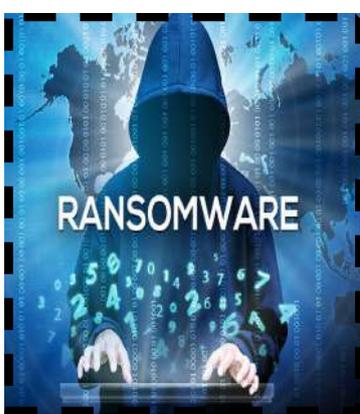




LATEST TECH NEWS

**WANNACRY RANSOMWARE CYBER ATTACK:
104 COUNTRIES HIT**

The crippling Wanna Cry ransomware attack, which used an exploit first developed by the US NSA, appeared to be slowing on Saturday. Edward Snowden was among those who criticised the NSA, saying the US spy agency has been building dangerous attack tools despite warnings. The Wanna Cry ransomware attack - one of the largest ever cyber attacks - appeared to be slowing around 24 hours after it wrecked havoc and shut down tens of thousands of computer systems across 104 countries. The slow down happened soon after 'MalwareTech', a Britain-based security researcher, accidentally discovered a 'kill switch' to halt the Wanna Cry attack. Experts, however, warned that enterprising hackers could circumvent MalwareTech's fix. A Over 200,000 systems



around the world were affected in the Wanna Cry attack, a tracker developed by a security researcher called 'MalwareTech' showed. Czech Republic-based anti-virus provider Avast, however, gave a more conservative estimate of around 126,000 systems being affected, news agency Reuters reported.

INSIDE:	
Technical News	1-3
4G compare 5G	4
Deccan Chronic	5
Apple: No Mining	6
Softwares & IOT	7
Super AI	8
Walk Fearless	9
Quiz	10

HDFC LIFE LAUNCHES INDIA'S FIRST AI-BASED INSURANCE EMAIL BOT

HDFC Life has announced the launch of India's first life insurance Email Bot. The Email Bot, named SPOK can automatically read, understand, categorise, prioritise and respond to customer emails that are sent to HDFC Life, within milliseconds. This automation initiative will enable HDFC Life to respond to user queries faster and more efficiently and consistently. It will also help generate deeper insight on customer needs by identifying patterns in customer interactions and facilitating HDFC Life to progressively anticipate and address all customer issues and needs. The deployment of SPOK will improve customer experience, while providing the support

staff with the bandwidth to focus on customer satisfaction and delight. SPOK will help us increase our operational efficiency and we are excited to see how these interactions with our customers provide us inputs to enrich their future experience with us." HDFC Life has embarked on this initiative in collaboration with Senseforth, a startup that offers a wide range of enterprise bots built on its AI platform. They are excited to partner with HDFC Life in this journey to transform their customer interactions using cutting edge AI technologies. The Email Bot is built on cutting-edge Artificial Intelligence and Natural Language Processing technologies. It functions on A.Ware, our AI Platform. A.ware mimics human cogni-



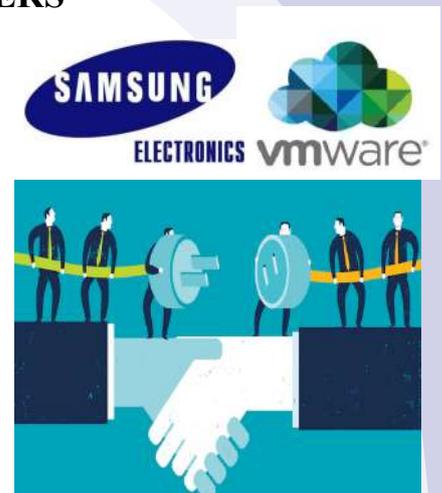
tive abilities in reading, comprehending, interpreting, and conversing.

NEWSLETTER COMMITTEE	
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ASHIMA MITTAL (Managing Editor)	
GAGANDEEP SINGH (Designer)	

SAMSUNG ELECTRONICS AND VMWARE COLLABORATE TO SIMPLIFY IOT FOR INDUSTRIAL CUSTOMERS

At the Internet of Things World 2017, Samsung Electronics Co. Ltd and VMware announced a new collaboration to help simplify Internet of Things (IoT) for both information technology (IT) and operational technology (OT) teams by expanding end-to-end IoT solutions for industrial and enterprise customers. The companies will showcase the combination of the SAMSUNG ARTIK™ Smart IoT platform with VMware Pulse™ IoTCenter™, offering a secure, enterprise-grade, end-to-end IoT infrastructure solution that allows IT and OT teams to have complete control of their IoT use cases, from the edge to the cloud. SAMSUNG

ARTIK™ Smart IoT platform provides customers with all the upfront IoT hardware and software they need to kick start their IoT developments, VMware will help manage IoT infrastructure from the edge all the way to the cloud. The combination will provide an end-to-end solution, including the hardware and software components, security, cloud connectivity, building services, and ability to monitor and manage the products over the product's lifecycle. Enterprises around the World will be able to monitor and manage these solutions across devices at enterprise scale both on-premise and in the cloud is critical for successful rollouts.



D-LINK SETS UP E-WASTE COLLECTION CENTERS ACROSS INDIA



D-Link, a global provider of connectivity for home continues to extend its support towards governments' e-Waste management program. D-Link India complies with the principles of Extended Producer Responsibility (EPR), and has set-up e-Waste collection centres at multiple locations in India. With a responsibility

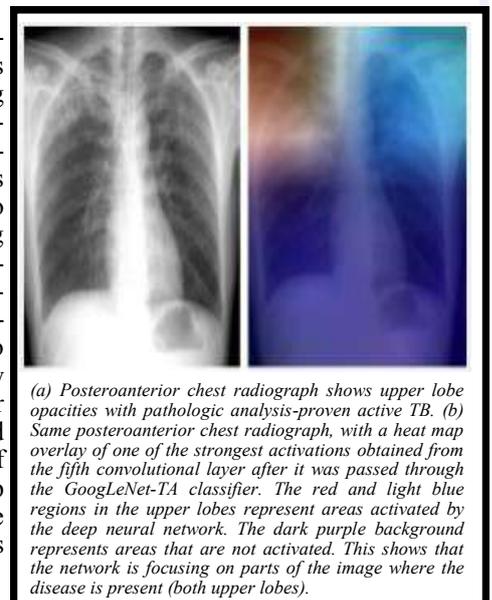
of conserving the environment for the betterment of our future generations. D-Link strongly believes in nurturing nature and is committed towards safeguarding our nature from hazards of e-Waste. The objective of e-Waste rule is to put in place an effective mechanism to regulate the generation, collection, storage,

transport, import, export (environmentally sound) recycling, treatment and disposal of e-Waste. In view of the same D-Link has set-up e-Waste Collection centres to collect end of life product/ components, irreparable products, defective components and other e-Waste generated during sale and service process.

ARTIFICIAL INTELLIGENCE CAN HELP IN DIAGNOSING TUBERCULOSIS IN REMOTE AREAS

Researchers are training artificial intelligence models to identify tuberculosis (TB) on chest X-rays, which may help screening and evaluation efforts in TB-prevalent areas with limited access to radiologists, according to a new study appearing online in the journal Radiology. According to the World Health Organization, TB is one of the top 10 causes of death worldwide. There is a tremendous interest in artificial intelligence, both inside and outside the field of medicine, said study co-author Paras Lakhani, M.D., from Thomas Jefferson University Hospital (TJU) in Philadelphia. An artificial intelligence solution that could interpret radiographs for presence of TB in a cost-effective way could expand the reach of early identification and treatment in developing na-

tions. Deep learning is a type of artificial intelligence that allows computers to complete tasks based on existing relationships of data. A deep convolutional neural network (DCNN), modelled after brain structure, employs multiple hidden layers and patterns to classify images. The best performing artificial intelligence model was a combination of the AlexNet and GoogLeNet, with a net accuracy of 96 percent. Application of deep learning to medical imaging is a relatively new field, Dr. Lakhani said. In the past, other machine learning approaches could only get to a certain accuracy level of around 80 percent. However, with deep learning, there is potential for more accurate solutions, as this research has shown.



(a) Posteroanterior chest radiograph shows upper lobe opacities with pathologic analysis-proven active TB. (b) Same posteroanterior chest radiograph, with a heat map overlay of one of the strongest activations obtained from the fifth convolutional layer after it was passed through the GoogLeNet-TA classifier. The red and light blue regions in the upper lobes represent areas activated by the deep neural network. The dark purple background represents areas that are not activated. This shows that the network is focusing on parts of the image where the disease is present (both upper lobes).

HEWLETT PACKET ENTERPRISE(HPE) UNVEILS COMPUTER BUILT FOR THE ERA OF BIG DATA



Hewlett Packard Enterprise has introduced the world's largest single-memory computer, the latest milestone in The Machine research project (The Machine). The Machine, which is the

largest R&D program in the history of the company, is aimed at delivering a new paradigm called Memory-Driven Computing (an architecture custom-built for the Big Data era).

The prototype unveiled today contains 160 terabytes (TB) of memory, capable of simultaneously working with the data held in every book in the Library of Congress five times over – or approximately 160 million books.

Based on the current prototype, HPE expects the architecture could easily scale to an exabyte-scale single-memory system and, beyond that, to a nearly-limitless pool of memory – 4,096 yottabytes. For context, that is 250,000 times the entire digital universe today. With

that amount of memory, it will be possible to simultaneously work with every digital health record of every person on earth; every piece of data from Facebook; every trip of Google's autonomous vehicles; and every data set from space exploration all at the same time – getting to answers and uncovering new opportunities at unprecedented speeds. By eliminating the inefficiencies of how memory, storage and processors interact in traditional systems today, Memory-Driven Computing reduces the time needed to process complex problems from days to hours, hours to minutes, minutes to seconds – to deliver real-time intelligence.

ERICSSON COLLABORATES WITH MICROSOFT TO ACCELERATE IOT GLOBALLY

Ericsson will further strengthen the global Internet of Things (IoT) ecosystem with Microsoft by enabling enterprises to speed up the time it takes to launch mobile network-based IoT services. Ericsson IoT Accelerator allows enterprises to deploy their IoT solutions using Azure, which connects them directly to the ecosystem of mobile operators using the connectivity management service delivered by the Ericsson Device Connection Platform (DCP) which is part of the Ericsson IoT Accelerator. Ericsson IoT Accelerator, a cloud-based, horizontal cross-

industry offering comprising platform services and near-product services for telecom operators and selected industries, provides a continuous incremental set of functionality offered as a service to enable agile creation and deployment of solutions for IoT. The connectivity management service of the Ericsson IoT Accelerator allows telecom operators to design, launch and evolve managed IoT connectivity offerings towards enterprises requiring cellular connectivity. The platform gives the enterprise a unified service experience for their entire device fleet.



ERICSSON

TOYOTA USES OPEN-SOURCE SOFTWARE IN NEW APPROACH TO IN-CAR TECH



With the Automotive Grade Linux (AGL) system in a mainstay model, Toyota aims to have the flexibility to customise its software, while it would also keep user data that could otherwise be captured by CarPlay from Apple Inc or Android Auto from Alphabet Inc's Google - applications which enable users to access smartphone data through vehicle infotainment systems.

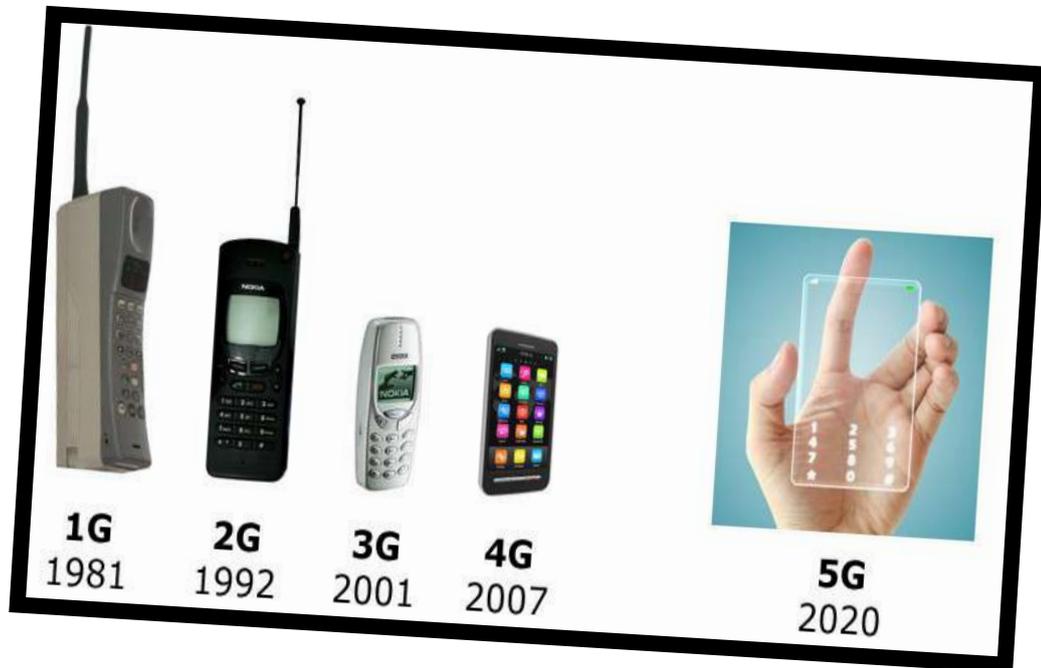
Toyota is among 10 global automakers working with suppliers and technology companies to jointly build AGL, a basic, open-source platform for vehicle applications which automakers can custom-

ise, eliminating the need to code systems from the ground up for each vehicle model.

The platform can also be used to support future advanced technologies, including self-driving functions and connected car services.

The latest Camry sedan to be launched in coming months will use AGL to operate its suite of in-vehicle apps, and the Japanese automaker said it planned to expand the platform to other Toyota and Lexus vehicles in North America and elsewhere.

2020 VISION 4G COMPARE THAN 5G ACTIVE STANDARDS



By 2020, the next major cellular wireless standard has been adopted. This continues the trend seen since 1981 in which a new mobile generation has appeared roughly every decade. The 5G family of standards is a major leap from previous generations in terms of power and functionality. Among its key features are:

- **Pervasive networks providing ubiquitous computing.** The user can simultaneously be connected to several wireless access technologies and seamlessly move between them. These can be 2.5G, 3G, 4G or 5G networks, Wi-Fi, WPAN or any other contemporary access technology. Multiple, concurrent data transfer paths can be easily handled.
- **Group cooperative relay.** High bit rates are now available in a larger portion of the cell, especially to users in an exposed location in between several base stations. This is achieved by cellular repeaters, together with macro-diversity techniques (also known as group cooperative relay), as well as beam-division multiple access.
- **IPv6**, where a visiting care-of mobile IP address is assigned according to location and connected network.
- **High-altitude stratospheric platform station (HAPS) systems**, delivering high-speed Internet service to very large geographical areas.
- **Wearable devices with AI capabilities**, offering greater levels of user interaction and personalization.
- One unified global standard with full compatibility, no matter what brand or model.

MR. UMESH SEHGAL
ASSISTANT PROFESSOR

IBM'S "MOST POWERFUL" QUANTUM COMPUTING PROCESSORS DEVELOPED: DECCAN CHRONICLE

IBM Research Staff Member Katie Pooley, an Applied Physics Ph.D. from Harvard who joined IBM in 2015, at the Thomas J Watson Research Center, is a process integrator on the IBM Q team. In the photo, Pooley is examining a cryostat with the new prototype of a commercial quantum processor inside. (Credit: Andy Aaron, IBM)

IBM announced that it has successfully built and tested its most powerful universal quantum computing processors. The first upgraded processor will be available for use by developers, researchers, and programmers to explore quantum computing using a real quantum processor at no cost via the IBM Cloud. The second is a new prototype of a commercial processor, which will be the core for the first IBM Q early-access commercial systems.

Launched in March 2017, IBM Q is an industry-first initiative to build commercially available universal quantum computing systems for business and science applications. IBM Q systems and services will be delivered via the IBM Cloud platform. IBM first opened public access to its quantum processors one year ago, to serve as an enablement tool for scientific research, a resource for university classrooms, and a catalyst of enthusiasm for the field. To date, users have run more than 300,000 quantum experiments on the IBM Cloud.

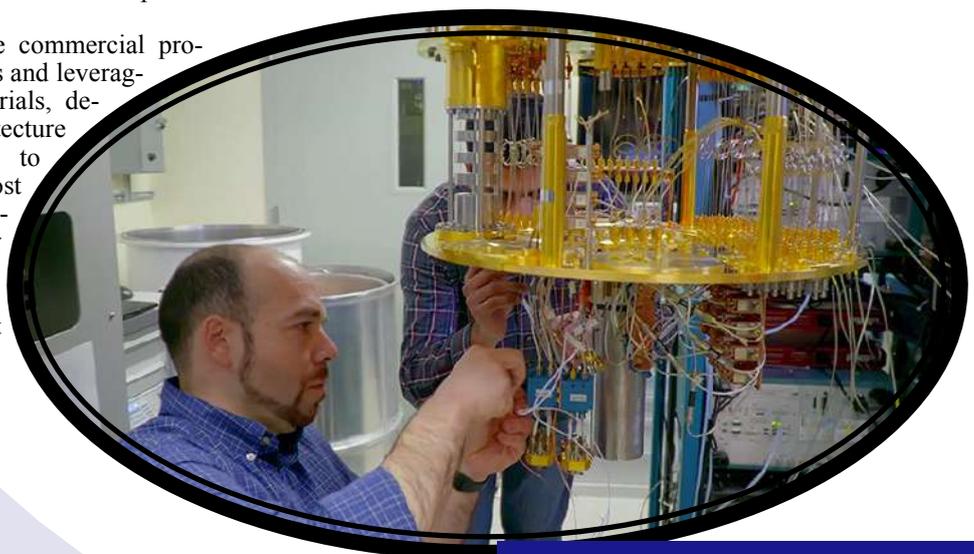
The two new IBM-developed processors include A 16 qubit processor that will allow for more complex experimentation than the previously available 5 qubit processor. It is freely accessible for developers, programmers, and researchers to run quantum algorithms, work with individual quantum bits, and explore tutorials and simulations. Beta access is available by request through the IBM Q experience and a new Software Development Kit is available on GitHub.

IBM's first prototype commercial processor with 17 qubits and leverages significant materials, device, and architecture improvements to make it the most powerful quantum processor created to date by IBM. It

has been engineered to be at least twice as powerful as what is available today to the public on the IBM Cloud and it will be the basis for the first IBM Q early-access commercial systems. "The significant engineering improvements announced today will allow IBM to scale future processors to include 50 or more qubits, and demonstrate computational capabilities beyond today's classical computing systems," said Arvind Krishna, senior vice president and director of IBM Research and Hybrid Cloud. "These powerful upgrades to our quantum systems, delivered via the IBM Cloud, allow us to imagine new applications and new frontiers for discovery that are virtually unattainable using classical computers alone."

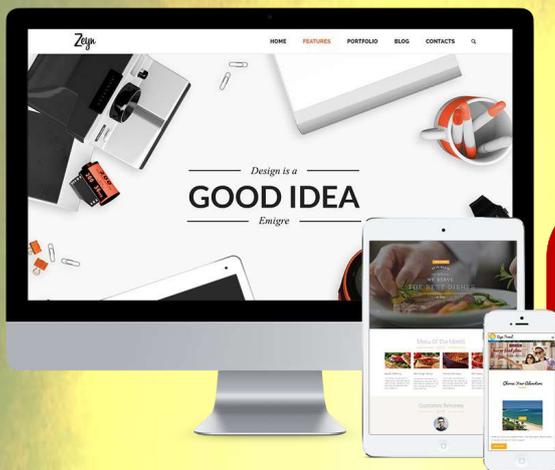
The inherent computational power of a quantum processor to solve practical problems depends on far more than simply the number of qubits. Due to the fragile nature of quantum information, increasing the computational power requires advances in the quality of the qubits, how the qubits talk to each other and minimizing the quantum errors that can occur.

IBM has adopted a new metric to characterize the computational power of quantum systems: Quantum Volume. Quantum Volume accounts for the number and quality of qubits, circuit connectivity, and error rates of operations. IBM's prototype commercial processor offers a significant improvement in the Quantum Volume. Over the next few years, IBM plans to continue to push the technology aggressively and aims to significantly increase the Quantum Volume of future systems by improving all aspects of the processors, including incorporating 50 or more qubits.



MR. KAMALJEET SINGH

ASSISTANT PROFESSOR



APPLE SETS A NEW ENVIRONMENTAL GOAL: NO MORE MINING

Apple again came up with an ever new idea making world a better place to live. With new iMac announced later this year, the company announced all its products will be made from recycled material.

That means the end of mining metals from the earth, which is a tall order. Apple doesn't have a timeline for moving to a completely closed-loop supply chain, said Lisa P. Jackson, the company's vice president of environmental and social initiatives. Jackson, former head of the Environmental Protection Agency under President Barack Obama, told that Apple is trying to move the industry in the direction of sustainability.

The organization figured out how to move altogether to sustainable power source to power its offices inside four years of declaring that objective, so it should be possible. In 2016, 96 percent of the power Apple utilizes overall originated from sustainable power source. In 24 nations, it's 100 percent inexhaustible. The organization is urging its providers to do likewise, and seven have guaranteed to control their Apple producing with sustainable power source before the finish of 2018. Apple is likewise utilizing 99 percent reused and sustainably sourced paper for its bundling.

MR. ARUN BEGILL

ASSISTANT PROFESSOR



NO-MINING FUTURE
makes deep seabed mining unnecessary

SOFTWARE SYSTEM CONNECTS DEVICES FOR THE INTERNET OF THINGS

The Internet of Things is steadily progressing: not only computers, but also machines, cars and household appliances are connected. Linking devices from different manufacturers is proving to be difficult. Researchers from the University of Kaiserslautern have found a solution: they are developing a user-friendly software system that connects devices from different manufacturers. The user can decide who has access. The system is ideal for companies, private households, as well as traffic systems and building technology. They will present the technology at the research stand of the state of Rhineland-Palatinate at Hannover Messe from 24th to 28th April.

Users can conveniently turn on the heating or lights remotely by smartphone, while machines exchange data in an automotive production facility. These are just two examples that show how devices are becoming increasingly interconnected. The Internet of Things (IoT) has been part of our everyday lives for quite some time. "An increasing number of devices have their own network connection and IP address," says Christopher Heinz, doctoral student under Prof Dr Christoph Grimm, who is head of the design of cyber-physical systems department at the University of Kaiserslautern. The abbreviation 'IP' stands for Internet Protocol and represents a unique web address. In the near future, an array of devices could be interconnected in many households, exchanging data -- such as the vacuum cleaner with the coffee machine and refrigerator. "Currently, the devices have to originate from



the same manufacturer," adds Johannes Kölsch, another doctoral student under the professorial chair. "Companies typically offer their own web solutions for this purpose."

The two computer scientists are working on a software system that aims to connect devices and machines from different manufacturers. "Our technology is similar to the concept of an adapter used to connect differently shaped plugs with electrical sockets abroad," Kölsch explains. Experts also refer to this as interoperability. This term describes the capability of technical systems from various manufacturers have to communicate with each other and recognise different signals, for instance.

The researchers at the University of Kaiserslautern would like to connect the devices using a software interface. The system is intended to be a simple and user-friendly solution. Special hardware is not necessary. It is conceivable that the technology may

be used on network devices already available in private households, for example Internet routers. "The devices would only have to be registered in the system," Heinz continues. A particular advantage is that the user retains control over who can control and use the appliances. "Users can grant permission to someone else. Data would then be encrypted before being transmitted from sender to recipient according to the latest security standards," Kölsch says.

This technology is not only of interest to private households. Companies could use it to combine different machines in their production facilities, hospitals could connect important medical equipment in laboratories and treatment rooms, and transport enterprises could link buses and trains to display screens at stations. The distribution systems of large building complexes could also be controlled more easily in this way, including heating, ventilation, air conditioning and lighting. Moreover, the power supplied by renewable energy sources could easily be distributed: this system would allow solar panels to deliver stored electricity directly to appliances when they require power, such as electric cars, in order to recharge.

The research work is taking place as part of the project 'VICINITY', which is supported by the European Union to the tune of 7.5 million euros. Professor Grimm coordinates the project in Kaiserslautern. Altogether, 16 European partners are involved in the work. The researchers will present the project at Hannover Messe.

MS. ASHIMA MITTAL

ASSISTANT PROFESSOR



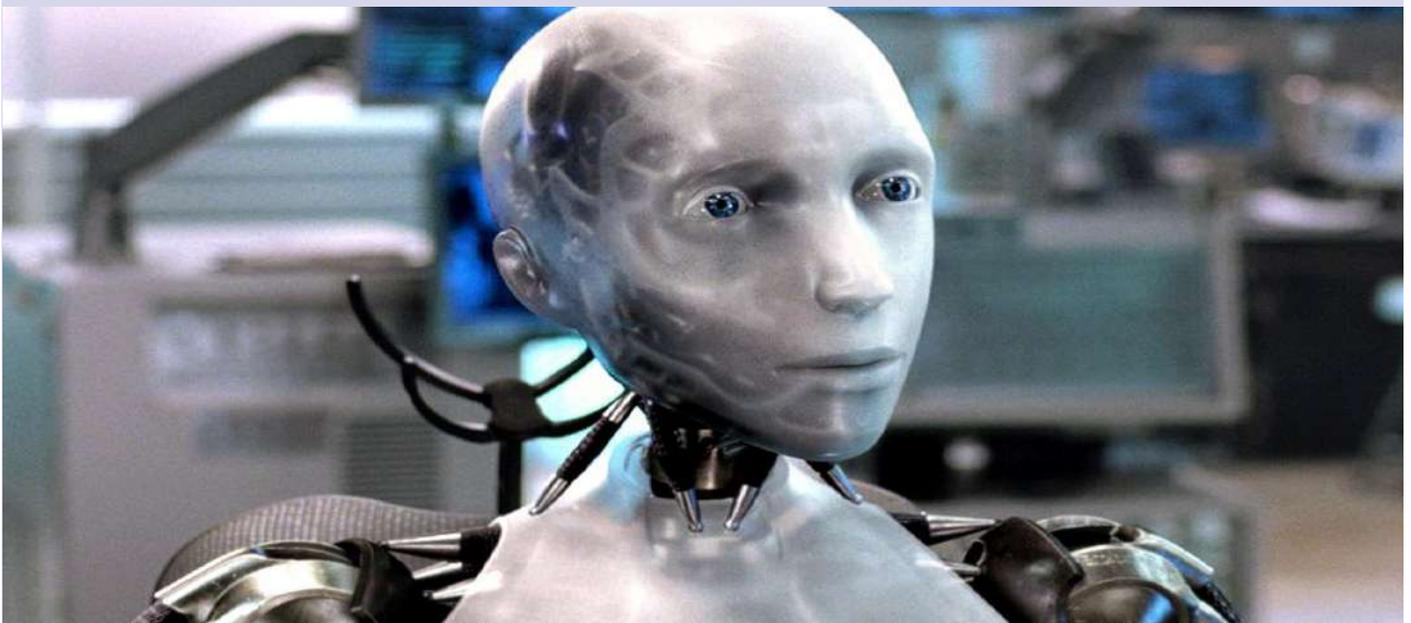
ARTIFICIAL SUPER-INTELLIGENCE

Think of the computer playing a game of chess. Think of the computer playing a game of chess .and robots working in fields of farmers and industry. There is a lot of debate in the scientific community when we'll be able to produce anything like super intelligence like - Human thinking . And if we ever reach the lofty heights of artificial super intelligence what will it look like? There are two main views – the optimists and the extremists.

The optimists believe technology will help us a lot

more than it will hurt us, solving all the world's problems. Global warming ? The Artificial Super intelligence would halt CO2 emissions by coming up with a better way to generate energy without fossil fuels. Then it will create some innovative way to remove excess greenhouse gases from the atmosphere.

In future super intelligence of computers will be used to build meat from scratch, molecularly identical to real meat, and then distribute around the world with ultra-advanced transportation to eliminate hunger from all over the world .And then there's Artificial Super intelligence. The scientists predict that : “An artificial super intellect of computer is much smarter than the best human brains in practically every field, including scientific, general wisdom and social skills.” In simple terms, it's a bit like comparing the brilliant human brains of noble laureates to the brain of God, the creator of the Universe.



MR GAGANDEEP SINGH

ASSISTANT PROFESSOR

GNA UNIVERSITY STUDENTS GIVES 'A CALL AGAINST WOMEN ABUSERS – WALK FEARLESS'

The students of GNA University organized a campaign 'Walk Fearless – A Call Against Women Abusers' in association with GNA University. It is a campaign that talks about the abuses that are being done against women and how to stop them. This campaign is part of global challenge sponsored by Facebook and managed by EdVenture Partners. Facebook has sponsored this campaign through its competition - Peer to Peer: Challenging Extremism (P2P), which is a Facebook global university initiative designed to counter the online presence and narrative of prejudice, hate speech and extremism culminating in the Facebook Global Digital Challenge. Dr Prem Kumar, Vice Chancellor – GNA University welcomed the guests of the event including Ms Jasleen Sihra - GNA Group, Ms Archie Sehgal, Director – Corporate Achievers by the Cynosure and applauded the efforts of the students for organizing such a meaningful event. He said that women can contribute to the society to such an extent that men cannot. He also urged that women should be aware about the laws made for them.

Dr. Shruti Shukla, State Coordinator cum Deputy Director (Guidance Bureau), State Council for Education Research & Training (SCERT), Mohali, was the chief guest for the event. She appreciated the event and said that a reform is required for which such events and seminars should be organized. Addressing the audience she stated that women empowerment can only be achieved by women enlightenment which is possible through education. She also threw light on the ways how workplace harassment can be tackled i.e. through changing the mindset of men and by bringing a social change. She urged that women should not tolerate any misbehave and should fight back for her dignity.

Monika Bickert, Head of product policy, Facebook said that "Creating and promoting positive speech is an essential element to countering hate and extrem-



ism online – that's why Facebook is a strong supporter of P2P."

The event began with a documentary movie – Gulabi Gang which showcased the struggle faced by the women of Bundelkhand, Uttar Pradesh and their struggle to fight the domestic abuse and all other violence that happened with them which led them to the formation of Gulabi Gang and raising their voice. The movie motivated everyone to stay strong in all situations and fight back for justice.

Then there was a panel discussion on the topic "Fighting Back The Abuse" which had the following panelists – Dr. Prem Kumar, Vice Chancellor, GNA University, Ms. Shahnaz Jolly Kaura, Transmission Executive, AIR, Jalandhar, Ms. Harvinder Kaur, Executive Member, PAHAL NGO, Dr. Ramnita Saini Sharma, Associate Professor, HMV College, Jalandhar, Mr. Rahul Saini, Novelist, Artist & Architect. The panelists discussed their view points on the topic

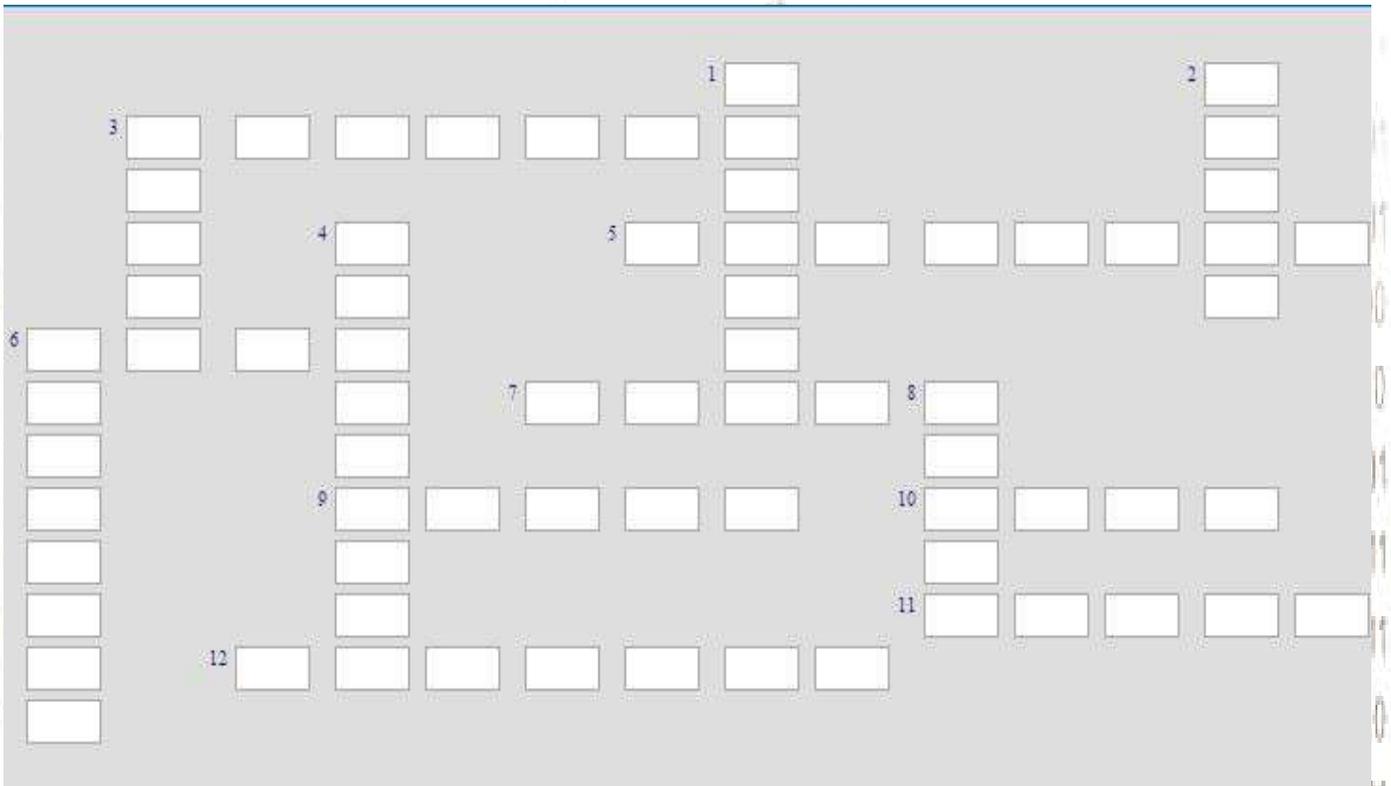
which was followed by an open house discussion wherein audience was allowed to interact with the panelists and share their own views.

A stage play titled "Chandan de Ohle" based on the theme of Women Abuse was performed by the artists of Friends Theater. It was directed by Mr. Ashok Kalyan and Mr. Varun Kapoor. The protagonist of the play was subjected to abuse by forcing her to marry an NRI who was double than her age and not letting her express her views or decisions of any sort. The artists spell bounded the audience with their performance and forced everyone to think that even in today's date the lust of going abroad is so big that we sacrifice the life of a girl so easily.

A sheet having the campaign title Walk Fearless was also made by the students wherein the chief guest and all other dignitaries signed it by writing their views on Women.



THE QUIZ



Clues Across

3. Name for a viewing screen
5. Also known as the W.W.W.
6. You press these with your fingers
7. A memory device used to store programs
9. Only press this switch in an emergency
10. Used to store pictures and writing away from the computer
11. _____ soft - The maker of Windows
12. A collection of computers connected together

Clues Down

1. A device used to make a "hard copy."
2. Better than an inkjet or ribbon
3. Hand operated pointing device
4. 10 across goes in here
6. Essential for typing
8. A device used to connect a computer to the Internet.

