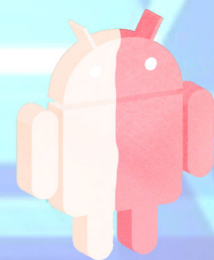


Youth's Park

BIOMETRIC SENSORS

Blue Smart

Marshmallow



Black Hat

This edition of **YOUTH'SPARK** contains the brainstorming information for enriching their minds. The information about Recent trends and Technology which makes to gain amazing facts, it has useful websites for carrier, puzzles to test sharpness of mind and also Art works, Articles, poems to express talent.

With best regards
Final MCA
2013-2016

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Black Hat



Hacker is someone who seeks and exploits weaknesses in a computer system or computer network. Black Hat Hackers or Crackers is one of the classification in the hacking. Black Hat Hackers break into secure networks to **destroy, modify, steal data** and even make the network unusable for those who are authorized to use the network. Crackers keep the awareness of the vulnerabilities to themselves and do not notify the general public or the manufacturer for patches to be applied. Individual freedom and accessibility is promoted over privacy and security. Once they have gained control over a system, they may apply patches or fixes to the system only to keep their reigning control.

by
A.Jayachandran

BIOMETRIC SENSORS

Biometrics refers to metrics related to human characteristics. Biometrics authentication or realistic authentication is used in computer science as a form of identification and access control. It is also used to identify individuals in groups that are under surveillance.

With the help of these biometric sensors our body could log us into an e-mail account. By the end of this year, Intel will be providing software so we can log in to websites via biometric authentication. It serves purposes of biometric authentication that is relatively reliable and secure(we won't have to remember dozens of passwords for different sites).



Apple already uses biometric authentication to authorize credit card payments through its Apple Pay service, and Intel wants to bring a similar concept to PCs.

by
Subha sree R

Smartscooter

The **Gogoro Smartscooter** is an electric scooter designed for urban transportation. It's powered by an electric motor developed by Gogoro, which is marketed as the G1 Aluminum Liquid Cooled Permanent Magnet Synchronous Motor. Instead of plugging into an outlet to recharge, the Smartscooter runs on swappable Panasonic lithium ion 18650 batteries.

The company states the following figures for the Smartscooter based on internal testing:

- Top speed of 95 km/h
- Acceleration of 0 to 50 km/h in 4.2 seconds
- Maximum torque of 25 Nm @ 0-2,250 rpm
- Maximum horsepower of 8.3 hp @ 4,000 rpm
- Range of >100 km when traveling at speeds of 40 km/h.



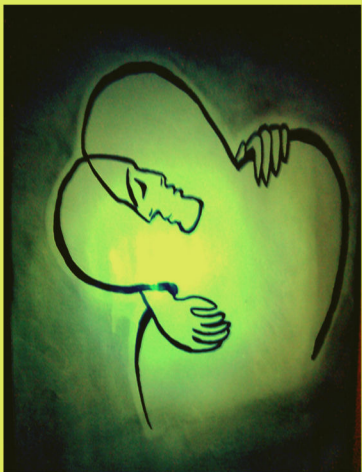
The Smart scooter's sensors collect information such as speed, battery level, consumption rate, system failures, and scooter falls. This information is presented to riders via Gogoro mobile apps.

BY
GOWTHAMI K.

இனிமையான கல்லூரி நாட்கள்

தயக்கத்துடன் முதல் வார்த்தை
பேசிய முதல் நாள்
நினைத்து நினைத்து
சிரித்த மற்ற நாட்கள்
என்று வரும் இறுதிநாள் என
நினைத்த முத்த நாள்
ஏன் வந்தது இந்நாள் என
நினைக்கவைக்கும் இறுதி நாள்
தோழியின் கண்ணீர் துடைத்த
அன்பின் சில நேரம்
என் கண்ணீரை அவள் துடைத்த
அரவணைப்பில் சில நேரம்
வகுப்பு எடுப்பதைத் தடுக்கும்
ஆர்வத்தில் சில நேரம்
தேர்வு முடிந்த களிப்பில் சில நேரம்
சுற்றித் திரியும் சுதந்திரக்
காற்றாய் பல நேரம்
பொறுப்பை உணர்ந்த
சுவாசக் காற்றாய் சில நேரம்
இந்த நேரங்கள் அனைத்தும் வாழ்வின்
சுகமான நினைவுகளே
இதற்காகவே அமைய வேண்டும்
கல்லூரி வாழ்வு...

M. தீபிகா



Art by
R.Nageshwari

Puzzles



1. PIGS AND DUCKS

While driving through the countryside one day I saw a farmer tending his pigs and ducks in his yard. I was curious to know how many of each he had. I stopped the car and inquired. Leaning on the stile jovially, he replied, 'I have altogether 60 eyes and 86 feet between them.' I drove off trying to calculate in my mind the exact number of ducks and pigs he had. What do you think is the answer?

2. SAWING THE TREE TRUNK

A heavy tree trunk can be sawed into a piece 12 ft long in one minute. How long will it take to saw it into twelve equal pieces?



3. SPADE FOR A HEART

Here is a spade: Can you cut the spade into three pieces that will fit together and form a heart? Remember, no part of the material should be wasted.

Answer
page 15

One's Turn

People have great opportunities in our country. Everyone have to prepare themselves for those things. People must have education and braveness. These two things are most important to get self confidence. It imports knowledge, infuses a sense of courage and ability to overcome their problems. So , grow strong both in mind and body. For the development of a good society, there is a need that every people use the opportunities in our country. It will make big things. People should have that inner urge to do things, Equitable growth of human resources and overall development of the nation. I have no doubt that you will do big things and so everyone can stand on their own feet. Everyone will achieve great things.

M.Nirmaladevi

BlueSmart Smart

Bluesmart, an American Company is developing and planning to produce Internet-connected travel products, starting with a carry-on suitcase which communicates with a smartphone app, raising \$1.7 million USD in contributions through crowdfunding website Indiegogo and becoming the highest crowd funding project ever for a travel product.

It has a digital lock that allows users to lock and unlock the suitcase from a phone app. The proximity sensors automatically lock the bag when it is separated from the user.

It also contains a digital scale for users to be able to see the exact weight of their suitcases on the app. Users receive distance alerts and are notified on their smartphones via SMS when they move further away from their case.

There is also location tracking technology that tracks the location of suitcases and also allows users to charge their cell phones. It is planned to be released in the market by Upcoming month .

FEATURES

- Weighs itself
- Tracks itself

by

S.SUSENDERAN

JUST 3 KEYS TO ENJOY LIFE

Ctrl :Control Yourself

Alt :Look for Alternative

Del :Delete the situation which
gives you tension!

A NOBLE CAUSE

EYE DONATION

I wish to begin with a quote of Peter Marshale, "The measure of life. After all. Is not its duration. But its DONATION". Let us be a light for those who are suffering from the darkness. Eye donation is an act of donating one's eyes after his/her death. It is a noble cause. India needs about 80,000 to 1 lakh eyes per ye Only corneal blinds can be benefitted through this not others. 4.9 Million are young adults who have spend their long years in darkness. It may sounds to be stun, but it is true. There is no age limit for donating the eyes.

Even if the deceased has medical history of hypertension, diabetes, asthma, tuberculosis etc., and even spectacle wearers and people who have undergone cataract operation can donate eyes. Patients suffering from Rabies, Tetanus, Aids, Jaundice, Cancer, Gangrene, Brain Tumor, Food Poisoning, Septosamia & a person who has died due to drowning cannot donate their eyes. After we thought about the eye donation a question may arise in our mind. Its quite normal that "After the removal of eyes, would there be any complications or disfigurement?" Absolutely NOT!!! There are two methods adopted for removal of eyes. Some eye banks would remove the whole eyeball. In such a case there may be temporary bleeding. The team is well trained to take care of such eventualities. The eye bank team, after the removal of eyes would properly close the eyes so that there is no disfigurement. The second method is the removal of only the clear transparent tissue.

Here also a plastic shield is placed in place of the tissue and no difference can be noticed. After the death of the donor, to is the family who can inform the nearest eye bank to fulfill their wishes. Within 6 hours the eyes should be removed. The precaution taken by the family are Switch off fans and switch on Air conditioner (if available). Raise the head of the deceased slightly by placing a pillow underneath. Place wet clean cloth over the closed eye lids. Please ensure that the eyelids are properly closed. Keep a copy of the death certificate ready (if available). Contact the nearest eye bank as quickly as possible. The process of removing eyes does not take more than 15-20 min. The eye bank team can come either to the house where death has taken place or to the hospital where death has taken place to remove the eyes there.

It would notdela thefuneral arrangements. So don't worries please donate your eyes. The time I filled up the eye donation form is the memorable time in my life. I felt the humanity so I want my friends also to feel the same. I insisted my family, they did it. It is now time for you to inform and convince your family, friends and surroundings to donate their eyes. Contact your nearest eye bank, fill the form or fill through online. "You were born with the ability to change someone's life. Don't waste it".

I like to end up with a Tamil quote
"Iyandara varai RATHA
thaanam!!! Irantha pinn KANN
thaanam!!!" I hope this article might increase the rate of eye donors.

BY,
M.PAVITHRA DEVI

ANDROID MARSHMALLOW

Android 6.0 "Marshmallow" is an upcoming update to the Android mobile operating system, most likely to be released in Q3 2016 ("tentatively SLATED for September"), with its third and final preview released on August 17, 2015. First unveiled at Google I/O on May 28, 2015, Marshmallow will primarily focus on incremental improvements and other feature additions.

Marshmallow provides native support for fingerprint recognition, allowing the use of fingerprints for unlocking devices and authenticating Play Store and Android Pay purchases. A standard API is also available for implementing fingerprint-based authentication in other applications. It supports USB Type-C, including the ability to instruct devices to charge another device over USB. Marshmallow also introduces "verified links" that can be configured to open directly in their specified application without further user prompts.

Version of the Android API provided by Marshmallow is 23. The Android Marshmallow developer tools are available in the SDK Manager under the API level "MNC".



Narmatha V.

வி. சுசுள்யா
(14MCA341)



இசையால் வந்த இனிமையும்
முதுமை தந்த வெறுமையும்
ஒன்றிலும் ஒன்று..!

V.Suganya

watch OS



watchOS (formerly stylized as Watch OS) is the operating system of the Apple Watch, developed by Apple Inc. It is based on the iOS operating system. It was first released on April 24, 2015, alongside the Apple Watch. The Apple Watch is currently the only device that runs watchOS. The API is called WatchKit. Written in objective c.

The home screen (rendered by and also known as "Carousel") is composed of circular application icons, which can be zoomed in and out with the Digital Crown. Glances provide fast access to a summarized view of the most popular native or third party applications used on Apple Watch.

The glance view is opened with a swipe up gesture from the watch face screen. Navigation between widgets is achieved by swiping left or right. Different actions are executed depending on the force with which the user executes a tap, which Watch detects with a special mechanism.

Latest version 1.0.1.

Latest preview 2.0 beta 5.

by
Karthikeyan.S

SWIMMING NANOBOTS

NANOBOTS is the combination of nano technology and Robotics. Scientists keep saying they'll put tiny robots into our bodies to cure disease. Now researchers at **ISRAEL INSTITUTE OF TECHNOLOGY** have made teeny tiny little swimming robots that can more easily move through thick tissues like blood to deliver their cancer-destroying payload.

They created a "nanoswimmer" the width of a silk fiber, made of several links of polymer and magnetic nanowires. After introducing it into a blood-like fluid, they applied an external oscillating magnetic field, propelling the nanobot the length of its body in a second.

We can target the organ to treat the cancer cells. This "nanoswimmer" will



the healthy in the targeted organ.

Scientist believe that nanobots will reduce the need for invasive surgery, speed recovery and lower the risk of complication.



S.PAVITHRA

Technology History

Facts

Fact 1 : The first hard drive by IBM

The first hard drive was made by IBM in 1956 and was called IBM Model 350 Disk File.

The first-generation storage unit was huge, with a cabinet the size of a cupboard that held 50 24-inch disks and held an impressive 5MB of data.



Fact 2 : RadioShack

RadioShack was one of the first companies to start the PC revolution in the mid 70's with its TRS-80.

What most people don't know is that RadioShack used to be called "Tandy Radio Shack & Leather" after it was acquired by Tandy, a leather goods company, in 1963.



Fact 3 : The first palmtop computer

The Atari Portfolio was released in 1989 and was the world's first palmtop computer.

Two years later it appeared in the film Terminator 2, where it was used by John Connor to hack an ATM and retrieve the key to the vault in the Cyberdyne lab.



Fact 4 : The first mouse

Many think the first mouse was invented in 1970 at Xerox PARC. However, the first Mouse was invented by Douglas Engelbart in 1963. It was a wooden shell with two metal wheels.



Fact 5 : The digital circuit

Claude Shannon, the "Father of information theory", invented the digital circuit when he was only 21, during his master's degree.

Shannon loved inventions – check out his "Ultimate Machine". When you turn on the switch, an arm pops out and turns it back off.



by
K.R.SHARANYA

HOPE THAT MAKES A BIG CHANGE IN YOU

The Professor began his class by holding up a glass with some water in it. He held it up for all to see & asked the students "How much do you think this glass weighs?" '50gms!' '100gms!' '125 gms' ...the students answered.

"I really don't know unless I weigh it," said the professor, "but, my question is:

What would happen if I held it up like this for a few minutes?"

'Nothing'the students said.

'Ok what would happen if I held it up like this for an hour?' the professor asked.

'Your arm would begin to ache' said one of the student

"You're right, now what would happen if I held it for a day?"

"Your arm could go numb; you might have severe muscle stress & paralysis & have to go to hospital for sure!"

..... Ventured another student & all the students laughed

"Very good.

But during all this, did the weight of the glass change?" Asked the professor.

'No'.... Was the answer.

"Then what caused the arm ache & the muscle stress?"

The students were puzzled.



"What should I do now to come out of pain?" asked professor again.

"Put the glass down!" said one of the students

"Exactly!" said the professor.

Life's problems are something like this.

Hold it for a few minutes in your head & they seem OK.

Think of them for a long time & they begin to ache.

Hold it even longer & they begin to paralyze you. You will not be able to do anything.

It's important to think of the challenges or problems in your life, But **EVEN MORE IMPORTANT** is to 'PUT THEM DOWN' at the end of every day before you go to sleep...

That way, you are not stressed, you wake up every day fresh & strong & can handle any issue, any challenge that comes your way!

Moral

So, when you start your day today, Remember friends to 'PUT THE GLASS DOWN TODAY!'

by
V.SATHYA

Google

project



Google Project Ara is the codename for an initiative that aims to develop an open hardware platform for creating highly modular smartphones. The platform will include a structural frame or endoskeleton that holds smartphone modules of the owner's choice, such as a display, camera or an extra battery. It would allow users to swap out malfunctioning modules or upgrade individual modules as innovations emerge, providing longer lifetime cycles for the handset, and potentially reducing electronic waste. Project Ara smartphone will begin pilot testing in Puerto Rico later 2015 with a target bill of materials cost of \$50 for a basic grey phone.

Google says the device is designed to be utilized by "6 billion people"; including 1 billion current smartphone users, 5 billion feature phone users, and 1 billion future users not currently connected. Google intends to sell a starter kit where the bill of materials is US\$50 and includes a frame, display, battery, low-end CPU and WiFi.



Google wants Project Ara to lower the entry barrier for phone hardware manufacturers so there could be "hundreds of thousands of developers" instead of the current handful of big manufacturers. This would be similar to how the Google Play Store is structured. Lowering the barrier for entry allows many more people to develop modules.

Anyone will be able to build a module without requiring a license or paying a fee.

D.Loganathan

FIVE POWERFUL WOMEN CEOs IN TECH IT INDIA

1. Vanitha Narayanan, Managing Director,
IBM India Private Limited.



2. Neelam Dhawan, Managing Director,
HP India Hewlett-Packard India.

3. Aruna Jayanthi, CEO,
Capgemini India.



4. Kirthiga Reddy, Head of Office, Facebook India.
Kirthiga leads the Global Marketing teams in India.



5. Kumud Srinivasan, President, Intel India
Kumud is responsible for general management of Intel's
operations in India



by
SATHYAPRIYA.S

யாரோ ஒருவன்

ஏன் கடக்கமுயன்றதென்று
தெரியவில்லை
முன்னிருந்த எச்சிலையின்
காட்சியா
வண்டியில் விழும் நொடி
என்ன நினைத்திருக்கும்
மரணிக்கிறோமென்று
கலங்கியிருக்கும் !

ம்..ஹீம்
மறுக்கின்றது
கடக்கும் போது
என்னை பார்த்த பார்வை

எலும்பு கூட்டினை
இறுக தோலால்
கட்டிய மேனி

நாயின் பிணமென்று
சாலையில்
பெரிய சலனமேதுமில்லை

பிரளையின்றி
தலைப்பகுதியினை
நொறுக்கி சென்றது
பின்னொரு வாகனம்

தூரத்தில் மற்றுமொரு வாகனம்

யாரோ ஒருவன்
எங்களிலிருந்து
உதிர்ந்து ஓடினான்

சுற்றி முற்றி நோக்கி
என்னை பார்த்தான்

பிணத்திற்க்கும் ஒரு உயிருண்டு
நம்பினவனாய்
ஒதுக்கி
மீண்டும் என்னை பார்த்தான்
நானும் பார்த்தேன்.

- வேடிக்கையாளன்
(பாலாஜி)

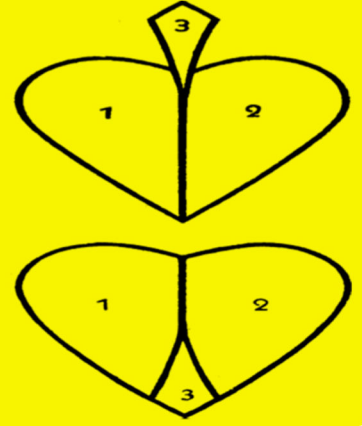
Puzzles

ANSWERS

1. There were sixty eyes, so there must have been thirty animals. Now the question is what combination of four-legged pigs and two-legged ducks adding to thirty will give 86 feet. With some pencil work, we get the answer 13 pigs and 17 ducks.

2. Eleven minutes. The twelfth piece does not require sawing.

3.



Technology Facts

1. **STEVE JOBS** - Innovator who enjoyed a second bite of the apple.
2. **TIM BERNERS LEE** - Father of the web and Champion of IT Freedom.
3. **BILL GATES** - Mixing maths and money to build Microsoft.
4. **JAMES GOSLING** - The father of the Java programming language.
5. **LINUS TORVALDS** - Creator of the Linux operating system.
6. **RICHARD STALLMAN** - The founder of the GNU project, an initiative to develop a complete Unix-like operating systems.
7. **ARTHUR C CLARKE** - Geostationary satellites would make ideal telecom relays.
8. **TED CODD** - Created 12 rules on which every relational database is built.
9. **STEVE SHIRLEY** - Early champion of women in IT.
10. **MARTHA LANE FOX** - Created Lastminute.com in 1998.

by
A.MANJULA

Compyouth Actions

GUEST LECTURE:

"Mobile Call Flow & Billing"
by Mr. E.Mouliswaran,
Specialist in System Development,
Verizon –Chennai.

24.1.2015

Alumni Interaction (STEP)

**Venuganakrishnan, CTS ,
Coimbatore**

19.2.2015

GUEST LECTURE:

**"Open Stack Cloud
Applications"**

by Mr.D.Sivakumar,
Lead Tech Support,
ABT INFO.NET - Pollachi.

28.2.2015

BigData on Cloud

"Mr. Giragadurai Vallirajan
Chief Technology Officer,
Bluemic Technologies Pvt Ltd
Bangalore.

19.3.2015

Mobile Application Development

by III year Interns from
ABT info.net

27.4.2015

INAUGURAL & LECTURE

"Amazon Web Services"

S.K.Balamurugan ,
Manager IT ,
Caresoft Global Pvt Ltd.

12.08.2015

Youth's Spark

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