the question mark?



HOW THE TEMPERATURE OF SUN IS MEASURED

A huge energy and light producing sphere of glowing gases, THE SUN makes life on Earth possible. The temperature of our nearest star varies tremendously, and not in ways you might realize.

At the core of the sun, gravitational attraction produces immense pressure and temperature, which can reach more than 27 million degrees Fahrenheit.

Nuclear fusion produces huge amounts of energy. The energy radiates outward to the sun's surface, atmosphere and beyond.

IS IT POSSIBLE TO MEASURE SUN'S TEMPERATURE

Can't actually measure it since we don't have instruments that can withstand that type of heat.

However, we can infer the core temperature by applying physical principles to other measurements.

The Sun is a big ball of hot plasma (ionized gas) that holds itself up by fusing hydrogen nuclei into helium nuclei in its central regions. In order for these reactions to take place, the temperature in the core has to be about 10 million degrees Celsius.

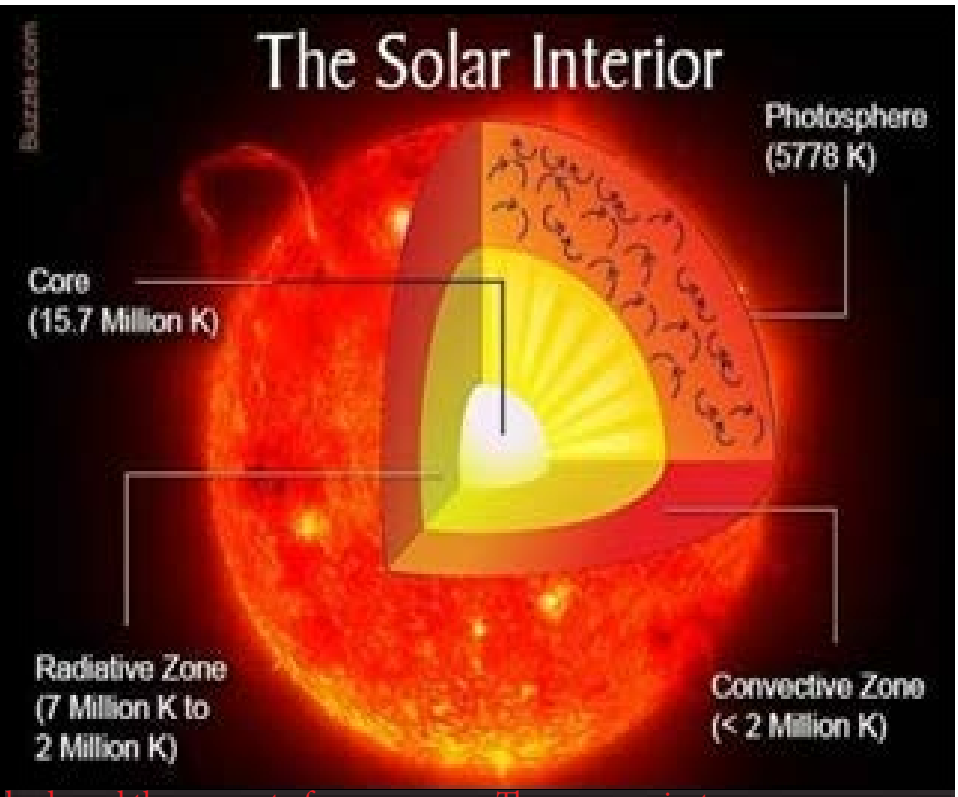
The light from the Sun that we see is "made" deep in the Sun's interior - it then bounces around inside the Sun and gradually makes its way out. It turns out that the light we see from the surface has nearly the spectrum of a blackbody.

This is great for us, because it means that we can measure the spectrum of the Sun, and then fit it with a blackbody spectrum to derive the temperature.

WAYS TO MEASURE SUN'S TEMPERATURE

The temperature at the surface of the sun is determined by its color.

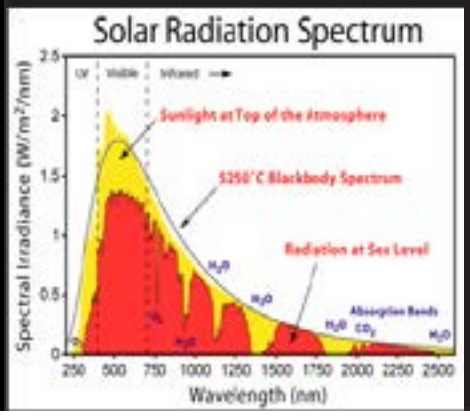
There is a theoretical relationship between the temperature of a black body and the amount of x light it radiates at different.



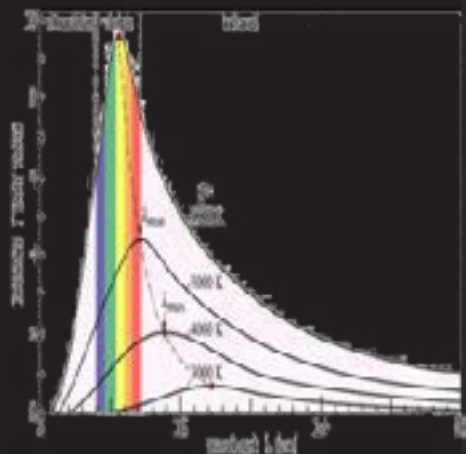
METHOD 1 : The spectrum of light frequencies (including visible light [colors], UV, infrared, microwaves, X-rays, etc…) that all black bodies emit is based solely on their temperature.

So all we had to do was measure the spectrum of light coming off of it and reverse-match it against the formula that gives us the spectrum based on temperature, and out pops the temperature.

METHOD 2 : We can measure the amount of light the sun outputs at various wavelengths, and you would eventually get a curve like one of these.,



Then we can just compare your experimental curve with the theoretical curves given by Planck's law, which says how much of each wavelength is emitted by a perfect black body.,



-SHARVIN SHAKESH P ,
II Year ICE

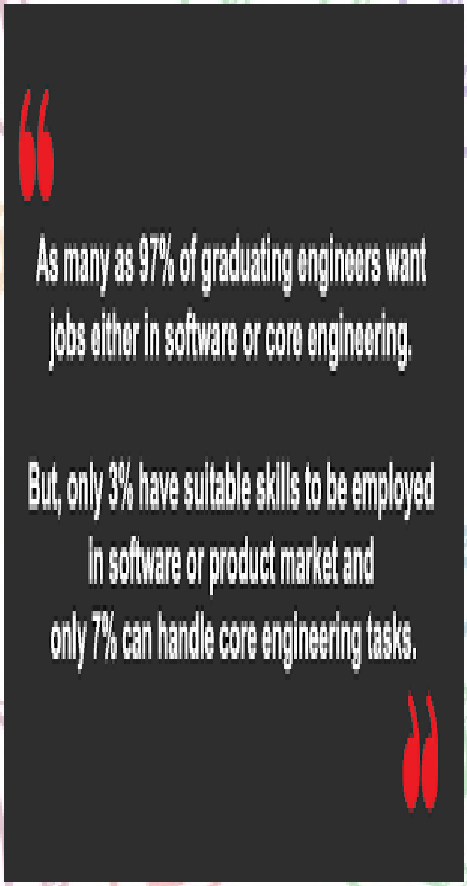
FUTURE TRENDS IN ENGINEERING

In the field of instrumentation and control, the trends toward more advanced and diverse technology have progressed dramatically with the development of virtual instrumentation technology, such as software sensors and virtual metrology. In instrumentation field, applications of sophisticated electronic instrumentation technology have advanced, and the objects to be measured are also being more diverse. Moreover in control field, there is increasing demand for control technology for high-speed and high-precision temperature control and positioning control.

In new markets where changes are created continuously by new applications, the automated system and system integration will become a necessary part of the solution. The innovation and development of products and engineering services will become primary work for automation engineers. In some new applications, artificial intelligence will become the spotlight that reflects the core value of automation.

The Internet of things (IoT) now in full swing will enter a high-growth path by 2020. In a time when people and things are all connected by network, automation engineers and end users will care most about the stability and reliability of the industrial network. The intellectualization, collection, and detection of data will mostly be resolved. The harder part is the troubleshooting and reliability of the industrial network. If situations arise in the network, whether in the business network or in the network controlling production, the whole operation of the enterprise will confront difficulties and hinder decision making in real time because control engineers rely on the industrial network for assessment and indicators. The primary concern for engineers will be the stability and reliability of the networked automation.

-SUBBULAKSHMI
IV YEAR/ICE



Exotic English

1) The bandage was wound around the wound.
2) The farm was used to produce produce.
3) The dump was so full that it had to refuse more refuse.
4) We must polish the Polish furniture..
5) He could lead if he would get the lead out.
6) The soldier decided to *desert* his dessert in the *desert*..
7) Since there is no time like the present, he thought it was time to present the present.
8) A bass was painted on the head of the bass drum.
9) When shot at, the dove dove into the bushes.
10) I did not object to the object.
11) The insurance was invalid for the invalid.
12) There was a row among the oarsmen about how to row.
13) They were too close to the door to close it.
14) The buck does funny things when the does are present.
15) A seamstress and a sewer fell down into a sewer line.
16) To help with planting, the farmer taught his sow to sow.
17) The wind was too strong to wind the sail.
18) Upon seeing the tear in the painting I shed a tear.
20) How can I intimate this to my most intimate friend?

Article Summarised by,
Subbiah Srinivasan.G
II Year ICE

PRIVATE LUNAR MISSION

SpaceX's Mars-colonizing Big Falcon Rocket (BFR) spaceflight system just went through a growth spurt.

The reusable rocket-spaceship duo will stand 387 feet (118 meters) tall at launch, SpaceX founder and CEO Elon Musk said Monday (Sept. 17) during a webcast event at the company's headquarters in Hawthorne, California. That's 11 percent taller than the previous design iteration, which the billionaire entrepreneur laid out in September 2017.

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Those two rear "actuated" fins will also serve as landing pads, as will a leg back there that's styled to look like a fin for symmetry and aesthetic purposes, Musk said.

The 2017 version of the BFR spaceship didn't have any front fins, and it sported just two rear "delta wings," which weren't part of the landing-leg system.

"I think this design is probably on par with the other one," Musk said during Monday night's event. "It might be better. It's slightly riskier technically, because of coupling legs and sort of the actuating wing-fin flaps . But I think it's the right decision overall. I think it looks beautiful. He also cited the new design's resemblance to the rocket used by the comic-book character Tintin in the 1954 adventure "Explorers on the Moon."

"I love the Tintin rocket design, so I kind of wanted to bias it towards that," Musk said. "If in doubt, go with Tintin."

Despite its recent growth, the BFR is still smaller than it was at birth, when it was known as the Interplanetary Transport System (ITS). Musk unveiled the ITS architecture at a conference in Mexico in September 2016, announcing that the vehicle would stand 400 feet tall (122 m) and be 40 feet (12 m) wide.

That girth was scaled down to 30 feet (9 m) in the 2017 update and remains the same today. Indeed, there shouldn't be many big changes to the booster or spaceship going forward, Musk said Monday night.

"I feel like this is the final iteration in terms of broad architectural decisions for BFR, BFS [Big Falcon Spaceship]," he said (though he did later add that the next version of the spaceship will probably also feature

some vacuum Raptors).

The architecture update was a bit of a sidelight Monday night. The main point of the event was to introduce Japanese billionaire Yusaku Maezawa as the person who bought a round-the-moon flight aboard the BFR that could launch as soon as 2023, if development and testing of the vehicle go smoothly.

Maezawa said he plans to take six to eight artists with him on the mission, which he is calling #dearMoon. He expects the works they create after returning to Earth to be transformative.

"These masterpieces will inspire the dreamer within all of us," Maezawa said.

Musk praised Maezawa's bravery and said his purchase (the cost of which was not disclosed) will help the development of the BFR significantly. SpaceX envisions the BFR eventually ferrying people to the moon, Mars and other worlds on a regular basis, helping humanity extend its footprint into the solar system.

"The BFR is really intended as an interplanetary transport system that's capable of getting from Earth to anywhere in the solar system, as you establish propellant depots along the way," Musk said.

STARSHIP-SUPER HEAVY USES

An important question we have to answer is, "How do we pay for this system?" The answer lies in creating a single system that can support a variety of missions. SpaceX can then redirect resources from Falcon 9, Falcon Heavy and Dragon to this system.

SATELLITES

SpaceX's Starship and Super Heavy Rocket are designed to deliver satellites to Earth orbit and beyond, at a lower marginal cost per launch than our current Falcon vehicles. With a 9m diameter forward payload compartment, larger than any other current or planned fairing, Starship creates possibilities for new missions, including space telescopes even larger than the James Webb.

SPACE STATION MISSIONS

Starship can deliver both cargo and people to and from the International Space Station. Starship's pressurized forward payload volume is greater than 1,000m3, enhancing utilization capacity for in-space activities. The aft cargo containers can also host a variety of payloads.

INTERPLANETARY TRANSPORT

Building Moon bases and Mars cities will require affordable delivery of significant quantities of cargo and people. The fully reusable Starship|-Super Heavy system uses in-space propellant transfer to enable the delivery of over 100t of useful mass to the surface of the Moon or Mars. This system is designed to ultimately carry as many as 100 people on long-duration, interplanetary flights

-B.IRFHANNA AMEER
III YR,ICE

DON COOPER

It's official: 45 years later, FBI has closed the file on its most famous unsolved hijacking case

A man in a business suit hijacked a plane, asked for a parachute and $200,000, and vanished into thin air. Finally after 45 long years, FBI has closed the unsolved case.

The 1971 hijacking remains an unsolved mystery that has even left the FBI baffled. The hijacking of a Seattle-bound airliner and the disappearance of the suspect known as DB Cooper, is now officially a closed chapter. But not a chapter FBI would like to read.

The Federal Bureau of Investigation announced on Tuesday that it was closing the case, reasoning that its crime-fighting resources would be better used elsewhere. The DB Cooper mystery remains one of America's most famous unsolved mysteries.

WHAT DID DB COOPER DO AND HOW DID HE DO IT?

On November 24, 1971, a man in his mid-40s who called himself Dan Cooper, dressed in a business suit and tie, boarded a Northwest Orient Airlines flight in Portland, Oregon, bound for Seattle.

After the take-off, the man gave a flight attendant a note, claiming he had a bomb in his briefcase and opened it to show a mess of wires and red sticks, according to FBI's account of the incident.

The airliner landed in Seattle safely and he freed 36 passengers in exchange for $200,000 (approximately Rs 1.3 crore) in cash and four parachutes. He still held several crew members and ordered the plane to take off again and head to Mexico City.

Then came the daring escape. At an altitude of about 10,000 feet, he leapt out of the back of the jetliner with a parachute and the ransom money.

Whether Cooper survived the jump from such a height and such a fast-moving aircraft has never been confirmed. And after all these years, his identity has never been established. "Evidence obtained during the course of the investigation will now be preserved for historical purposes at FBI headquarters in Washington, DC," the agency said.

That evidence includes the hijacker's black tie and a crumbling package of $20 bills matching the ransom money's serial numbers.

The FBI, decades after it interviewed hundreds of people, has come to a dead end. The agency even pursued a new lead in 2011 when it compared DNA from a woman who claimed to be DB Cooper's niece to the suspect's tie. There was no match.

Meanwhile, the myth of DB Cooper endures. Dead or alive, nobody knows, but for 45 years now, the case has been a mystery intriguing the world.

The closing of the file means that if the so-called Cooper did survive the jump, he would have pulled off the perfect crime.

-N.Rukmani
III year,ICE

CHANGE IMPORTANT IN LIFE?

Change is inevitable in life. Change is a part of our life. Everything in the world changes from time to time. But the question is "If our change is towards positive or negative aspects". The world is updating day by day. If we fail to update and change ourselves to the frequency of the world, then we'll be outdated. We must change to achieve a positive growth and develop our personal skills.

Remember " If there were no change, there would be no butterflies!"

BENEFITS OF POSITIVE CHANGE IN LIFE:

Confidence:

Changing our attitude towards ourselves is the key to building confidence. Change happens with consistent efforts made over time, and it'll make difference in the long run. If you change the way you look at your problems and remember you've everything within you to overcome it, then you are building a change within you towards positive growth.

Resilience and Strength:

Sometimes life is hard. Sometimes changes occur without our permission. Then we must have the capacity to recover quickly from difficuties and toughness. Developing resilience and confidence give you strength.

Happiness and Peace:

Change is related to happiness because it'll build your confidence and strength. Accepting your authentic self, while working on being the best version of yourself brings peace."CHANGE ALONE IS PERMANENT "Change is the universal truth of life.

For some people change is diffcult because they are practised with their routine activities and a sudden change may cause pain in them. Intentionally or unintentionally we're changing daily in our life and it may be either a positive change or a negative change. Both will have impact in our life in its own way. Progress is impossible without change, and those who cannot change their minds cannot change anything. Change is hard at first, messy in the middle and gorgeous in the end.So, friends change and update yourself in this changing world. Make sure that let others change does not disturb you. Take everything in a positive way.

-Saikamala/
IV YEAR/ ICE

Careers in Indian Navy

India occupies vital geo-strategic position in the Indian ocean. Indian Navy safeguards the country's maritime sovereignty. It plays four roles: military, diplomatic, constabulary and benign. Navy's military role includes deterrence and dissuasion against any intervention or act harming the national interests. It has the capability to inflict a crushing defeat on the adversary in the event of hotilities. It ensures our coastal security. It is a multi-dimensional and networked force that maintains high level of readiness at all times in order to defeat all maritime threats. Indian Navy offers excellent career opportunities in various branches to eligible young men and women to serve the force.

ENGINEERING BRANCH

Modern ships, submarines and aircraft with advanced technology, machinery and propulsion systems. The Engineer Officer is responsible for keeping all these systems serviceable. Opportunities to work in shore jobs in Naval Dockyards and indigenous production units also exist. In no other career is an engineer exposed to such a wide spectrum of opportunities for keeping abreast of modern developments. Naval Architects specialize in warship construction. The Indian Navy today employs the largest pool of trained Naval Architects in India. A Naval Architect is involved in design, construction, quality control, repair and new construction work of naval vessels.

ELECTRICAL BRANCH

A warship is a mini floating city with an integral power generation and distribution system. In addition, complex missile systems, underwater weapons, radar and radio communication equipment form part of a warship's equipment. A majority of these are either computer based or computer aided and incorporate the latest trends in electronics engineering. For a ship to be able to fight effectively, all this equipment must be kept working at peak efficiency.

-BY
KIRTHIKA .G
III YEAR, ICE

POEM!!!

Student Life
Student life is full of fun,
Work and play.
Their day begins with a prayer
And ends with play.

They go to school with a heavy bag on their back
And water bottles in their hand.
They sit in the class and toil all day
And learn about millipedes that coil all day.

In school they make many friends
And learn many trends.
They even learn values
Of love and life.

They study all day
And are bright like the sun-ray.
They can even swim
Like the fish on sea-bay.

Studies develop brainpower,
Sports develop willpower.
They can do both
Without any pain!

They use pens,
They use papers.
They can draw many things
And make many colorful rings.

But when March month comes,
They study all day.
They work for appreciation
And sacrifice lot of recreation.

East or west,
Student life is the best.
They can start their day with a prayer
And end with lots of play!

POEM!!!

FRIENDS FOREVER

Time elapsed from orange to grey,
Years passed with the touch of ray,
Standing in a pace holding to ourselves,
With all those muddy hair, stinky breathe,
altercations and fights, We held on.
We held on together to gall, to abuse, to make fun of each others.
But Hey buddy!! Do you think one day is enough, enough to flood our love?
With a ting of smile they replied..
Everyday is our friendship day!!

SANTHOSINI/ IV YEAR/ ICE

Art Works!!!

-IRFHANNA AMEER
III YR,ICE

-KIRTHIKA
III YR,ICE

-MAHALAKSHMI
II YR,ICE

-NISHA FRANCY
II YR,ICE

Photography!!!

-MANOJ KUMAR
III YR,ICE

-ATCHAYA
III YR,ICE

-DIVYA PRABHA
III YR,ICE

-AKASHSAMI
II YR,ICE

Brought to you by Public Relatios team of
The department of Instumentation and Control Engineering,
Saranathan College of Engineering,Trichy.