



The IMPETUS

for a change..



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Dr. Amos H. Jeeva Oli

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Issue 3
July '15

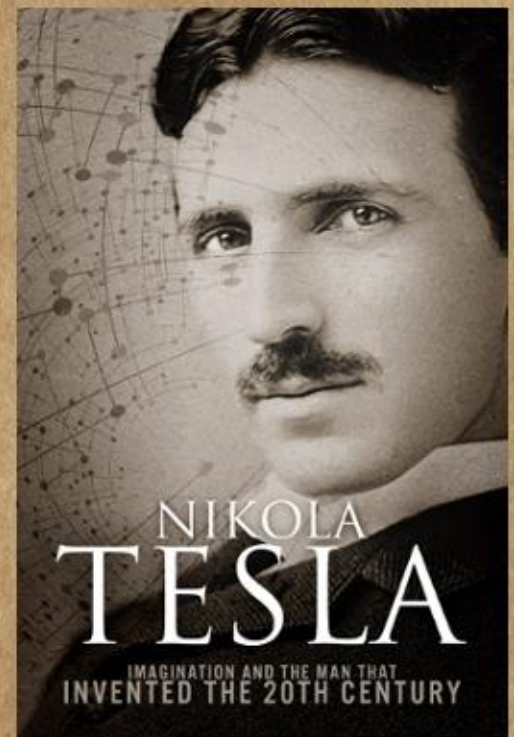
Editorial

Hello fellow kcgians!, How have you all been? We know that you have missed us badly, the semester exams, holidays , results and getting ready for a new semester have got us all occupied. We hope that everyone has had an amazing vacation and are ready for a new academic year with more energy and enthusiasm.

In this issue we have articles to feed your brain cells about new technologies and innovations, and more over, the guest column flourished by Dr. Amos H. Jeeva Oli , H.O.D ECE Department.

We conclude by thanking all our friends and staff members who have helped us in creating this issue in spite of all their deadlines and prior work. We wish you all great success and happiness for this semester. :D

I think you'll
find me



ELECTRIFYING!!!

It is paradoxical, yet true, to say, that the more we know, the more ignorant we become in the absolute sense, for it is only through enlightenment that we become conscious of our limitations. Precisely one of the most gratifying results of intellectual evolution is the continuous opening up of new and greater prospects. -- Nikola Tesla

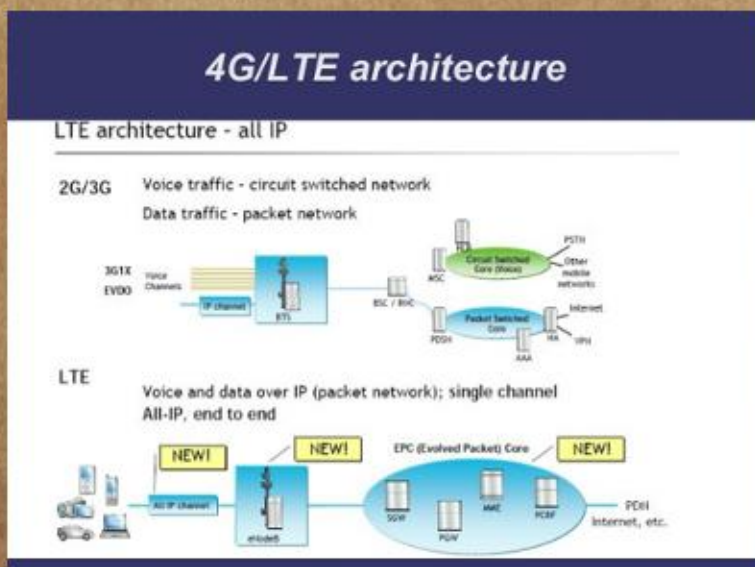
LTE-The New Generation Network

When you're looking at buying a new phone, you might find that there are way too many acronyms to choose from, between CDMA, GSM, LTE, WiMax... the list goes on.

Claims like "It's faster" and "downloads more pictures", "lets consumers watch movies anytime" and "video chat on-the-go". Everyone has heard these claims before, but not everyone is sure what exactly they mean, and how 4G LTE enables them. Understanding 4G facts and terminology can take some time. To help uncover the mystery that is 4G LTE, below is a quick primer on what it is and how it applies to day-to-day life.

LTE stands for "Long Term Evolution" and applies more generally to the idea of improving wireless broadband speeds to meet increasing demand. LTE is a 4G wireless communications standard developed by the 3rd Generation Partnership Project (3GPP) that's designed to provide up to 10x the speeds of 3G networks for mobile devices such as smart phones, tablets, net books, notebooks and wireless hotspots. Bandwidth constraints that have kept many applications tied to landlines will be history. As for the security concern LTE provides security through strong mutual authentication, user identity confidentiality, integrity protection, and optional multilevel bearer data encryption—along with other security enhancements. But the technology is still in its infancy so we've probably got a while to wait before it's widely available.

- Jerusha Lawrence (2nd yr)



Thync -- article on pg 3-->

Thync: Artificial feelings?

Thync, A small triangular device is introducing a new way to relax, as well as get energetic. The device promises to alter the way a person feels with a simple press of a button, with a combination of Neuroscience and tech.

As explained by the company's page, the mind reacts to different stimuli, differently. A splash of water, or a cooling breeze causes the mind to relax. Where as other stimuli trigger fight or flight responses in the brain, making us stressed but energetic. Thync utilizes these feelings and can produce them in the user.

Thync uses neurosignaling to activate specific cranial and peripheral nerves to influence this balance and shift you to a state of calm or give you a boost of energy in minutes.

The technology used by the device is neurosignaling, and utilizes tDCS and TENS by using pulsed currents with low intensity and higher frequency outputs using bio compatible materials.

The device operates in two modes, Thync energy and Thync calm, both modes are controllable with the accompanying app. Thync calm is the devices relax setting, Whereas Thync energy is the device's get up and go setting.

Calm Vibe users feel Physically relaxed, more centered, More aware of breathing and heart rate, Detached from stressful thoughts Less likely to react emotionally, Mild euphoria in some cases.

Energy Vibe users feel Mental alertness, focused, Burst of physical energy, excited, Motivation to be active, Need to accomplish something, Warm feeling in their chest.

Thync System is comprised of the Thync Module, Thync Strips and the Thync App. The model and app are connected via Bluetooth, and would cost you 300\$(Rs. 19046)

By Shreyas Asthana
Final year

ARREARS ARE STEPS

All is lost
Ready to think
Remember this thought
Excellence isn't far
Achievement isn't easy
Rather is success
Still I say
Arrears aren't you
Remember to think
Everything is tough
Somewhere a link
To make you tough
Especially if you say
Prepare for success
Success isn't far

-Balaji.B
Third Year

Nikola Tesla, the Natural Genius!

It is said that he had a photographic and eidetic memory, because of which he could visualize an invention in his mind with extreme precision, including all dimensions.

He never slept more than two hours a day.

He has a crater on the moon and a minor planet named after him.

He came up with the two-phase AC generating system for the Niagara falls.

He came up with the death ray technology 50 years before it was actually invented.

He came up with the RADAR technology 15 years before it was actually invented.

He dropped other scientific inventions having revolutionising practical applications only because he saw a possible misuse of the respective technology.

It takes a great scientist to invent great things.

It's a whole new level to let go of your inventions for the greater good.

Buckle up Final Years!

1. Accenture presents Innovation Jockeys 4,
Website: <http://innovationjockeys.net/>
Last date: September 20,2015

2. Indo-Asian Solar Challenge
Website: <http://www.risclpu.in>
Last Date: September 10,2015


accenture
presents



POWERED BY YAHOO!
INDIA



Report :

Industrial Visit

July 17, 2015, Final year students of B section visited NARL (National Atmosphere Research Laboratory). The students had a chance to see Microstrip patch antennas, MST Radar facilities, SODAR instrument, Rayleigh Doppler Lidar system etc.

Guest Column

All over the world, Technical Universities and Institutions, have formulated and redefined their vision to offer technical programs which help students to graduate as Engineers who have acquired knowledge and skills that suit their profession and possess an attitude that befits a professional. This article endeavours to highlight what an Engineering graduate will be able to when he or she completes his/her program.

An Engineering graduate will be able to:

1. Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems
2. Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
3. 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 issues.
4. 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.
5. Create, select and apply appropriate techniques, resources, modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the relevant limitations.
6. 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.
7. Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9.Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.

10.Communicate effectively on complex engineering activities with 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.

11.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.

12.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.

Every engineering student should undergo the undergraduate program in order these outcomes.
Wishing you all the very best in this endeavour.



-Dr. Amos H. Jeeva Oli,
HOD, Department Of ECE.

Achievements

- | | |
|--|---|
| 1. PENCIL SKETCHING
ALMA (III yr) - 2nd prize | 7. STANDUP COMEDY
VIGNESH (II yr)-2nd prize |
| 2. COLLAGE
SONIA.A (III yr) - 1st prize | 8. SOLO DANCE
BERYL (IV yr)-2nd prize |
| 3. SOAP CARVING
ALMA (III yr) - 1st prize | 9. ENGLISH DEBATE
SHREYAS ASTHANA (III yr)-1st prize |
| 4. GLASS PAINTING
SHARMILA (I yr)- 2nd prize | 10. LIGHT MUSIC -3rd prize |
| 5. QUIZ
VISHNU MOHAN (III yr) -1st prize
VIGNESHWARAN.S (III yr) -1st prize
SRIRAM (III yr)-1st prize
SREERAG.S (III yr)-3rd prize
PRASHANTH.M (III yr)-3rd prize
SHYAMJITH.R (III yr)-3rd prize | 1. VAANI (II yr)
2. DEEPTI (II yr)
3. SALIN(II yr)
4. DEEPAN (II yr)
5. ALMA (III yr)
6. RANJANI.S(II yr)
7. AMRITHA(II yr)
8. ADITHYA(II yr)
9. ARAVINTH(II yr)
10. JOHNSON(II yr) |
| 6. CREATIVE WRITING
JANANI JEEVANANTHAN
(II yr)-2nd prize | |



As tears well from my eyes,
Here I am writing this.
The shortest of all good byes,
Has today been his.

The nation mourns for it's loss,
The mother has lost her child.
The most grateful of all,
Made all Indians bind.

The Greatest citizen passed away,
Ungrateful people yet stay.
Mother India feels the gap,
As the wings of fire stops to flap.

The age could not catch him up,
Even the death had to sneak and
grab.

We should make his dream work,
Thus never will die his fame..

-Joe Gowthaman
Final Year



"If a country is to be corruption free
and become a nation of beautiful minds,
I strongly feel there are three key
societal members who can make a
difference. They are the father, the
mother and the teacher."

Dr. APJ Abdul Kalam
October 15, 1931 - July 27, 2015

Upcoming Events

- 6th Aug 2015 Nexentus 2k15 Sri Sairam Engineering College, Chennai
7th Aug 2015 Ubiquiton '15 SA.ENGINEERING COLLEGE, Chennai
8th Aug 2015 International Workshop on Embedded Systems and VLSI
Design - Connection 2015
Icsa Seminar Hall, Post Box 771, No: 107, Pantheon Road,
Egmore, Chennai
8th Aug 2015 International Conference on Technological Advancements in
Engineering-IISRT, Chennai
12th Aug 2015 PRAVAH 2K15 Sri Sairam Engineering College, Chennai

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HOD, ECE.

Mr. T. Thomas Leonid,
Asst. Prof., ECE.

Ms. Aida Jones,
Asst. Prof., ECE.

Ms. B. Thyla,
Asst. Prof., ECE.

Mohan Natraj P.
ECE 4thYr

Sneha J.
ECE 4thYr

Mohtasheem A.
ECE 4thYr

Sreeraag S.
ECE 4thYr

Sreege S.A.
ECE 4thYr

Shreyas Asthana
ECE 4thYr

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