

DOT MATRIX

Volume 1 (2017)



TECHEEZ CLAN
WE MAKE IT HAPPEN

CONTENTS

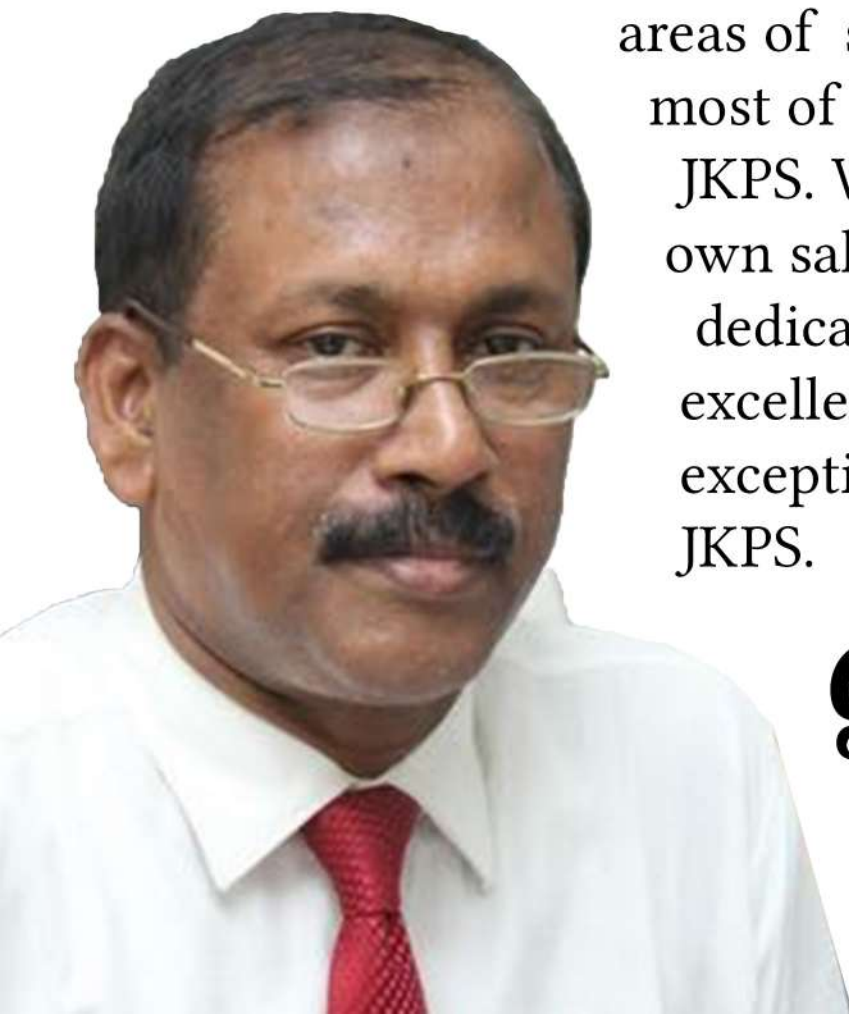
- 01.** - Message from the Principal's Desk
- 04.** - Message from the Headmistress' Desk
- 06.** - Message from the HOD'S Desk
- 08.** - Article on Scope of Digital Learning by Mr. C.P. Nayak
- 10.** - Breakthrough Technologies
- 17.** - CPU War
- 21.** - GPU War
- 24.** - 5G Technology
- 28.** - Ransomware
- 30.** - The Team

PRINCIPAL'S DESK

1

JKPS, one of the premier schools, enjoys a good reputation for excellence in academics, sports and cultural activities. It gives me profound happiness and honour to announce that the school emphasizes on the important qualities of integrity, honour, creativity, respect and self-discipline. The children walk out of the school and become easily adaptable, competitive, and open to new skills and competencies. I am confident that nothing will thwart the spirit of the facilitators of this temple of learning, in the mental, physical or spiritual growth of the students. Our students should all be nurtured to become successful learners, striving to maximize their potential in all

areas of student life and make the most of opportunities on offer at JKPS. We inspire learning for its own sake by modelling lifelong dedication to learning as excellence performance is not an exception but an expectation at JKPS.



George Mathew

We support and encourage boys and girls in their quest to develop respectful and fulfilling relationships with their peers, school staff, parents and members of the community.

Our Prime Minister, Mr. Narendra Modi's ambitious programme for the betterment of the nation and changing our nation to a hub of digital infrastructure will soon make this digital India a dream come true. Science & technology is everywhere entwined in almost every part of our lives. Technology based classrooms in our school have been highly successful in minimizing the gap between the teachers and the students. The whole concept of online assignments on JKPS website are easily accessible anytime anywhere, 24 x 7. Introducing technology into the learning environment has encouraged cooperative learning and student collaboration. Beyond the classroom computer networking has allowed students to communicate and collaborate with each other, and also with experts around the globe. Relying upon the technology has become inevitable.

Dear students along with appreciating all the benefits, it is extremely important to beware of its negative impacts and more importantly, take proper actions ameliorate them. To help in this venture the members of TECHEEZ computer club of JKPS, which was founded in 2008, have been actively involved in activities like web designing, movie making, software development etc.

They also participated in various interschool competitions and brought laurels to the school. I thank the management for their consistent support in this endeavour. My sincere congratulations to the members of TECHEEZ Computer club for their incessant effort in designing and publishing TECHEEZ Website, TECHEEZ E-Magazine - Dot Matrix, and TECHEEZ APP and indulging in other initiatives, the dedicated faculty of Computer Science Department, and Mrs. Ritu Gulati, HOD Computer Science, whose zestful leadership has rendered these endeavours possible.

With best wishes,

George Mathew

Principal, Jaspal Kaur Public School

HEADMISTRESS' DESK

In the words of Dalai Lama, "When educating the minds of our youth, we must not forget to educate their hearts". At JKPS, we focus on discovering, developing and drawing out the hidden talents and the magic lying dormant inside our students. From academics to co-curricular activities, perseverance and a never-say-die spirit are entrenched in the hearts of each and every student, not only making them good students but brilliant human beings. In today's dynamic world, a 360 degree development and grooming is of supreme importance and in JKPS we are creating an environment for future leaders, entrepreneurs and professionals who possess skills and aptitudes in an array of functional disciplines.



Renuka Kamal

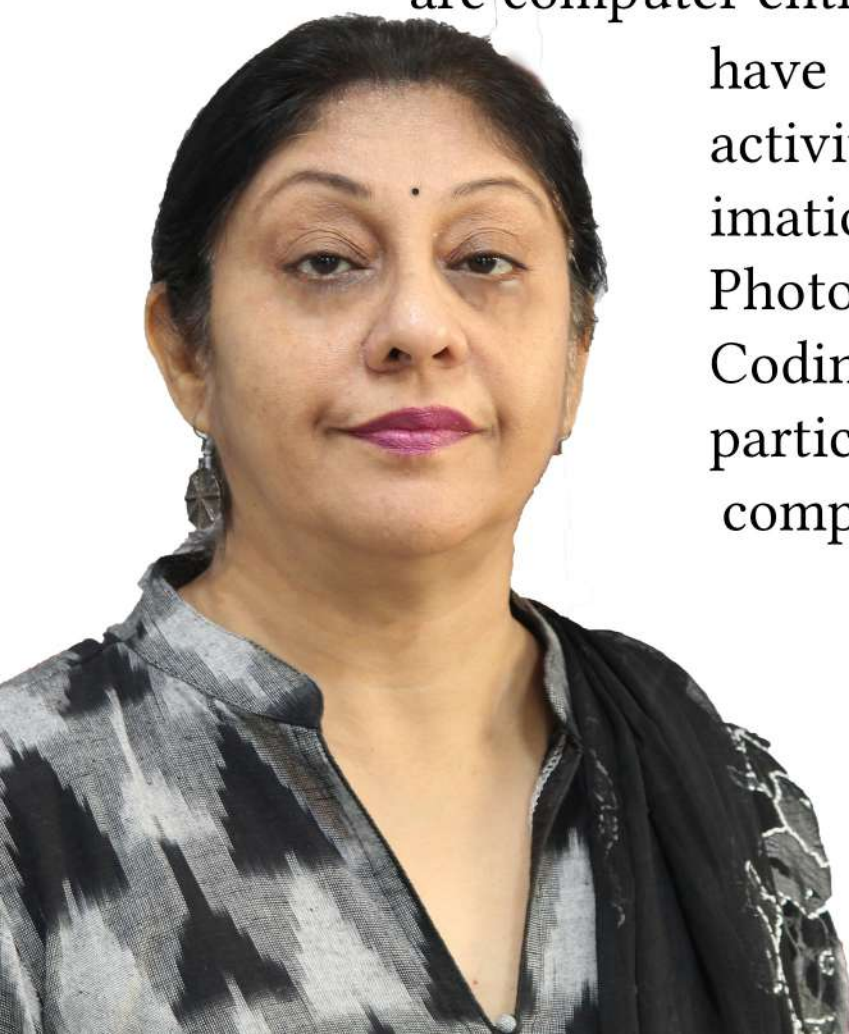
Today education and research are in a period of extraordinary transition. In this digital era, the explosion of information has made the role of teachers more crucial than ever. The ease of accessibility of information and the skill to network openly with sources of information from a diversity of viewpoints makes the teacher's role even more important. Our competent team of computer faculty strive to focus on each and every child, monitor and mentor them, appreciate their achievement and guide them to understand the usage of technology better. The Techeez team has been instrumental in bringing out the technical 'Dot-Matrix' e-magazine. Alongside, the website and app is also being launched by our young, budding geeks. I am positive that in times to come we will continue this journey with elevated enthusiasm and persistently provide a platform of holistic learning to the young generation of learners. I appreciate the commendable efforts put forth by the team for its grand beginning. The efforts taken to bring about innovative content is appreciable. I hope this effort of Techeez team will serve as a stepping stone towards the many milestones we have to cover in the pursuit of excellence.

Dr. Renuka Kamal
Headmistress

HOD'S DESK

Computers and Information Technology have, without a doubt, changed the world entirely. To ensure that the youth stay abreast of the technological advancements of the day, JKPS has strived to promote technological understanding among students; students who shall be the leaders and innovators of our future. To help with this endeavour, the TECHEEZ computer club of JKPS was founded in 2008. It started with just 4 students and has now grown to a team of about 50 students. The group of 45 are a curious lot, who like to get their hands dirty with technology. They undertake a number of advanced activities using the well-equipped computer labs at JKPS. TECHEEZ members are computer enthusiasts of all ages and they

have been actively involved in activities like Web designing, Animation, Movie making, Photography, Audio Editing, Coding, Encryption etc. They also participate in various inter-school competitions and make us proud.



Ritu Gulati

Tagline of TECHEEZ club 'MAKE IT HAPPEN' puts the club's aspirations in perspective. It hopes to instil confidence that nothing is impossible for our students. We, at JKPS have always aimed to impart to the students the knowledge and skills essential for scaling the heights in today's world. We also believe that technology, today plays an instrumental role in shaping diverse spheres of life. Imparting IT-associated skills to the Gen-X is essential for their success and, TECHEEZ is a step forward in ensuring this.

Within the last decade, technology has permeated almost every aspect of our lives. It affects how we conduct business, socialize, connect, play, and most importantly how we teach and learn. It is inevitable that we will continue to rely more and more on technology. This makes the presence of the TECHEEZ Club very crucial for the all-round development of our students.

I would like to thank our Management, Principal, faculty members and students for their support in making the TECHEEZ Computer Club a reality. With their guidance, zeal and passion we hope to see it grow and achieve its vision.

Ritu Gulati,
HOD Computer Science

SCOPE OF DIGITAL LEARNING

Over the past decades, our world has become a ground for new developments, vicissitudes and achievements and all this could be affordable only because of the advancements and acceptance of the digital assets around. Today as we rise as the techno-philic society the scope of being digital has multiplied several times. Now as the developed nations have started realizing the cost benefits of going digital the role of Digital Education has become the panacea for current education all over the globe. From primary classes to the PhD. courses E-learning has proved to be the key holder for all.

Digital education comes as a win-win for all. In the past few years there has been a considerable rise in Digital and Live Virtual Classrooms at different levels of learning. Students view this as a flexible option allowing them to study as per their time and pace. Teachers too find it convenient to prepare their learning plans well aided by technology. Teaching becomes a smoother experience with a perfect mesh of personalized packages having a blend of animations, gamification and elaborated audio-visual effects.

Also the ideal condition of “you name it and you have it” has been proved literary by collaborative tools of big industries like the G suite of education, a powerful and affordable platform to learn and store information by Google and Adobe education exchange which is a vast platform for teachers to exchange and share ideas and learn adobe related technology. Now, you don’t have to wait for your turn to be taught but you can access the internet and achieve a wider prospective of the topic. As per my recent experience with the online courses such as “Pedagogy for effective use of ICT for school teachers” by IIT Bombay and “Information to Modern Application Development” by IIT Madras through NPTEL, I assure you that such online courses provide you with a great lot new information and helps you to assess your position at the global level. To sum up, the digital learning has effectively come out as an open window for lifelong learners who can attain information from photography to hypnotherapy with help of these courses and that too from reputed institutions and universities round the globe



C.P. Nayak
TechEEZ Faculty

BREAKTHROUGH TECHNOLOGIES OF 2017

REVERSING PARALYSIS

Scientists are making remarkable progress at using brain implants to restore the freedom of movement that spinal cord injuries take away.



DID YOU KNOW?

There are over ten million cases of paralysis in India per year

SELF-DRIVING TRUCKS

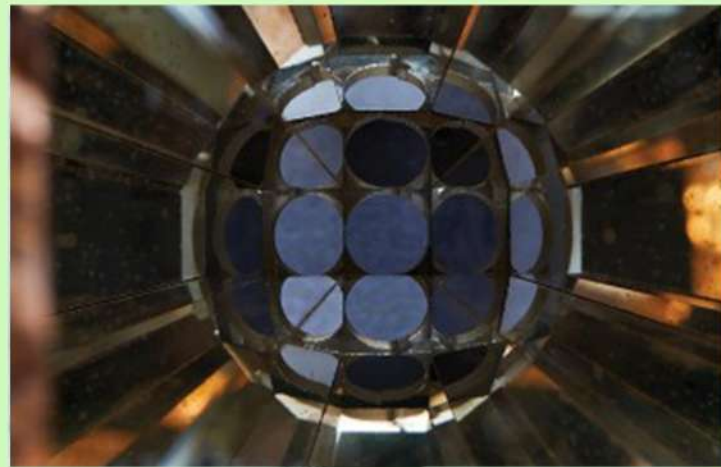
Elon Musk has once again surprised us by announcing the Tesla Fully Automated Electric Semi-Trucks which is planned for a 2019 release..



DID YOU KNOW?

The new design of Hot Solar Cells could lead to inexpensive solar power that keeps working after the sun sets.

By converting heat to focused beams of light, a new solar device could create cheap and continuous power.



PRACTICAL QUANTUM COMPUTERS

Advances at Google, Intel, and several research groups indicate that computers with previously unimaginable power are finally within reach.

Google's Quantum Computers are almost 100 million times faster than our regular laptops.

DID YOU KNOW?

BitCoin's value has been hiked up to almost Rupees 5,30,000. So, Quantum Computing has posed a threat to cryptocurrency



360-DEGREE SELFIE

360-Degree Selfies have been made which allow us to take 360 degree selfies. It was first introduced by the company Ricoh.



GENE THERAPY (2.0)

Scientists have solved fundamental problems that were holding back cures for rare hereditary disorders.



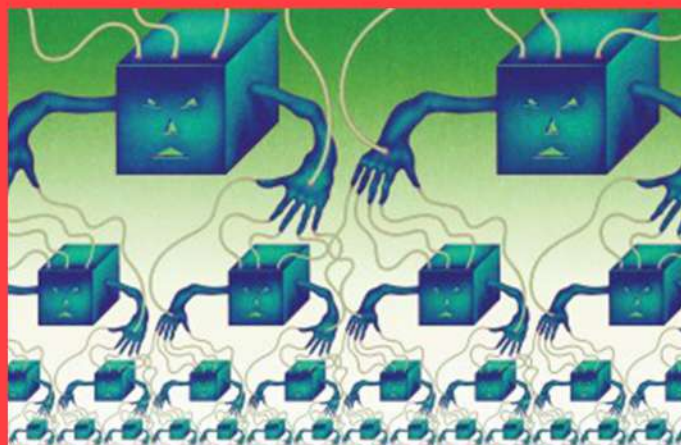
CELL ATLAS

Biology's next mega-project will find out what we're really made of.



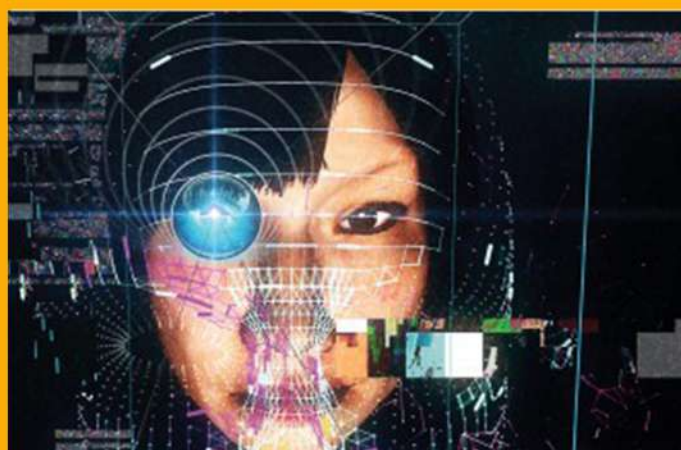
BOTNET OF THINGS

The relentless push to add connectivity to home gadgets is creating dangerous side effects that figure to get even worse.




PAYING BY FACE

Face-detecting systems in China now authorize payments, provide access to facilities, and track down criminals. Will other countries follow?



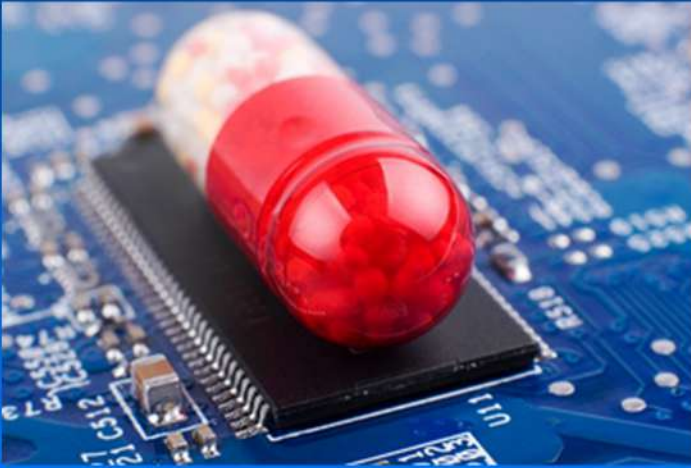
DNA-STORAGE TECHNOLOGY

A stylized graphic of a DNA double helix, rendered in bright cyan against a dark blue background. The structure is composed of thick, rounded lines for the sugar-phosphate backbones and thinner, straight lines for the base pairs, creating a modern, geometric representation of the molecule.

DNA digital data storage refers to any process to store digital data in the base sequence of DNA. This technology uses artificial DNA made using commercially available oligonucleotide synthesis machines for storage and DNA sequencing machines for retrieval. This type of storage system is more compact than current magnetic tape or hard drive storage systems due to the data density of the DNA. Currently it was reported that in **1 gram of DNA 215 petabytes (215 million gigabytes)** could be stored. It also has the capability for longevity, as long as the DNA is held in cold, dry and dark conditions, as is shown by the study of woolly mammoth DNA from up to 60,000 years ago, and for resistance to obsolescence, as DNA is a universal and fundamental data storage mechanism in biology. These features have led to researchers involved in their development to call this method of data storage "apocalypse-proof" because "after a hypothetical global disaster, future generations might eventually find the stores and be able to read them." It is, however, a slow process, as the DNA needs to be sequenced in order to retrieve the data, and so the method is intended for uses with a low access rate such as long-term archival of large amounts of scientific data.

TRACKING DRUG

US' Food and Drug Administration has approved the first-ever drug which uses digital tracking to record if the medication was taken. The system works by sending a message from the pill's sensor to a wearable patch, which can transfer the information to the patient's smartphone and doctor. The product is approved for the treatment of schizophrenia, bipolar disorder and depression



LIGHT L16 CAMERA

At first glance, there's something Frankenstein-like about the Light L16 computational camera. When viewed from the front, it could be any number of things: a funky looking hard drive, a mini-tablet festooned with lenses, a portable speaker riddled with sensors. But the creators see nothing strange about this photo device. To them, the Light L16 is a bold new concept, one



that's clearly defined by the design: A single camera body with 16 different lenses. It will provide a great competition to DSLR cameras and will cost around \$1700 (Rupees 1,10,100)

GOOGLE LENS

WHAT IS GOOGLE LENS?

Google Lens is a set of vision-based computing capabilities that allows your Smartphone to understand what's going on in a photo, video or live feed. For instance, point your phone at a flower and Google Lens will tell you, on the screen, which type of flower it is; or, aim the camera at a restaurant sign to see reviews and other information pop up. The new AI system is heading



to Google Photos and Assistant first. Another cool tool available in Google Lens is the ability to point your phone at a router's setting sticker and have it automatically connect to that network. In conjunction with Assistant, Google Lens also allows users to point their

phone at a sign for a concert and automatically add that event to their calendars, or even purchase tickets right then and there. For your existing pics in Google Photos, activate Lens and it will offer details about what's actually in an image.



DID YOU KNOW?

Google officially launched Google Lens on October 4, with app previews pre-installed into the Google Pixel 2, although the rollout plan for others devices has not yet been officially announced. A preview of Lens has also been implemented into the Google Photos app for Pixel phones.

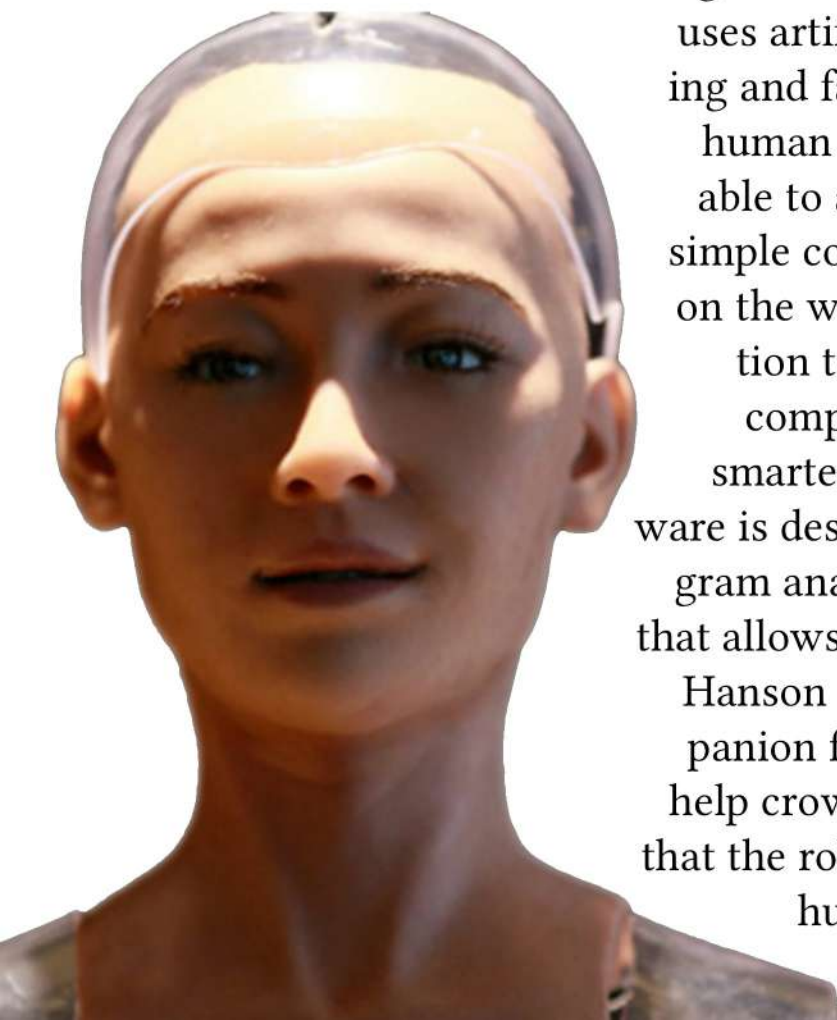
SOPHIA : THE HUMANOID

WHO IS SOPHIA?

Sophia is a humanoid robot developed by Hong Kong-based company Hanson Robotics. It has been designed to respond to questions, and has been interviewed around the world. In October 2017, the robot became a Saudi Arabian citizen, the first robot to receive citizenship of any country.

Sophia was activated on April 19, 2015. The robot is modeled after actress Audrey Hepburn, and is known for its human-like appearance and behavior

compared to previous robotic variants. According to the manufacturer, David Hanson, Sophia uses artificial intelligence, visual data processing and facial recognition. Sophia also imitates human gestures and facial expressions and is able to answer certain questions and to make simple conversations on predefined topics (e.g. on the weather). The robot uses voice recognition technology from Alphabet Inc. (parent company of Google) and is designed to get smarter over time. Sophia's intelligence software is designed by SingularityNET. The AI program analyses conversations and extracts data that allows it to improve responses in the future. Hanson designed Sophia to be a suitable companion for the elderly at nursing homes, or to help crowds at large events or parks. He hopes that the robot can ultimately interact with other humans sufficiently to gain social skills.



CPU SHOWDOWN

CORE-X VS THREADRIPPER

INTRODUCING INTEL'S®
MOST POWERFUL, MOST SCALABLE
 DESKTOP PROCESSOR



UNLOCKED INTEL® CORE™ X-SERIES PROCESSOR FAMILY

Processor number¹	Base clock speed (GHz)	Intel® Turbo Boost Technology 2.0 frequency² (GHz)	Intel® Turbo Boost Max Technology 3.0 Frequency³ (GHz)	Cores/threads	L3 cache	PCI express 3.0 lanes	Memory support	TDP	Socket (LGA)	RCP Pricing (1K USD)
i9-7980XE NEW	2.6	4.2	4.4	18/36	24.75 MB	44	Four channels DDR4-2666	165W	2066	\$1,999
i9-7960X NEW	2.8	4.2	4.4	16/32	22 MB	44	Four channels DDR4-2666	165W	2066	\$1,699
i9-7940X NEW	3.1	4.3	4.4	14/28	19.25 MB	44	Four channels DDR4-2666	165W	2066	\$1,399
i9-7920X NEW	2.9	4.3	4.4	12/24	16.5 MB	44	Four channels DDR4-2666	140W	2066	\$1,199
i9-7900X NEW	3.3	4.3	4.5	10/20	13.75 MB	44	Four channels DDR4-2666	140W	2066	\$999
i7-7820X NEW	3.6	4.3	4.5	8/16	11 MB	28	Four channels DDR4-2666	140W	2066	\$599
i7-7800X NEW	3.5	4.0	NA	6/12	8.25 MB	28	Four channels DDR4-2400	140W	2066	\$389
i7-7740X NEW	4.3	4.5	NA	4/8	8 MB	16	Two channels DDR4-2666	112W	2066	\$339
i5-7640X NEW	4.0	4.2	NA	4/4	6 MB	16	Two channels DDR4-2666	112W	2066	\$242

CPU SHOWDOWN

CORE-X VS THREADRIPPER



RYZEN THREADRIPPER AVAILABILITY

\$999

TR

1950X

16-Cores,
32-Threads

3.4 GHz /
4.0 GHz

\$799

TR

1920X

12-Cores,
24-Threads

3.5 GHz /
4.0 GHz

\$549

TR

1900X

8-Cores,
16-Threads

3.8 GHz /
4.0 GHz

CHARACTERIZING INFINITY FABRIC IN RYZEN™ THREADRIPPER™

78ns near memory
133ns far memory

Low power die-to-die
interconnect at 2pJ per bit

102.22GB/s die-to-die bandwidth
(bi-directional)



THE COMPARISON

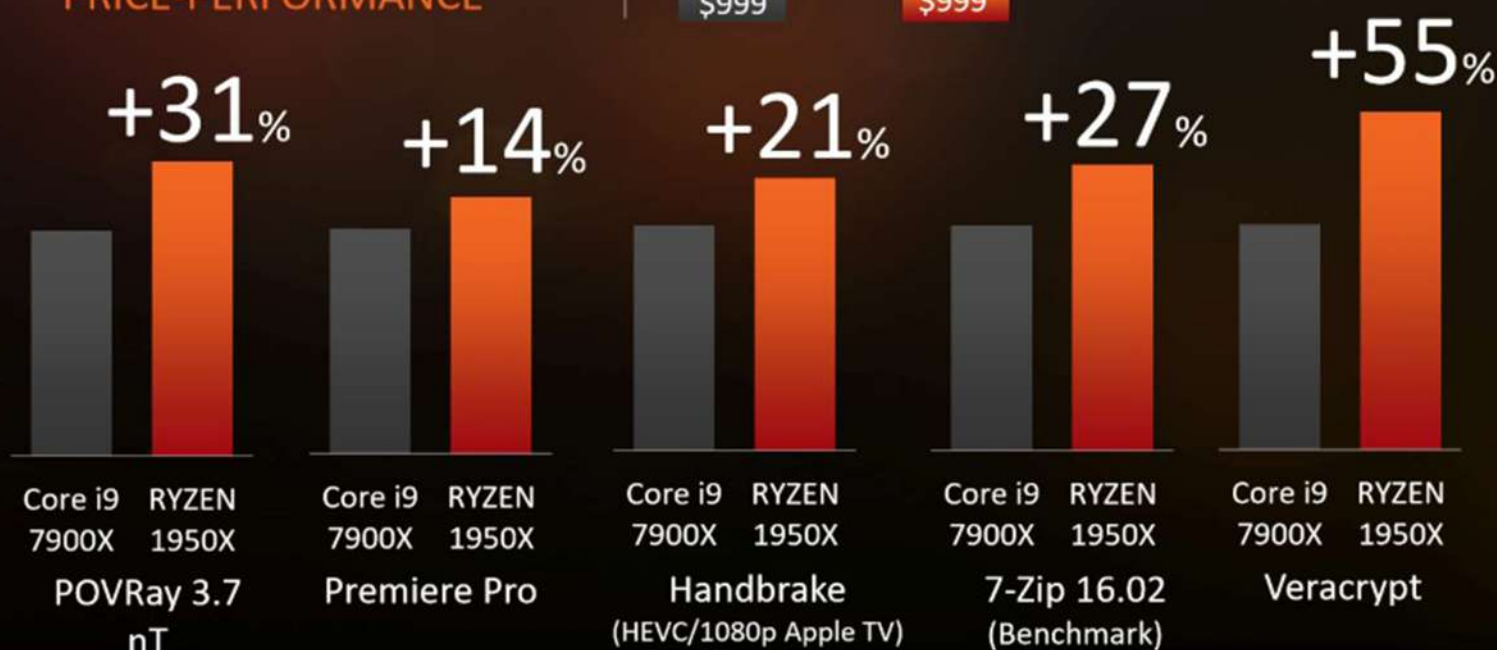
CORE-X VS THREADRIPPER

HEAVY WORKLOADS PRICE-PERFORMANCE

Core i9
7900X
\$999

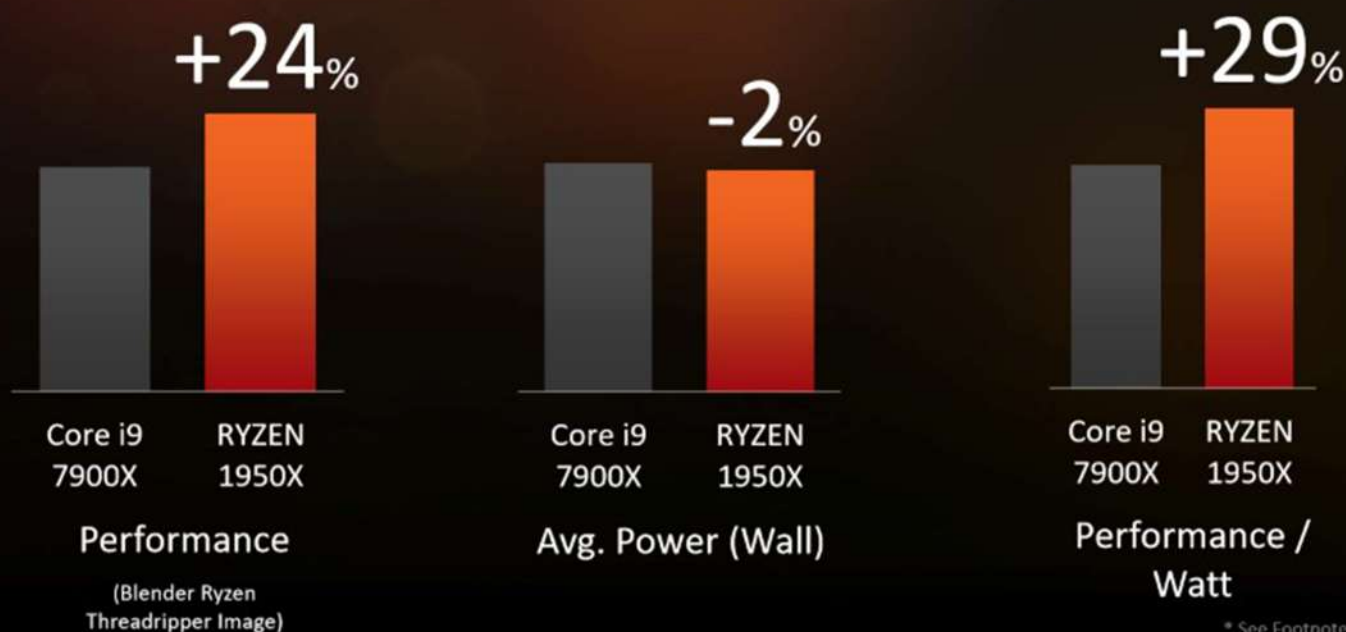
vs.

RYZEN
1950X
\$999



* See Footnote 3 AMD

RYZEN THREADRIPPER PERFORMANCE-PER-WATT ADVANTAGE



* See Footnote 5 AMD

THE COMPARISON

CORE-X VS THREADRIPPER

RYZEN THREADRIPPER 1950X
HIGHEST PERFORMANCE
HEDT PROCESSOR EVER



* See Footnote 2 **AMD**

VERDICT

By the stats we showed and by the benchmarks too, we can clearly say that AMD's Flagship Threadripper beats Intel's Core-X 7900X. The RYZEN is not better than the 7960X and 7980XE but then considering it's price, it's awesome. The 7960X and 7980XE are monstrously powerful cards with a heavy price-tag. The Ryzen 1950X is no doubt expensive but still a bang for buck. It's inexpensive than the Higher-End Core-X CPUs but still performs too good for it's price. So, if you want to buy a super-futureproof CPU, then you should go for any ThreadRipper Processor and it won't get outdated any time in the coming 6-7 years, As, people still use the i7 2nd-3rd gens without any issues. If you want to build a super-workstation type of PC, then you could go for the 7980XE.

WORLD'S FIRST GPU : GEFORCE GTX 256

THE GEFORCE 256 IS THE ORIGINAL RELEASE IN NVIDIA'S "GEFORCE" PRODUCT-LINE. ANNOUNCED ON AUGUST 31, 1999 AND RELEASED ON OCTOBER 11, 1999, THE GEFORCE 256 IMPROVES ON ITS PREDECESSOR (RIVA TNT2) BY INCREASING THE NUMBER OF FIXED PIXEL PIPELINES, OFF-LOADING HOST GEOMETRY CALCULATIONS TO A HARDWARE TRANSFORM AND LIGHTING (T&L) ENGINE, AND ADDING HARDWARE MOTION-COMPENSATION FOR MPEG-2 VIDEO. IT OFFERED A NOTABLY LARGE LEAP IN 3D GAMING PERFORMANCE AND WAS THE FIRST FULLY DIRECT3D 7-COMPLIANT 3D ACCELERATOR.



GPU WAR

AMD RX VEGA VS GTX 1080 TI

	Compute Units	TFLOPS	Memory Size	Memory Interface
Radeon™ RX Vega⁶⁴	64 nCU¹ 4096 Stream Processors	25.3² / 27.5³ / 12.7⁴ / 13.7⁵ FP16 / FP32 Performance	8GB	2048-bit
Radeon™ RX Vega⁵⁶	56 nCU¹ 3584 Stream Processors	21/10.5 FP16 / FP32 Performance	8GB	2048-bit
NVIDIA™ GTX 1080Ti	3584 NVIDIA CUDA Core Units	11 FP16 / FP32 Performance	11GB	352-bit
NVIDIA™ GTX 1080	2560 NVIDIA CUDA Core Units	9 FP16 / FP32 Performance	8GB	352-bit



Reasons to consider the [AMD Radeon RX Vega 64](#)

Better floating-point performance	12,665 GFLOPS vs 11,340 GFLOPS	More than 10% better floating-point performance
Significantly wider memory bus	2,048 bit vs 352 bit	More than 5.8x wider memory bus
Higher texture rate	395.8 GTexel/s vs 354.4 GTexel/s	More than 10% higher texture rate
More shading units	4,096 vs 3,584	512 more shading units
More texture mapping units	256 vs 224	32 more texture mapping units



Reasons to consider the [Nvidia GeForce GTX 1080 Ti](#)

Much higher effective memory clock speed	11,008 MHz vs 1,890 MHz	More than 5.8x higher effective memory clock speed
Higher clock speed	1,480 MHz vs 1,247 MHz	Around 20% higher clock speed
More memory	11,264 MB vs 8,192 MB	Around 40% more memory
Higher pixel rate	139.2 GPixel/s vs 98.94 GPixel/s	More than 40% higher pixel rate
More render output processors	88 vs 64	24 more render output processors
Higher memory clock speed	1,376 MHz vs 945 MHz	More than 45% higher memory clock speed
Lower TDP	250W vs 295W	More than 15% lower TDP

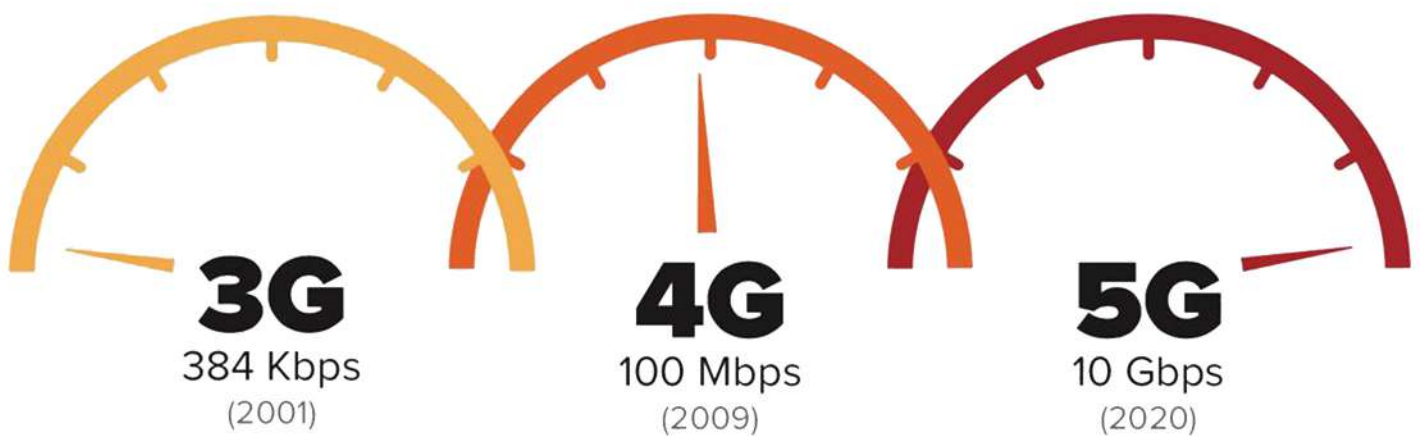
GPU WAR

THE VERDICT OF THE ULTIMATE SHOWDOWN

By the facts, it becomes quite difficult to know which one is better. By the facts, one may say that RX Vega is better than GTX 1080 Ti but this is not true at all. The GTX 1080 Ti is way better any of the RX Vega Series Graphic Cards. Even the GTX 1080 would be slightly better than the Team Red's GPUs. The Vega would provide awesome Gaming Performance which would be sufficient to max out 1080p 60fps easily. but not as good as GTX 1080 and 1080Ti. For BitCoin mining, it would be a beast since AMD's graphic cards are famous for BitCoin mining mainly. The RX 580 graphic cards were sold out for a while on all stores, this is because of it's awesome cryptocurrency mining capacity with an affordable price tag. The RX Vega, like all AMD GPUs (and CPUs too) is more consumptive in terms of Wattage and this is not a new thing. So, if you have a budget in which you're confused between GTX 1080 Ti/1080 and RX Vega 64/56, then you should go for the Team Green (GTX) for gaming and go for Team Red's (VEGA) GPUs for Cryptocurrency mining. In normal uses (Gaming, Rendering, Streaming etc.) GTX 1080/1080Ti would be the optimal choice.



5G TECHNOLOGY



The mobile industry is ready to go through a big transition in the coming years. We are on the verge of experiencing something spectacular. While most of us are happy with our current data speeds, it won't be the case a few years from now. With the advent of IoT devices and exponentially increasing user base, the mobile industry needs a robust plan to be able to cater to our needs in the future. Their solution to this problem is the next generation of the mobile communications systems, a.k.a. 5G.

WHAT IS 5G?

In the simplest of its contexts, 5G refers to the 5th Generation of the cellular technology. Starting in the 1980s with 1G, our cellular networks went through multiple evolution stages to become what we see and use today. Whenever there was a significant upgrade in the cellular technology, carriers marked the upgrade with a different generation. When '2G' or the 'second generation' of cellular technology was launched, it marked the adoption of the digital system over the pre-existing analog system. It also added mobile data in the form of GPRS and EDGE. However, after 2G, the lines marking the different generations became a little bit blurry, but still, every successive generation meant higher data speed, better connectivity, and better call quality. 5G technology is supposed to take the cellular world by storm. It is going to mark as big a jump from our current 4G-LTE technology as 2G did from 1G.



SPEED OF 5G?

While the current 4G-LTE technology typically uses spectrum under 3GHz, the 5G technology will use higher bands of spectrum, above the 20 GHz mark. This range of the spectrum is also known as the “millimeter wave”, as the frequency of the waves become so high that its wavelength is only a few millimeters long. Data throughput by a wave is directly proportional to its frequency, hence, higher the frequency higher will be the amount of data it can carry. This high-frequency range in spectrum gives 5G many advantages over the current 4G technology. One such aspect is speed :

5G will bring a huge speed boost to our data connectivity. The theoretical max speed of 5G will be around 100 Gbps while the minimum speed will be around 10 Gbps. Comparing that to the theoretical speed of current 4G-LTE technology which tops out at 1Gbps, we can assume that the data speed will be at least 10X higher than 4G-LTE.

SAMSUNG SETS

5G

SPEED RECORD AT 7.5GBPS

Quick enough to download a HD movie in 1 second

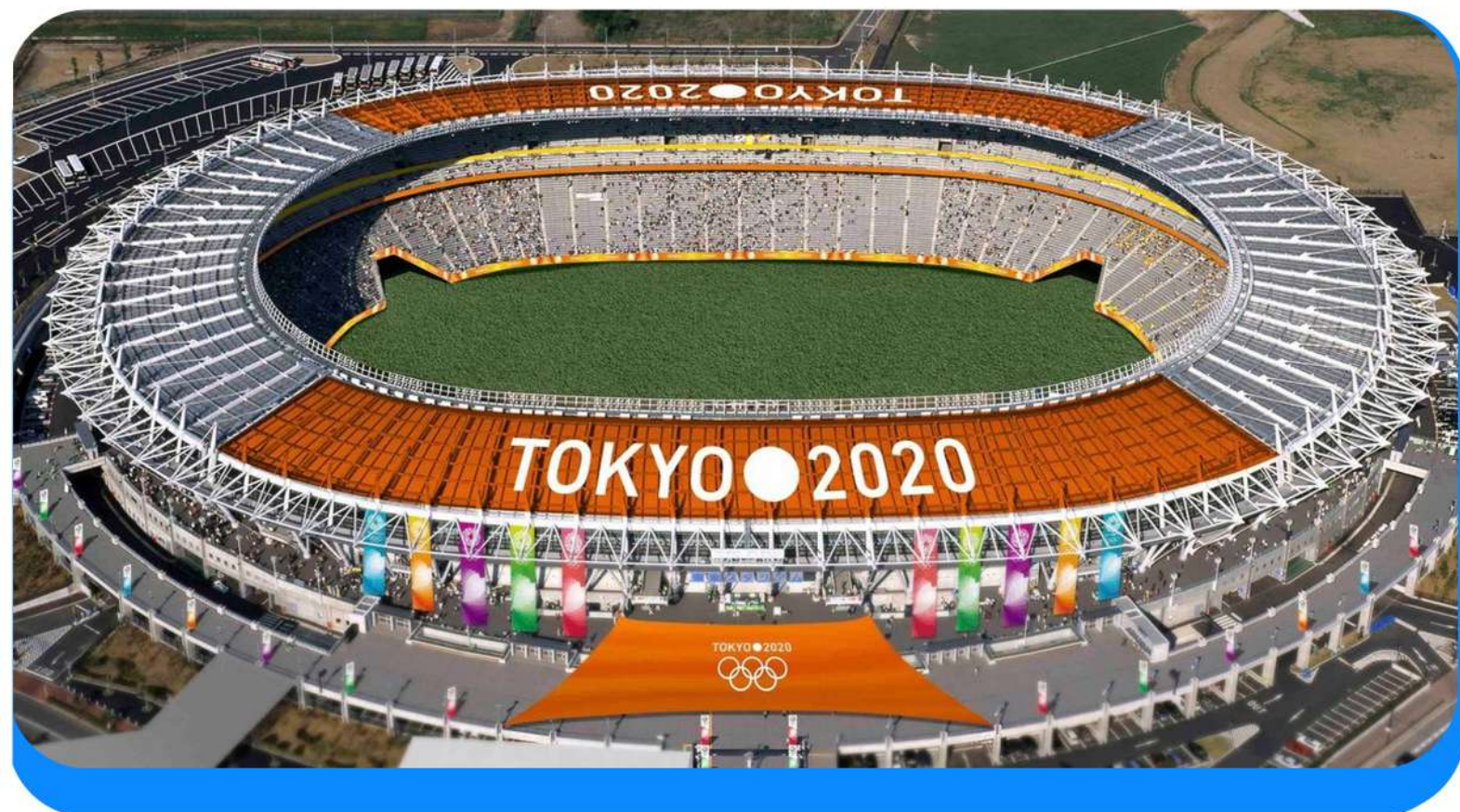


RELEASE DATE OF 5G

27

One drawback of using high-frequency spectrum is that high-frequency signals attenuate fast and can cover only a small distance. While today a large tower can send signals which cover several miles, the 5G waves can cover a distance of only 200 meters. They are also not good at penetrating solid structures like walls and buildings. This means instead of a single tower which is big, thousands of small cells need to be installed throughout the city to cover a similar area. Thus, a robust infrastructure needs to be in place before 5G can be rolled out.

Carriers are optimistic and planning to carry out the trial of 5G in the coming Olympics Games in the year 2020. The launch of 5G to the mass market in the USA is supposed to roll out in the year 2022-23. Also, when it comes to the 5G supported devices, we can expect them to be unveiled when 5G networks are ready for prime time.



RANSOMWARE



WHAT IS RANSOMWARE?

Ransomware, also called Business Email Compromise, is a type of malicious software that infects a computer and restricts users' access to it until a ransom is paid to unlock it. Individuals and organisations are discouraged from paying the ransom, as this does not guarantee access will be restored.

HOW TO BE SAFE FROM IT?

SAFETY MEASURES

As deadly Ransomwares are being programmed and are spreading. Here are some safety measures

ON COMPUTERS :

Make sure you have a good reputed Antivirus installed. The bad guys will take advantage of vulnerabilities found in software to install malware, so it's important to keep the operating system and software on your computer up-to-date by installing the latest security patches and updates. Regularly back up any files stored on your computer. If your computer does become infected with ransomware, your files can be restored once the malware is removed from the computer.

ON MOBILES :

Avoid downloading apps from unfamiliar sites and only install apps from trusted sources. You must be storing not much data on your smartphone as compared to your Laptop or Computer, so make a habit of regularly backing up your device. Also install a good ANTIVIRUS and avoid installing unpopular apps and always install apps from Play Store. Uninstall apps that show multiple ads and that too of unknown sources as they might redirect you to infected websites.

THE TEAM



Mr. C.P. Nayak, Mrs, Prabhjot Gulati, Mrs. Madhu Thirwani, Mrs.Ritu Gulati, Mrs. Shikha Chopra (From left to right)



Ritu Gulati | C.P. Nayak | Madhu Thirwani | Shikha Chopra | Prabhjot Gulati
Saiyam Dudeja | Jasjeet Singh | Arjun Tandon | Himesh Nayak | Haresh Nayak
Harsh Rana | Aaryan Arora | Udit Khattar | Samarth Mincoha | Siddharth Chawla
Paavan Ahuja | Dhananjay Singh | V.Saai Nithin Reddy | Manvinder Singh
Japnit Singh | Vininder Singh | Ansh Kapoor | Karan Grover | Dev Goel
Harjas Singh | Aditya Bajaj | Shruti Singh | Dravya Vermani

Ritu Gulati | C.P. Nayak | Madhu Thirwani | Shikha Chopra | Prabhjot Gulati
Saiyam Dudeja | Jasjeet Singh | Arjun Tandon | Himesh Nayak | Haresh Nayak
Harsh Rana | Aaryan Arora | Udit Khattar | Samarth Mincoha | Siddharth Chawla
Paavan Ahuja | Dhananjay Singh | V.Saai Nithin Reddy | Manvinder Singh
Japnit Singh | Vininder Singh | Ansh Kapoor | Karan Grover | Dev Goel
Harjas Singh | Aditya Bajaj | Shruti Singh | Dravya Vermani

Ritu Gulati | C.P. Nayak | Madhu Thirwani | Shikha Chopra | Prabhjot Gulati
Saiyam Dudeja | Jasjeet Singh | Arjun Tandon | Himesh Nayak | Haresh Nayak
Harsh Rana | Aaryan Arora | Udit Khattar | Samarth Mincoha | Siddharth Chawla
Paavan Ahuja | Dhananjay Singh | V.Saai Nithin Reddy | Manvinder Singh
Japnit Singh | Vininder Singh | Ansh Kapoor | Karan Grover | Dev Goel
Harjas Singh | Aditya Bajaj | Shruti Singh | Dravya Vermani

Ritu Gulati | C.P. Nayak | Madhu Thirwani | Shikha Chopra | Prabhjot Gulati

We make **IT** happen

Saiyam Dudeja | Jasjeet Singh | Arjun Tandon | Himesh Nayak | Haresh Nayak
Harsh Rana | Aaryan Arora | Udit Khattar | Samarth Mincoha | Siddharth Chawla
Paavan Ahuja | Dhananjay Singh | V.Saai Nithin Reddy | Manvinder Singh
Japnit Singh | Vininder Singh | Ansh Kapoor | Karan Grover | Dev Goel
Harjas Singh | Aditya Bajaj | Shruti Singh | Dravya Vermani

Ritu Gulati | C.P. Nayak | Madhu Thirwani | Shikha Chopra | Prabhjot Gulati
Saiyam Dudeja | Jasjeet Singh | Arjun Tandon | Himesh Nayak | Haresh Nayak
Harsh Rana | Aaryan Arora | Udit Khattar | Samarth Mincoha | Siddharth Chawla
Paavan Ahuja | Dhananjay Singh | V.Saai Nithin Reddy | Manvinder Singh
Japnit Singh | Vininder Singh | Ansh Kapoor | Karan Grover | Dev Goel
Harjas Singh | Aditya Bajaj | Shruti Singh | Dravya Vermani

Ritu Gulati | C.P. Nayak | Madhu Thirwani | Shikha Chopra | Prabhjot Gulati
Saiyam Dudeja | Jasjeet Singh | Arjun Tandon | Himesh Nayak | Haresh Nayak
Harsh Rana | Aaryan Arora | Udit Khattar | Samarth Mincoha | Siddharth Chawla
Paavan Ahuja | Dhananjay Singh | V.Saai Nithin Reddy | Manvinder Singh
Japnit Singh | Vininder Singh | Ansh Kapoor | Karan Grover | Dev Goel
Harjas Singh | Aditya Bajaj | Shruti Singh | Dravya Vermani

Ritu Gulati | C.P. Nayak | Madhu Thirwani | Shikha Chopra | Prabhjot Gulati
Saiyam Dudeja | Jasjeet Singh | Arjun Tandon | Himesh Nayak | Haresh Nayak
Harsh Rana | Aaryan Arora | Udit Khattar | Samarth Mincoha | Siddharth Chawla
Paavan Ahuja | Dhananjay Singh | V.Saai Nithin Reddy | Manvinder Singh
Japnit Singh | Vininder Singh | Ansh Kapoor | Karan Grover | Dev Goel
Harjas Singh | Aditya Bajaj | Shruti Singh | Dravya Vermani



.dot matrix

TECHEEZ E-MAGAZINE
VOLUME 1 (2017)

Jaspal Kaur Public School, B'Paschimi, Shalimar Bagh, New Delhi, Delhi 110088

Magazine designed by Arjun Tandon (TECHEEZ Member)