VELAMMAL COLEGE OF ENGINEERING AND TECHNOLOGY

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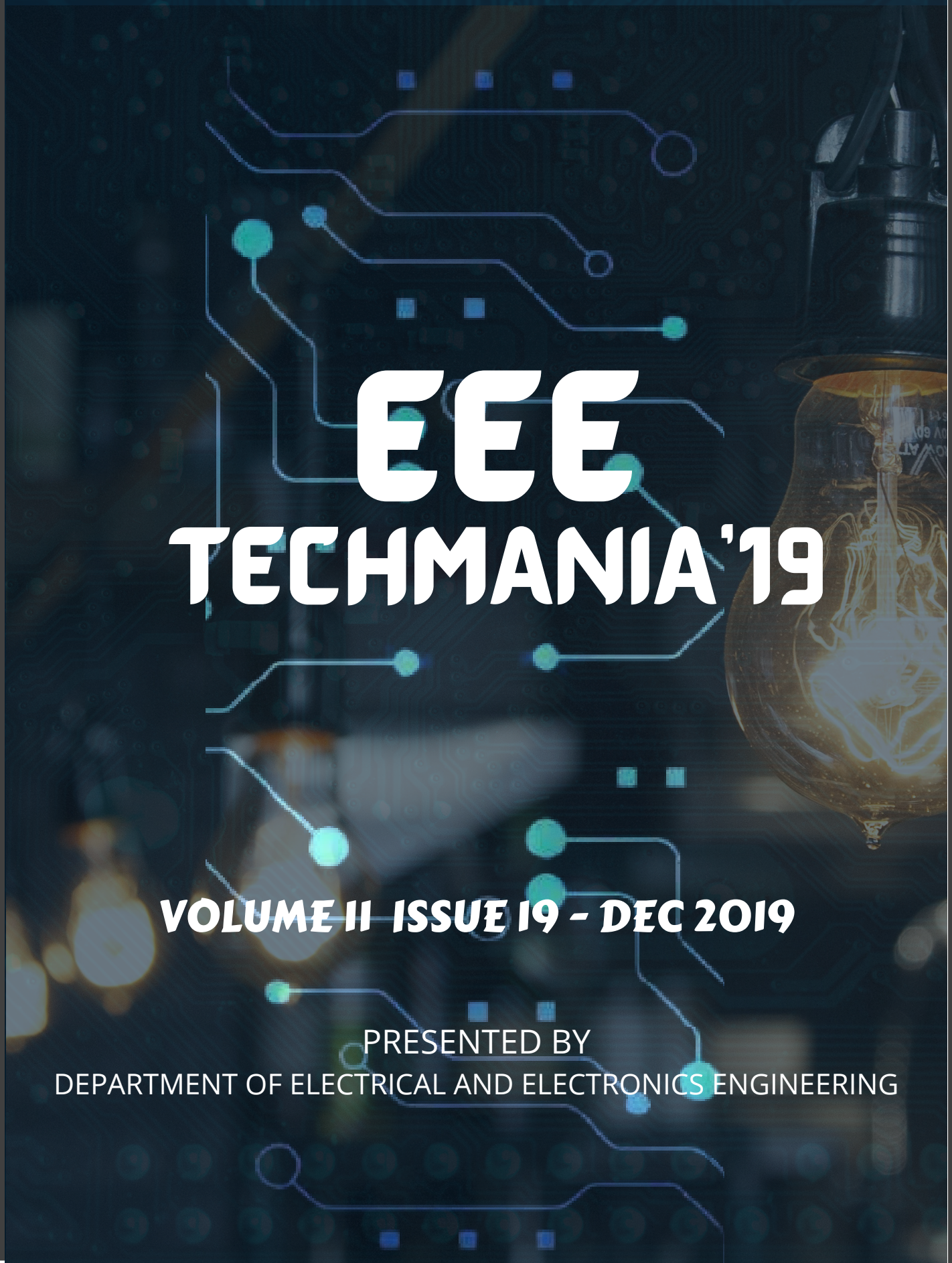

EEE TECHMANIA'19

VOLUME II ISSUE 19 - DEC 2019

PRESENTED BY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VCET

VISION AND MISSION

VISION :

To emerge and sustain as a center of excellence for technical and managerial education upholding social values.

MISSION :

- Imparted with comprehensive, innovative and value-based education.
- Exposed to technical, managerial and soft skill resources with emphasis on research and professionalism.
- Inculcated with the need for a disciplined, happy, married and peaceful life.

EEE DEPARTMENT

VISION AND MISSION

VISION :

To produce quality Electrical Engineers for industry and good citizens for society through excellence in technical education and research.

MISSION :

- To empower graduates with sophisticated knowledge and technical skills.
- To explore, create and develop innovations in Electrical Engineering and Technology.
- To provide beneficial service to the rural, state, national and international communities.

PROGRAM EDUCATIONAL OBJECTIVES:

1.Graduates will professionally be competent, excel in academics and solve wide range of problems in Electrical and Electronics Engineering field to serve the needs of Employers.

2. Graduates will engage in continuous professional development activities through Lifelong Learning to enhance technical knowledge and communication skills.

3. Graduates will excel in leadership quality and managerial capability which leads to Entrepreneur that bridge the gap between the advanced technology and the end users.

MESSAGE FROM HEAD OF THE DEPARTMENT

The student contributors to the TECHMANIA'19 -Dec Issue's creative efforts have produced a lot of joy and happiness, which is evident in this. The Department of EEE has always supported and guided the students in bringing out their talents. They stand as a witness to the monumental efforts taken by the management to make the college a center of excellence in education and research. It is great to find a considerable number of articles, poems and drawings that certainly prove that our students are adequately equipped and possess necessary skill sets to express their talent. Reading this magazine would definitely be an inspiration and motivation for all students to contribute even more to the Forthcoming issues. I hope that everyone would continue to give their full efforts to keep the momentum and continue to enhance the standards of the magazine

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DR.STEPHEN HAWKING – An Inspiration for us all!!

·Stephen Hawking was a British scientist, professorand author who performed groundbreaking work in physics and cosmology,and whose books helped to make science accessible to everyone

·At age 21, while studyingcosmology at the University of Cambridge, he was diagnosedwith amyotrophic lateralsclerosis (ALS).

·Hawking was born on January 8, 1942, in Oxford,England. His birthdaywas also the 300th

·At a New Year's party in 1963, Hawking met Jane Wilde and they were married in 1965. The couple gave birth to a son, Robert, in 1967, and a daughter, Lucy, in 1970. A third child, Timothy, arrivedin 1979.

Stephen Hawking: Books

·Over the years, Hawking wrote or co-wrote a total of 15 books.A few of the most noteworthy include:

- The Universe in a Nutshell"
- A Briefer History of Time
- 'A Brief History of Time'

·At the age of 21, Hawking was diagnosed with amyotrophic lateral sclerosis (ALS, or Lou Gehrig's disease).In a very simple sense, the nerves that controlled his muscles were shutting down. At the time, doctors gave him two and a half years to live.

By the mid-1970s, the Hawking family had taken in one of Hawking's graduatestudents to help manage his care and work.

·He could still feed himself and get out of bed, but virtually everything else required assistance.
·In 1985 he lost his voice for good following a tracheotomy. The resulting situationrequired 24-hour nursing care for the acclaimed physicist.

·In1974, Hawking'sresearch turned him into a celebrity within the scientific world when he showed that black holes aren't the information vacuumsthat scientists had thought they were.
·In simple terms, Hawking demonstrated

·That matter, in the form of radiation, can escape the gravitational force of a collapsed star.
Another young cosmologist, Roger Penrose,had earlier discovered groundbreaking

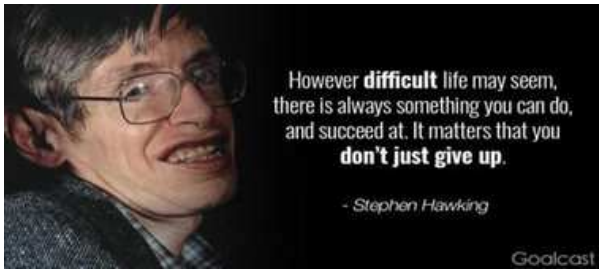
Findings about the fate of stars and the creation of black holes, which tapped into Hawking's own fascination with how the universe began.

·In 2007, at the age of 65, Hawking made an important step toward space travel. While visiting the Kennedy Space Center in Florida, he was given the opportunity to experience an environment without gravity

In October2017, Cambridge University posted Hawking's 1965 doctoral thesis, "Properties of Expanding Universes," to its website. An overwhelming demand for access promptly crashed

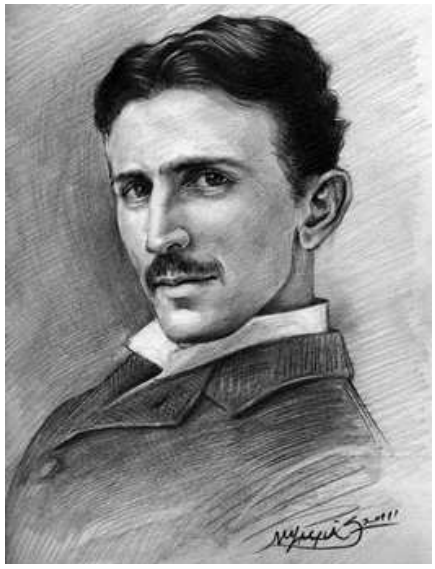
·The university server,though the document still fielded a staggering 60,000 views before the end of its first day online.

On March 14, 2018, Hawking finally died of ALS, the disease that was supposed to have killed him more than 50 years earlier. A family spokesman confirmed that the iconic scientistdied at his home in Cambridge, England



G.JAISURYA
III YEAR- EEE-B

THE MAN WHO INVENTED THE 20TH CENTURY – NIKOLA TESLA



• *Nikola Tesla, the designer of the alternating current electric system is the man who invented the 20th century. Not just the alternating current, he also pioneered many modern inventions during his time.*

• *The man who dreamt of and invented the hydroelectric powerplants, seismology, fluorescent lamp, worldwide data communication network was*

Early life -

• Born in 1856, in Smiljan, Croatia, Tesla was an ambitious physics student who was a dreamer and always envisioned future technology in mind.

• He wanted to design a brushless AC motor to harness the full alternating current produced by the generator and to use it effectively.

• In 1882, he moved to Paris and got a job repairing the direct current power plants with the Continental Edison Company.

• The vision of Tesla had a major problem. No one knew how to construct a fully working AC motor as everyone were following the traditional way of using DC.

• Working at the Edison factory, Tesla had new ideas on AC motors. When he succeeded in making a working prototype, he needed to go to America.

Tesla Vs Edison: The Electricity War

• Thomas Alva Edison, as we all know, was an American inventor and businessman who was the greatest inventor of America.

• At the age of 31, he had almost 2300 patents across different countries of the world.
The invention of phonograph earned him the nickname, „The Wizard of Menlo Park"
• Edison was brilliant, insightful but he was extraordinarily hard headed and a practical, pragmatic businessman.

• Around the 1870's, Edison was committed to revolutionize the world by replacing the gas lamp by a safe and inexpensive light source powered by electricity.

• Edison had to build an entire system to take his invention to the streets. The power plants built by Edison were able to deliver current to only a radius of half a mile.

Brilliant Tesla inventions that never got built –
Tesla was known for inventing many things but forgetting to write them down. He was a visionary who changed the world with his inventions. Some of his most breathe taking inventions were:

1. Earthquake machine –

In 1893, Tesla patented a steam-powered mechanical oscillator that would vibrate up and down at high speeds to generate electricity.
While attempting to tune his mechanical oscillator to the vibration of the building housing his New York City laboratory, he caused the ground to shake.
Suddenly, all the heavy machinery in the place was flying around. He grabbed a hammer and broke the machine. The building would have been down in another few minutes.Police and ambulances arrived on the scene to attend to the commotion, but Tesla told his assistants to remain quiet and tell the police that it must have been an earthquake.

2. Thought Camera –

Tesla believed it could be possible to photograph thoughts.

In 1893, Tesla told a newspaper reporter decades later: —I became convinced that a definite image formed in thought must, by reflex action, produce a corresponding image on the retina, which might possibly be read by suitable apparatus.If this can be done successfully, then the objects imagined by a person would be clearly reflected on the screen as they are formed, he said, —and in This way every thought of the individual could be read. Our minds would then, indeed, be like open books

3. Artificial Tidal Waves –

Tesla believed that the power of science could be harnessed to prevent war.

In 1907 the New York World reported on another of Tesla's military innovations in which wireless telegraphy would trigger the detonations of high explosives at sea to generate tidal waves so vast that they would capsize entire enemy fleets.

4. Electric Powered Supersonic Airship –

From the time Tesla was a boy, he had been fascinated with the idea of flight.

Combining his knowledge of electrical and mechanical engineering, he began to think more about aviation after the failure of Wardenclyffe.

5. Death Beam –

Tesla's genius mind continued to spark new visions even late in his life.

On his 78th birthday, he told The New York Times that he had come up with this most important invention, one that would —cause armies of millions to drop dead in their tracks.

6. Lightning ball -

Lightning ball is a form of lightning that appears in the form of a sphere and travels slowly while hovering a few feet above the ground.

It's an extraordinary rare phenomenon and even today no scientist have ever successfully produced it in a laboratory.

Except Tesla, who did it back in 1890s.

Conclusion –

"For the man who succeeded in producing a lightning ball, inventing remote control, neon lighting, modern electric motor, wireless communication",

Tesla were a man displaced in time, an Archimedes, Steve Wozniak, Tony Stark of the 19th century.

It was unfortunate that Tesla had to live in a time when the world demanded practical and profitable results.

Nikola Tesla's unpatented inventions and his works throughout his life is a proof that he was a man who worked completely out of interest and dedication without expecting fame and wealth.

-PET.T.BAVITHA
II YEAR EEE A

NANOELECTRONICS- “GOOD THINGS IN SMALL PACKAGES”

Nano electronics refers to the use of nano technology in electronic components. The term covers a diverse set of devices and materials with common characteristics.

Dimensions:

1.The sizes ranges from 1nm to 100nm.

2.Already SiMOSFET technology generations are already within the regime.

3.This includes 22nm CMOS nodes and 14nm,10nm and 7nm FinFET.

Fundamental Concepts

• In 1965,Gordon Moore made continuous observation on Silicone transistor and found that the scaling continuously goes down and coined Moore's law.
• Since his observation, transistor minimum feature sizes have decreased from 10micro meter to 10nm.

Mechanical Issues

1. The volume of an object decreases as the third power of its linear dimensions, but the surface area only decreases as its second power.

2. This somewhat subtle and unavoidable principle has huge ramifications.

3. For a normal-sized drill, the power of the device is enough to handily overcome any friction.

4. For this reason, while super- miniature electronic integrated circuits are fully functional, the same technology cannot be used to make working mechanical devices beyond the scales where frictional forces start to exceed the available power. So even though you may see microphotographs of delicately etched silicon gears, such devices are currently little more than curiosities with limited real world applications, for example, in moving mirrors and shutters.

5. Surface tension increases in much the same way, thus magnifying the tendency for very small objects to stick together. This could possibly make any kind of "micro
factory" impractical: even if robotic arms and hands could be scaled down, anything they pick up will tend to be impossible to put down.

Nanoelectronics, Energy Conversion and Storage.

1.The above being said, molecular evolution has resulted in working cilia, flagella, muscle fibers and rotary motors in aqueous environments, all on the nanoscale.

2. To build meaningful "machines" at the nanoscale, the relevant forces need to be considered. We are faced with the development and design of intrinsically pertinent machines rather than the simple reproductions of macroscopic ones.

3. All scaling issues therefore need to be assessed thoroughly when evaluating nanotechnology for practical applications.

Nanofabrication

1.Nanoelectromechanical systemsalso fall under this category. Nanofabrication can be used to construct ultra dense parallel arrays of nanowires, as an alternative to synthesizing nanowires individua lly.

2.Of particular prominence in this field, Silicon nanowires are being increasingly studied towards diverse applications in

3. Such SiNWs can be fabricated by thermal oxidation in large quantities.

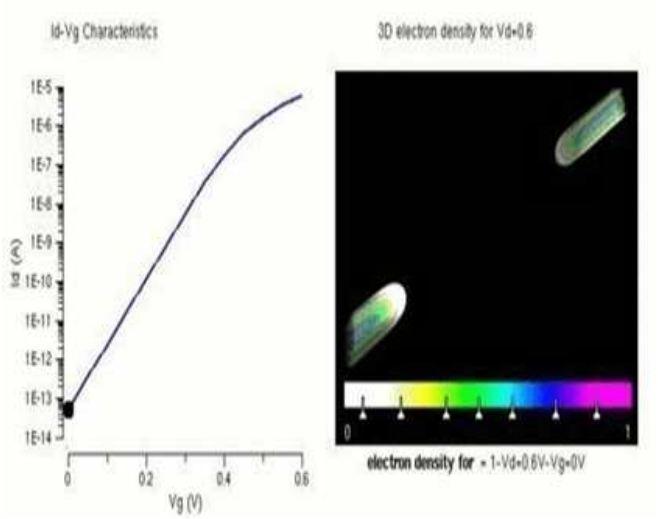
Nanomaterials

1. Besides being small and allowing more transistors to be packed into a single chip, the uniform and symmetrical structure of nanowires and/or nanotubes al lows a higher electron mobility (faster electron movement in the material), a higher dielectric constant (faster frequency), and a symmetrical electron/hole charac teristic.

2. Also, nanoparticles can be used as quantum dots.

3. Nanoionics studies the transport of ions rather than electrons in nanoscale systems.

4. Nanophotonics studies the behavior of light on the nanoscale, and has the goal of developing devices that take advantage of this behavior.



Nanoelectronic Devices

1. Current high-technology production processes are based on traditional top down strategies, where nanotechnology has already been introduced silently.

2. Simulation result for formation of inversion channel (electron density) and attainment of threshold voltage (IV) in a nanowire MOSFET. Note that the threshold voltage for this device lies around 0.45V

3. The critical length scale of integrated circuits is already at the nanoscale (50 nm and below) regarding the gate length of transistors in CPUs or DRAM devices.

4.. Nanoelectronics holds the promise of making computer processors more powerful than are possible with conventional semiconductor fabrication techniques.

Displays

32. The production of displays with low energy consumption might be accomplished using carbon nanotubes (CNT) and/or Silicon nanowires.

33. Such nanostructures are electrically conductive and due to their small diameter of several nanometers, they can be used as field emitters with extremely high efficiency for field emission displays (FED).

34. The principle of operation resembles that of the cathode ray tube, but on a much smaller length scale.

Nanoelectronics In Energy

Solar cells and super capacitors are examples of areas where nanoelectronics is playing a major role in energy generation and storage.

APPLICATIONS

Some of the devices that have been developed with the help of Nanoelectronics and its future applications are listed below.

1. Nanoradio

2.Nanocomputers

-KIRUTHIKA RANI.S

II YEAR- EEE-A

DYNAMIC INTERSECTIONS AND SELF-DRIVING VEHICLES

- **Connected and automated vehicles are expected to be at the core of future intelligent transportation systems. One of the main practical challenges for self-driving vehicleson public roads is safe cooperation and collaboration among multiple vehicles when conflicts arise on shared road segments.**
- **Intersections controlled by traffic lights and stop signs are common examples of such potentialconflicts, and cooperative protocols for such intersections have been studied.**

- **On the other hand, there are many differenttypes of shared road segments. In this paper, we study Dynamic Intersections that might appear almost anytime and anywhere on public roads and that might lead toautomobile accidents**
- **Consider how a self-driving vehicle can safely navigate these dynamic intersections by using sensor-based perception and inter-vehicle communications. We present a cooperative protocol for dynamic intersections which can be used by self-driving vehiclesfor safely coordinating with other vehicles**

- **Under our protocol, self-driving vehicles can also create a vehicular communication-based traffic manager named Cyber Traffic Light when the area is congested.**

- **A cyber trafficlight functions as a self- optimizing trafficlight by estimating the traffic volumesand by wirelessly coordinating among multiple self- driving vehicles. Our simulation results show that our protocolhas higher traffic throughput, compared to simple traffic protocols while ensuring safety.**

T.SHRUTHY
IV YEAR-EEE-B

SMART WATCH - WATCH WHAT'S NEXT

- *It‘s amazing how quickly the landscape of the technology world changes. It wasn‘t too long ago when smart wearables were hogging all the limelight and were dubbed _the next big thing‘. Now, the hype has dramatically fizzled out.*

- *Major technology companies across the globe poured millions of dollars into research to make _the‘ game-changing product, but quickly learned that getting wearables right is a tall order. In addition to the form factor and the aesthetics, to build smart wearables that are truly useful and desirable for people, has been a bigger challenge than these companies expected.*

- *2016 was one of the worst years for smart wearable tech, which brought more bad news than good.*

- *But, the biggest limiting factor for an OS is the vessel it arrives on, the hardware. Interestingly, a slew of new smart watches with Android Wear 2.0 have been introduced in the last few weeks. And what's more interesting is that a big chunk of them are all high-end, luxury watches.*

Back to the future:

- However, this year has seen new life breathed into the segment. Lots of new technology is being introduced; quite a few companies are making their foray into the market, and notable luxury watchmakers are becoming more open to thetechnology

Access control:

Pebble arguably kicked off the smart watch category with its original Kickstarter campaign in 2012. The company went on to release quite a few variants of the Pebble Watch, but none of them achieved mass success. Pebble saw a massive drop of 54.1% in their year-on-year growth for 2016, before being consumed by Fitbit. There has been only one player which has consistently performed in the segment and it'sApple.

The future of smart wearables is shrouded in uncertainty, but at least for now, it has received a much-needed shot in the arm.

-GOWSHIK BALAJI.K
II YEAR-EEE

BIOMEDICAL IMAGING & IMAGE PROCESSING

Biomedical imaging concentrates on the capture of images for both diagnostic and therapeutic purposes. Snapshots of in vivo physiology and physiological processes can be garneredthrough advanced sensorsand computer technology.

The image quality has also improved,with enhanced resolution and contrast detail providing more reliable and accurate diagnoses. The limitations of what x-rays could reveal were partiallyaddressed through the introduction of contrast medium to help visualize organsand blood vessel

First introduced as early as 1906, contrast agents, too, have evolved over the years. Today,digital x-rays enable images to more easily be shared and compared.

Biomedical engineers are using CT and MRI to measure the blood profusion of tissue; especially important after a heart attack or suspected heart attack. Researchers are also using functional MRI (fMRI) to measure different types of brain activity following strokes and traumatic head injuries.

Using contrast or imaging agents that attach to specific molecules, diseaseprocesses, such as cancer, can be spotted before they render their effects at the level of gross pathology.

Biomedical Image Processing

Biomedical image processing is similar in concept to biomedical signal processing in multiple dimensions. It includes the analysis, enhancement and display of images captured via x- ray, ultrasound, MRI, nuclear medicine and optical imaging technologies.

Today, this acquisition and reconstruction occurs in less than a second.

Rather than simply eyeball an x-ray on a light box, image processing softwarehelps to automatically identify and analyze what might not be apparent to the human eye. Computerized algorithms can providetemporal and spatialanalysis to detect patterns and characteristics indicative of tumors and other ailments

Depending on the imaging technique and what diagnosis is being considered, image processing and analysis can be used to determine the diameter, volume and vasculature of a tumor or organ; flow parameters of blood or other fluids and microscopic changes that have yet to raise any otherwisediscernible flags.

-R.M.SIVAMANIKANDAN
II YEAR –EEE-A

Agricultural Robot and AI -

Robotics and artificial intelligence (AI) will drive a deep and transformative change in the agricultural world during the coming decades. Seeing, localising, and taking plant-specific intelligent action are no longer the exclusive realm of humans. Machines have demonstrated the technical viability and the emphasis has long shifted to the finer details of ROI, reliability, business model, etc. As such, a new class of activities in agriculture are prone to automation, just as advances in power and motion technologies mechanized many agricultural tasks, or just as advances in seed and agrochemical technology removed the human from many activities.

The IDTechEx assessment is that the upcoming changes are already a question of when and not if. The transformation will not be overnight, but nonetheless, robotics and AI are inevitability in the evolution of agricultural tools and practises.

Indeed, this report analyses all the emerging product types, including autonomous robots taking plant- specific precision action, intelligent vision-enabled robotic implements, diverse robotic fresh fruit harvesters, highly automated and autonomous tractors and high-power farm vehicles, drones, automatic milking, and so on. It provides interview-based company profiles and analysis of all of the key

companies and innovators. Finally, the report offers short- and long-term market forecasts, considering the addressable market size in area or tons and value, penetration rates, annual

Agricultural Robots: A Cost– Effective Precision Revolution?

Examples of these products or robots are shown below. These are often small or mid-sized robots which are designed to autonomously navigate and to automatically take some precise plant-specific action.

Machine vision technology is often a core competency of these robots, enabling the robots to see, identify, localise, and to take some intelligent site-specific action on individual plants. The machine vision increasingly uses deep learning algorithms often trained on expert- annotated image datasets, allowing the technology to far exceed the performance of conventional algorithms and to match or even exceed even that of expert agronomists. Crucially, this approach enables a long-term technology roadmap, which can be extended to recognize all types of crops and to analyse their associated conditions, e.g., water-stress, disease, etc.

The rise of autonomous robots, provided they require little remote supervision, can alter the economics of machine design, enabling the rise of smaller and slower machines. Indeed, this elimination of the driver overhead per vehicle is the basis of the swarm concept. There is clearly a large productivity gap today between current large and high-power vehicles and those composed of fleets of slow small robots. This productivity gap however can narrow as the latter has substantial room for improvement.

The first major target market is in weeding. The ROI benefits here are driven by labour savings, chemical savings, boosted yields, and less land compaction.

Intelligent Robotic Implements: The Inevitable Next Generation of Agricultural Tools

Simple robotic implements utilizing basic row-following vision technology are already mature and not uncommon in organic farms. Advances in vision technology are transforming tractor- pulled implements though, upgrading them into intelligent computerized tools able to take plant-specific precise action.

The core technology here is also the machine vision, which enables the identification and the localization of specific plants. The algorithms already surpass the capabilities of agronomist in specific cases, e.g., weed amongst cotton. Crucially, the systems are becoming ever more productive (see image below), closing the productivity gap with established technology.

The report provides an analysis of the relevant technologies, companies, and markets. In terms of market forecasts, it offers projections by annual robot sales, accumulated fleet size, total RaaS market, and more.

Autonomous Tractors and High-Power Vehicles: Fewer but More Autonomous Systems Will Be the Future?

Autonomous navigation is not new to tractors. Thanks to RTK-GPS, tractors have long been benefiting from tractor guidance and autosteer. The latter is in fact level-4 autonomy since the tractor can autonomously drive outdoors along pre-determined GPS coordinates without human intervention. The cost of implementation, as well as the adoption of such technologies have increased. In short, the technical challenge does not hinder deployment.

Level-5 or fully autonomous tractors have also been demonstrated for some years. The technical barrier here
is low. The required hardware is available and the autonomous driving software challenges are relatively mild given the nature of the operational environment.

As with all cases, the legislative environment is a hindrance today, but will not hold back the industry for long.

Robotic Fresh Fruit Picking: Is It Technically and Commercially Viable?

Fresh fruit picking is still largely manual as deficient technical ability had thus far held automation back. As such, farms are faced with high operating costs and are, more importantly, grappling with the growing challenge of assembling sufficiently large armies of seasonal pickers. Is this about to change?

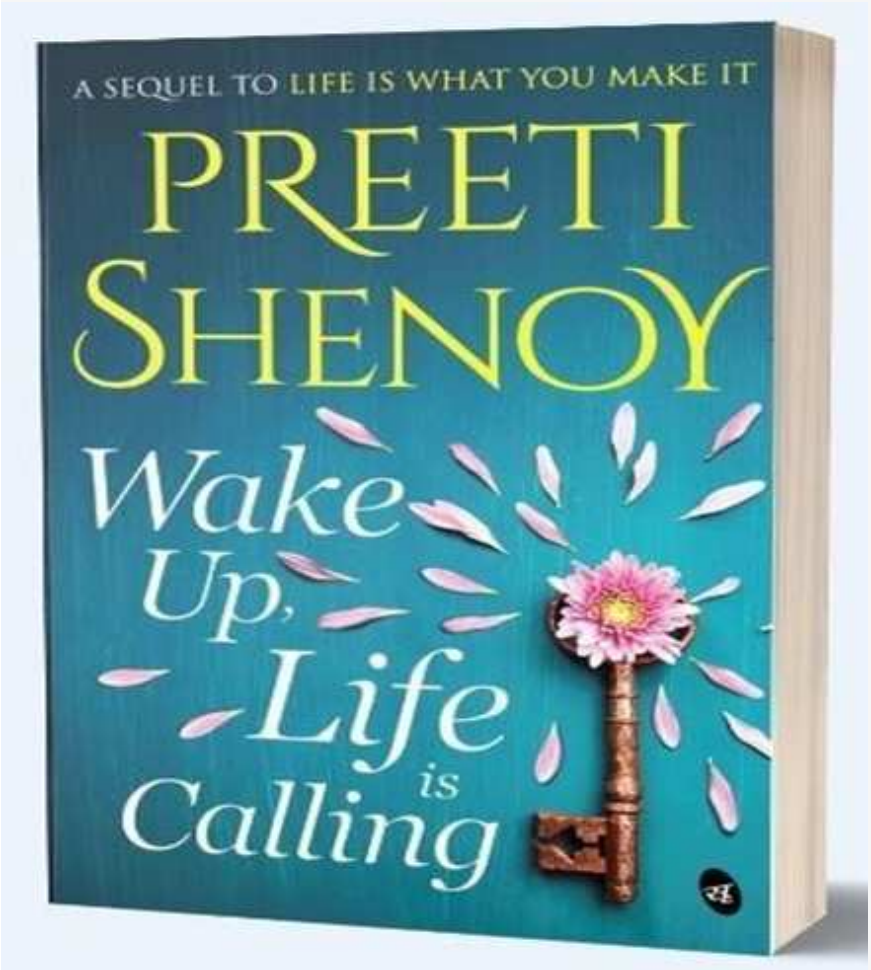
The total deployed number of units is small, thus the robotically harvested amount of fresh fruit is still vanishingly small compared to the addressable market. However, the technical viability is long proven. The emphasis is now in bridging the productivity gap to offer a reliable solution with reasonable ROI compared with the incumbent human picking.

Humans today are still faster- e.g., 2-3s per picked strawberry vs 8-10s for the robot. This speed gap will almost certainly narrow in the future, lowering the comparative advantage of humans. In addition, robots can have many arms, compensating for the slowness of each arm (both articulated and delta arms are deployed). The increasing availability of more affordable robotic arms which do not overshoot the power and precision requirements will continue to help. The machine vision can identify nearly all the visible fruits, but is yet to establish a method to find hidden fruits.

M.DHARSHA
II YEAR EEE–A

Book review

Wake up, life is calling – PreetiShenoy



Title: Wake up, Life is Calling Author: PreetiShenoy Publisher: Srishti Publisher Page Count: 256
Published: April, 2019

MY VIEWS:

I am really spellbound after reading this amazing book. It is an emotional roller coaster ride, which is both gripping and overwhelming. The book talks about suicide, mental illness, depression, loss, trust and many more things.

It is the story of Ankita, a young girl who had suffered from a major mental illness and came back from a mental hospital. She is trying everything to regain normalcy in her life. She is in a college she loves, studying Creative writing, where she makes new friends as well, who do not know anything about her past.

She is busy and happy in her new life. But, this happiness doesn't last long as her past resurfaces, and his ex-boyfriend comes back to her life, to regain her trust. And just when she thought she can handle that, she discovers a book, a suicide manual, which pushes her to some dark spots, as she gets stuck in the spirals of her own thoughts. But can she escape her thoughts? Will Ankita survive the ordeal a second time around?

The character of Ankita is very-well developed, but the other characters, especially Vaibhav, seemed vaguely developed. Also, the narration is not much smooth, as the book gets boring somewhere in the middle.

What I liked the most is the positivity, the realization of self worth and the sense of hopefulness at end of the book. It is uplifting and shows how severe mental illness can be treated. The book demonstrates how by changing our thoughts, we can change our life itself. The author has written various words of wisdom, in the form of Ankita's Life's Little Notes, which made the book much more engaging.

About the Author:

PreetiShenoy is the bestselling author of Life is What You Make It and eleven other titles. Her books have been translated into several Indian and foreign languages. She is among the highest-selling authors in India. She is also a speaker, columnist, and artist. Preeti has been featured on BBC, Conde Nast, Verve, India Today and all other major media.

M.DHARSHA
II YEAR EEE–A

IDIOMS AND PHRASES

1. Gift of gab

Meaning:

The gift of gab is the ability to speak in a very fluent, confident and eloquent manner, especially when this ability allows one to easily persuade others to do what one wants

Example:

He was entertaining company and certainly had the gift of the gab.

Origin:

Gab was used during the late 1700's as a word for conversation or _chatter.' The Scottish term gab was associated with gob, meaning _the mouth.' Having the gift of the gab meant having a gift for fluent conversation.

2. Harp on the same string

Meaning:

Dwell on the same subject. The verbharpis defined as "to dwell on or recur to a subject tiresomely or monotonously." The phrasal verb harp on can be used with the object of on being either the thing about which you are dwelling or the person to whom you are speaking

Example:

I am tired of hearing him harp on the same string.

Origin:

The abbreviated phrase harpon was already established by Shakespeare's day (along with the occasional harpof or harpupon). The longer phrase provides a moment of linguistic play in Richard III

3. Jump on the bandwagon

Meaning:

To join an activity that has become very popular or to change your opinion to one that has become very popular so that you can share in its success. In other words, to get involved in an activity or idea because it is likely to succeed or it is fashionable
at that time.

Example:

She jumps on the bandwagon when a new fashion trend becomes popular.

Origin:

This idiom originated in the USA probably in the 18th century when musicians were carried in a bandwagon ahead of everyone else when going to a parade or a political rally. The phrase suggests that people will follow any event for the excitement of it rather than actually knowing if it is true or not.

4. Bite the bullet

Meaning:

To bite the bullet is to accept or confront a difficult situation with courage and stoicism; to accept the truth of a situation; to bravely pay the price of a bad situation; to force yourself to do something you dislike

Example:

Mary has to learn to bite the bullet and face her fears of flying.

Origin:

The phrase was first recorded by Rudyard Kipling in his 1891 novel The Light that Failed.

5. Takestwo to tango

Meaning:

When you want to emphasize thatboth people involved in a difficult situation must accept the blame, or that an activity needs two people who are willing to take part for it to happen

Example::

There is no such thing as a one-sided argument. It takes two to tango.

Origin:

The phrase refers to the South American dance tango, which requires two partners to perform. It originated in a 1952 song Takes Two to Tango by Al Hoffman and Dick Manning and gained popularity subsequently as an expression.

By,

J.MOTHIGA SHIVANI

II YEAR EEE-A

Poem

VCET கவிஞர்கள்

என் கண்ணில் இருந்து விழும்
ஒரு துளி கண்ணீர் - அதை
யாரும் துடைக்கவில்லை - நீ
துடைத்தாய் என் தோழியாக !
இணைகளில் உன்பெயர் எழுதினால்
போதுமே !
மனதினில் நின்றிடும், உன் பெயர்
என்றுமே...
அவள் தான் தாய்...
உயிர் போகும் அளவுக்கு
அனுபவித்த பிரசவ வலியை மறந்து
போகிறாள்...
மழலையின் முகம் பார்த்த பூரிப்பில்
பாசமழை பொழிகிறாள் !!! ❤

- காவியா. மா :)

Kaviya .M

* மனிதம்
மயங்கியது
மனிதனின் நடமாட்டத்தில்
மனிதம்
மங்கலமாய்
ஜொலித்தது
கொரோனா காலத்தில் . . .
பறவைகளின் ஒலி
கேட்கிறதும் கிளைப்ப
விலங்குகள்
வீதிகளில் நடனமாட
என்னே !
கொரோனா காலம்
விரும்தோம்பல்
விக்கலாய் நிற்க
வீட்டிலிரு
தனித்திரு
நண்பனின்
உயிர் மூச்சு காற்றில் . . .
வாழு
வாடிவிடு
உயிரோட்டமான
நண்பனின் தீண்டுகத்தில் . . .

A.BHARATHY VENKATKUMAR
II YEAR –EEE-A

மழையே நீ என்னுள் வந்து ஊடுருவி

என்னை நனைப்பது ஒருபுறம் என்றால்

உன்னால் நான் கவிதை என்னும் தமிழ்

வார்த்தை களில் மூழ்கி

திளைத்து மகிழ்ந்து நனைவது மறுபுறம்.

மாலை மங்கும் நேரத்தில் மேகத்தின்

கரு விழிகள் இந்த பூமியை நோக்கி

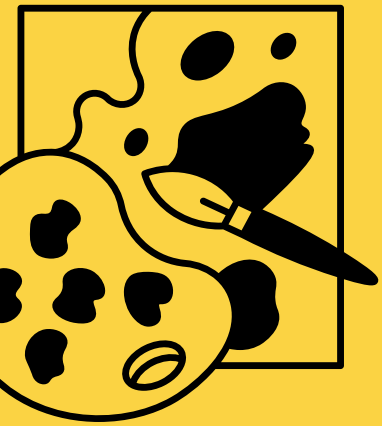
வட்டமிட சீரிய காற்றுடன் கூடவே ஒய்யாரமாக சப்தம் எழுப்பும்

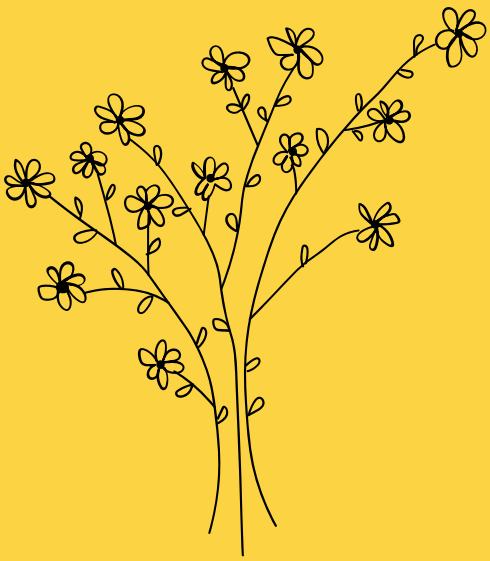
இடி மின்னல்களின் இடையே

விண்ணை பிளந்து மண்ணிற்கு உதயம் ஆகும்

எங்கள் காக்கும் தெய்வம் மழைக்கு கோடான கோடி நன்றிகள்.

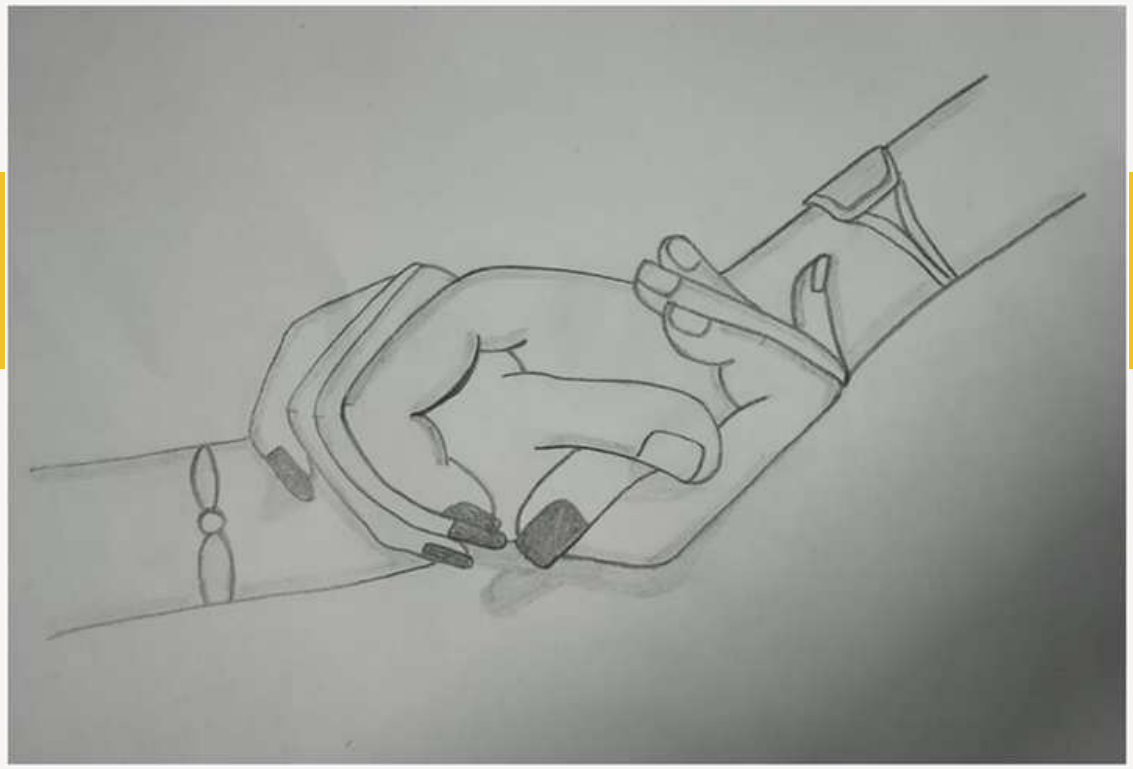
M.DHARSHANA
III- EEE-A





ARTWORK

S.RUBIKSHA II YEAR
EEE-A



K.J.PADMAVARSHINIII
YEAR EEE-A

S.G.DHARINI II YEAR EEE-A

S.DHARSHINI II YEAR EEE-A

P.MANICKAM
II YEAR EEE-A

P.SARAVANA KUMAR
II YEAR EEE-A

R.DEEPIKA
II YEAR EEE-A

Inspiration is like a spark. It can light the whole city. One frail lady with strong conviction has motivated thousands of others to have good education and be proud citizens. One Velammal has kindled the spirit of Thousands of Velammalians.

VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF EEE