

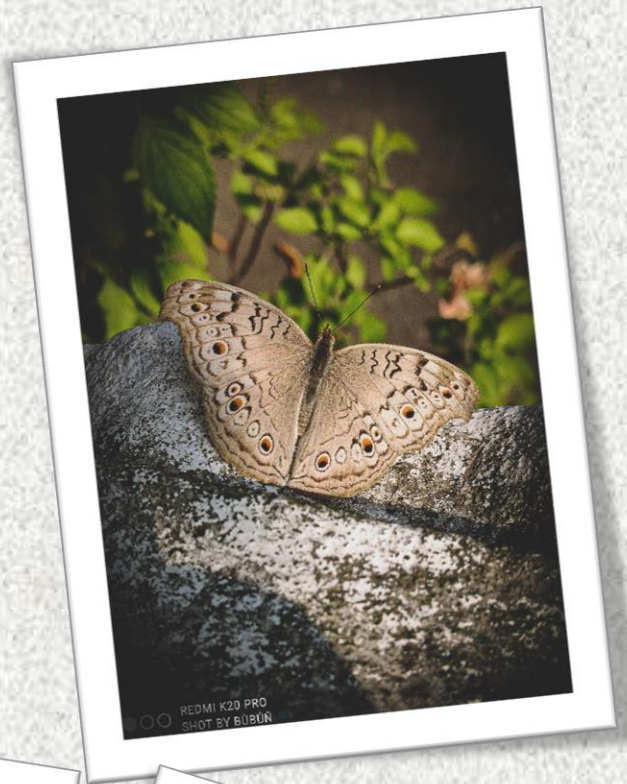
iART3FACTS

Chronicles Of Technology, Talent, Innovation & Inspiration



DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING

PHOTOGRAPHY



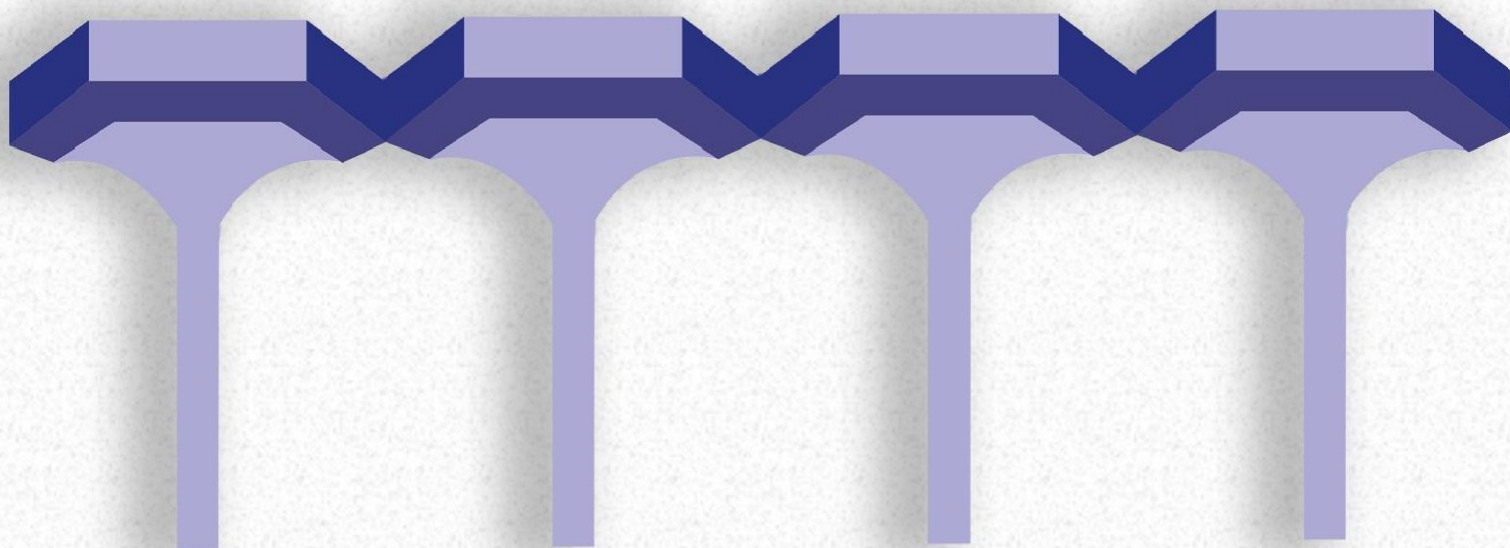


ART3FACTS

Chronicles Of Technology, Talent, Innovation & Inspiration

TECHNO-CULTURAL MAGAZINE

SIXTH EDITION, APRIL 2021



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



HALDIA INSTITUTE OF TECHNOLOGY

HALDIA, PURBA MEDINIPUR - 721657 (WB)

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PICTURE PERFECT

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ABOUT



About Institute

Haldia Institute of Technology (An Institute of ICARE, Haldia, Approved by AICTE, and affiliated to WBUT) began its journey in the year 1996. It is the first private and accredited academic institution catering technical education in West Bengal. The institute has an enclave campus of 43 acres of land having an administrative block of 3332 square meters with nine academic blocks having an area of around 20350 squares. There are 11 B. Tech courses (production engineering excluded), and 5 MTech and MCA, MBA courses.

Haldia Institute of Technology is accredited by the National Assessment and Accreditation Council (NAAC) with an "A" grade, valid up to September 2021. Haldia Institute of Technology ranked "174" among engineering colleges in India by the National Institutional Ranking Framework (NIRF) in 2019.

Department of Electronics & Communication Engineering

The Department of Electronics & Communication Engineering was established in 1998. National Board of Accreditation (NBA) accredited it in 2004 and subsequently in 2007. Presently, the department has an intake capacity of 180 student for the B. Tech course. It also offers MTech in Microelectronics and VLSI Design since 2005 with intake capacity 18 students. The department has several well-equipped laboratories for the students as well as for researchers. It has a departmental Library, which contains text/reference books, more than 500 titles. The department of Electronics and communication stands by the vision "To produce dynamic human resources of global standards by imparting quality teaching, carrying out research and technology development in the emerging areas of Electronics & Communication Engineering".

The department also strives to produce electronics and communication engineers having strong theoretical foundation, good design experience and exposure to research and technology development in frontier areas of electronics and communication engineering. And also, to create competent professionals who can work as an individual or in a group with effective communication and leadership skills meeting the requirements of multi-cultural global environments and to help the student be a successful and responsible engineer for the betterment of mankind by inculcating social and ethical values in professional engineering program.

Presently, The Head of the Department is **Prof. (Dr.) Chanchal Kumar De** (2017-present).

Former Head of the Department(s):

1. Mr. Santi Prasad Maity (1998-2001)
2. Mr. Goutam Lohar (2001-2005)
3. Mr. Asim Kumar Jana (2005-2009)
4. Dr. Sunandan Bhunia (2009-2015)
5. Dr. Jaydeb Bhaumik (2015-2017)



Prof. (Dr.) M.N. Bandyopadhyay

Director

Haldia Institute of Technology Haldia,

Purba Medinipur

MESSAGE FROM DIRECTOR

I am extremely glad to note that Department of Electronics and Communication Engineering, Haldia Institute of Technology is going to publish the sixth edition of the techno-cultural magazine 'i-Artefacts'. It is an immense pleasure to know that this magazine covers four sections including Tech Trends, Picture Perfect, Youth Central & Campus Insider with Technical and Non-technical Articles, Drawings and Photographs, Inspirational Stories from Alumnus, Latest Happenings in the Department as well as Institute and Tech-updates.

Today, the Society seeks a generation of young people who are not only enlightened but also trained to think innovatively. They are expected to meet tough challenges and create opportunities in unconventional areas in a very short span with unprecedented success. It is my firm belief that obstacles do not deter success, rather they enhance one's possibilities to succeed. This type of magazine with vast diversification in both technical and non-technical fields will give the students a better understanding of all the trades.

Electronics & Communication Engineers should be jack in all trades. Their eyes should be open to observe all types of innovative ideas and thoughts which are being implemented throughout the world. They have to understand the technical as well as the cultural activities and how these can be interrelated, and this magazine can be one of the best mediums to have an idea about this.

It is my strong belief that obstacles do not deter success, rather, they enhance one's possibilities to succeed. So, I am providential enough to express my heartfelt contentment over the publication 'i-Artefacts'. I take this opportunity to convey my best wishes and congratulate all the committee members for their sincere hard work. I hope this magazine comes as a breeze of fresh air and encourages the youth to do constructive work and take the nation forward.



Dr. Anjan Mishra

Registrar

Haldia Institute of Technology, Haldia

Purba Medinipur

MESSAGE FROM REGISTRAR

In the era of rapid technological advancement and information revolution, we aspired and two decades to build our youth for the development of the country. During the journey we always encouraged the growth of the students by our patronage, criticism, sympathy and guidance. Haldia Institute of Technology with these initiatives has now become a Centre for meaningful learning. It is my privilege to express my sincere satisfaction over the publication of the techno-cultural print magazine “i- Artefacts” initiated by the Department of Electronics and Communication Engineering.

The entire team of faculty and staff members at the Institute is tuned towards continuous improvement keeping the soul statement in mind that students are the prime-movers of technology. Apart from teaching and learning we have strong inheritance of research, consultancy work, cohesive industry-institute partnership, collaborations with industries and universities, journal publications and many more.

This institute is emerging as a trend-setter in the heart of West Bengal, offering a good mix of academic and co-curricular activities. I urge all the stake holders to make the most of the multiple opportunities, for self-development as well as the development of the Institute and the society as a whole. Please make the best use of all the facilities that are available. Please try to maintain a balance between academic and co-curricular activities. Enjoy yourselves by all means, but always re- member the need for self- discipline, moral values and a sense of responsibility.

The mastery of mind cannot be termed complete unless the hidden potentials beyond the books are harnessed, nourished and properly shaped. The objective of all cultural events and programs at our Institute had always been focused on the same. I am sure that the initiative taken by the Department of Electronics and Communication Engineering, will definitely make our effort towards the achievement of the vision of our Institute stronger. I extend my best wishes to the faculty members and students involved of the magazine “i-Artefacts”.



Prof. (Dr.) Asit Kumar Saha

Principal

Haldia Institute of Technology Haldia,

Purba Medinipur

MESSAGE FROM PRINCIPAL

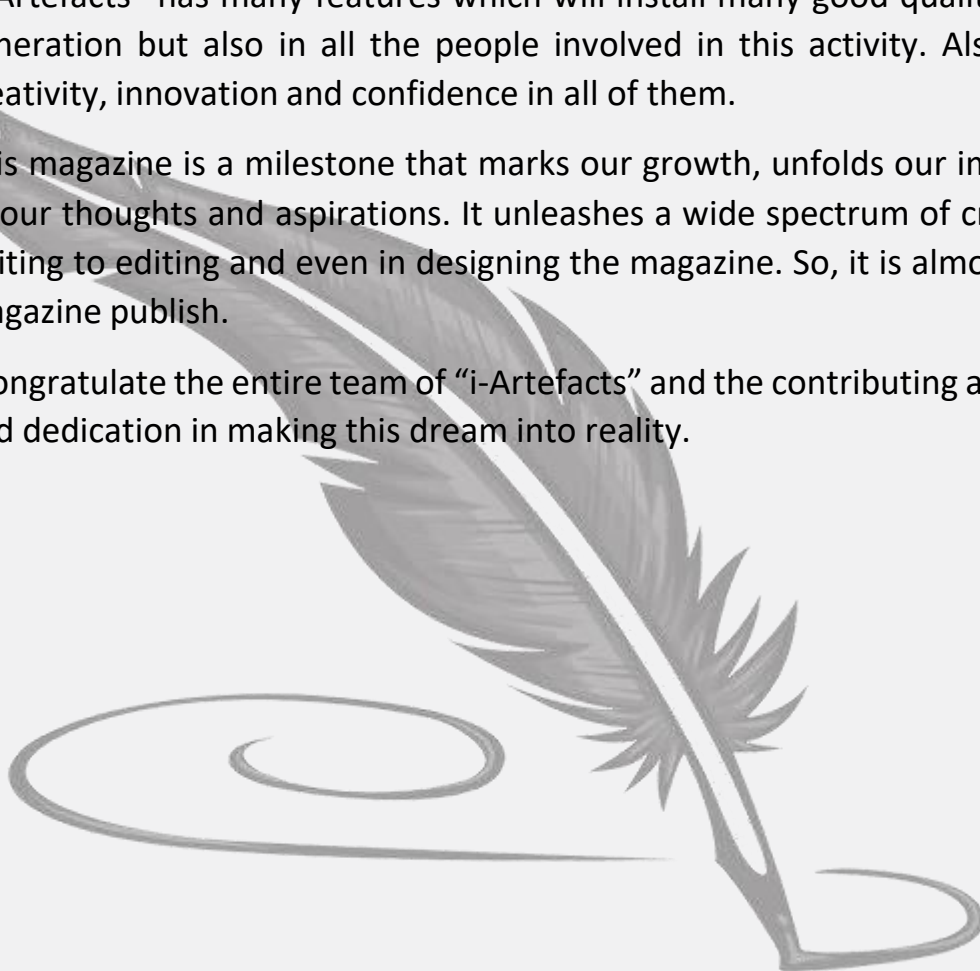
I am glad to know that Department of Electronics and Communication Engineering is going to publish the sixth edition of its annual techno-cultural magazine “i-Artefacts” in April, 2022.

Innovation in Science and Technology is a highly philosophical subject. Congested mind cannot think freely unless it is relaxed with cultural taste. Swami Vivekananda believed “Education is the manifestation of perfection already in man”. So, even if we put efforts to impart education to match the advancement of technology; it would not be effective if it is not complimented with something where the thoughts of our young generation are reflected. Here, techno-cultural magazine can play a major role to manifest their thoughts and views towards its perfection.

“i-Artefacts” has many features which will install many good qualities not only in our young generation but also in all the people involved in this activity. Also, it will try to inculcate creativity, innovation and confidence in all of them.

This magazine is a milestone that marks our growth, unfolds our imaginations, and gives life to our thoughts and aspirations. It unleashes a wide spectrum of creative skills ranging from writing to editing and even in designing the magazine. So, it is almost like a dream to get the magazine publish.

I congratulate the entire team of “i-Artefacts” and the contributing authors for their hard work and dedication in making this dream into reality.





Prof. (Dr.) Chanchal Kumar De

Head,

Dept. of Electronics & Communication Engineering

Haldia Institute of Technology Haldia,

Purba Medinipur

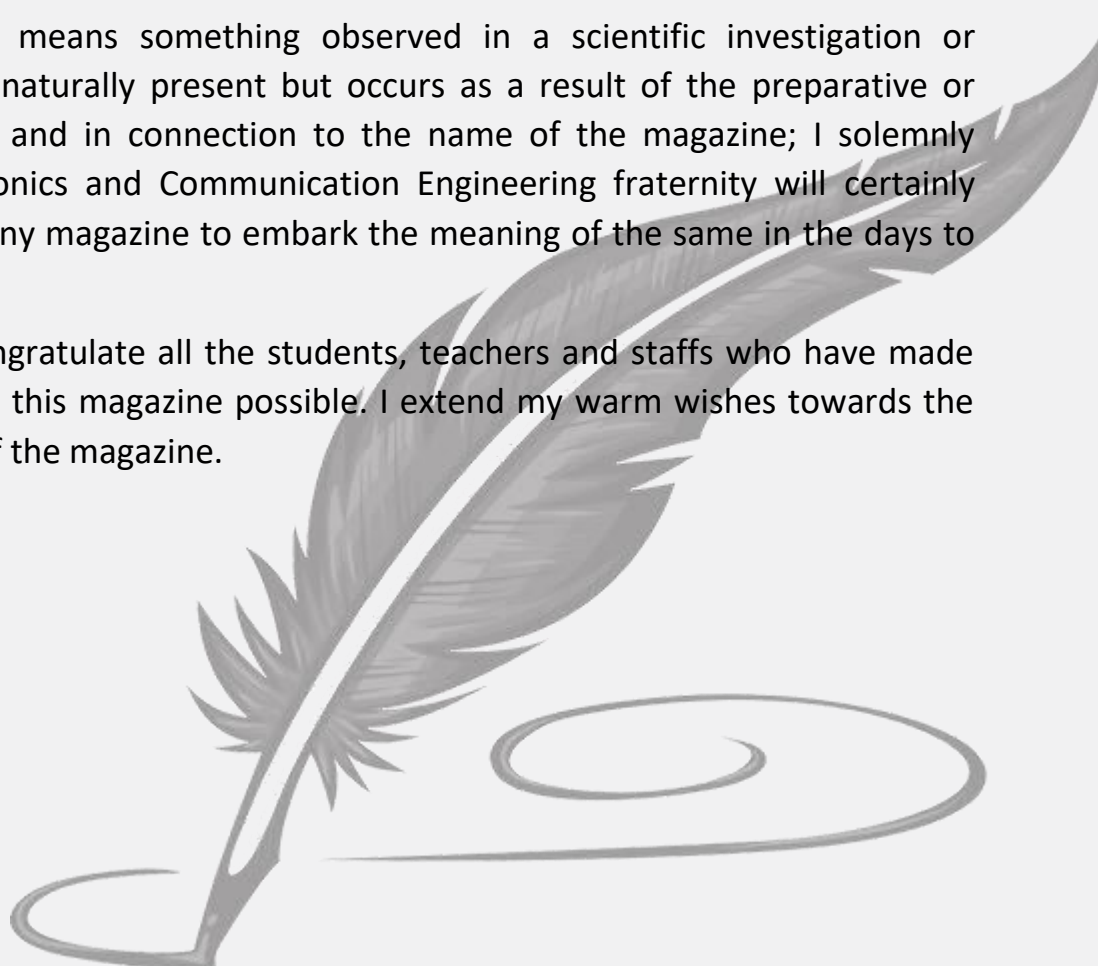
MESSAGE FROM THE HEAD OF DEPARTMENT

I am happy to learn that our department, Department of Electronics and Communication Engineering, Haldia Institute of Technology is coming out with the sixth edition of the departmental magazine “i-Artefacts”. In fact, the name and fame of a department depends on the caliber and achievements of the students, teachers and staffs.

A magazine carries the contributions reflecting ethos and aspirations of the students, faculty and staff members of a department. “i-Artefacts”, the magazine provides a platform for students, teachers and staffs to share information and innovative ideas, spread the latest technical knowledge, exhibit the varied creativities and cultivate right ways that will equip all of us to stay competent in our respective fields of study and research.

Moreover, ‘i-Artefacts’ means something observed in a scientific investigation or experiment that is not naturally present but occurs as a result of the preparative or investigative procedure and in connection to the name of the magazine; I solemnly believe that the Electronics and Communication Engineering fraternity will certainly impart a shape to this tiny magazine to embark the meaning of the same in the days to come.

It is my pleasure to congratulate all the students, teachers and staffs who have made untiring efforts to make this magazine possible. I extend my warm wishes towards the success of this edition of the magazine.





Dibyendu Chowdhury

Assistant Professor (ECE)

Haldia Institute of Technology Haldia,

Purba Medinipur

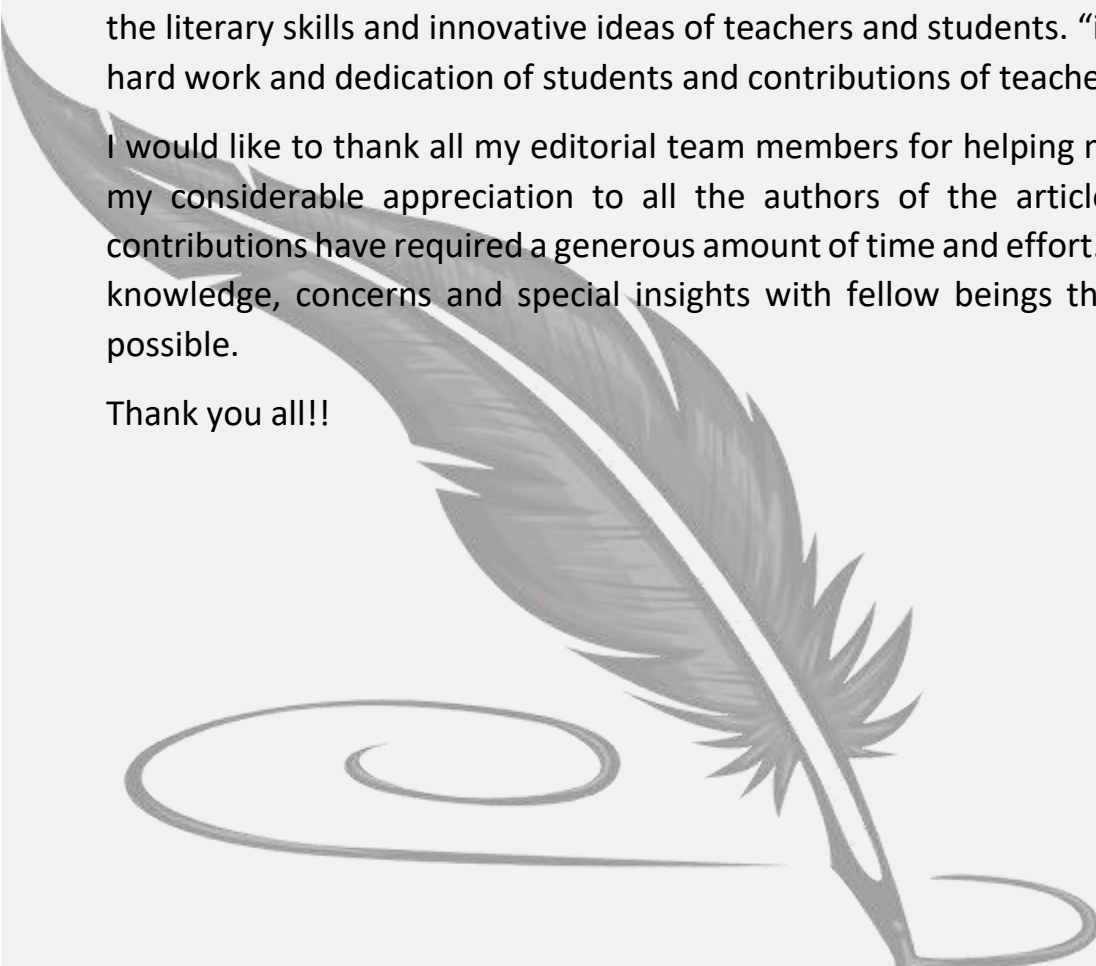
EDITOR'S NOTE

Mid-way through editing and designing a pile of articles which I was nose deep in and with the thoughts of the zillion things that 'JUST HAD TO BE DONE'. I pulled at my hair for the very first time. This was the first of many such moments (hours)! Putting a magazine together was no cake walk. I along with my editorial team members have spent sleepless nights to make this magazine stand out.

So here you have "i - ARTEFACTS", the long-awaited magazine of the ECE department for the year 2021. The name of the magazine, "i - ARTEFACTS" may seem difficult, but it just means "AN OBJECT MADE BY HUMAN HAND". This magazine gives an insight into the different hobbies of students, their creativity and activities. This magazine is a platform that exhibits the literary skills and innovative ideas of teachers and students. "i - ARTEFACTS" presents the hard work and dedication of students and contributions of teachers.

I would like to thank all my editorial team members for helping me to this through. I express my considerable appreciation to all the authors of the articles in this magazine. These contributions have required a generous amount of time and effort. It is this willingness to share knowledge, concerns and special insights with fellow beings that has made this magazine possible.

Thank you all!!





Jai Kumar
4th year B. Tech, ECE

STUDENT EDITORS NOTE

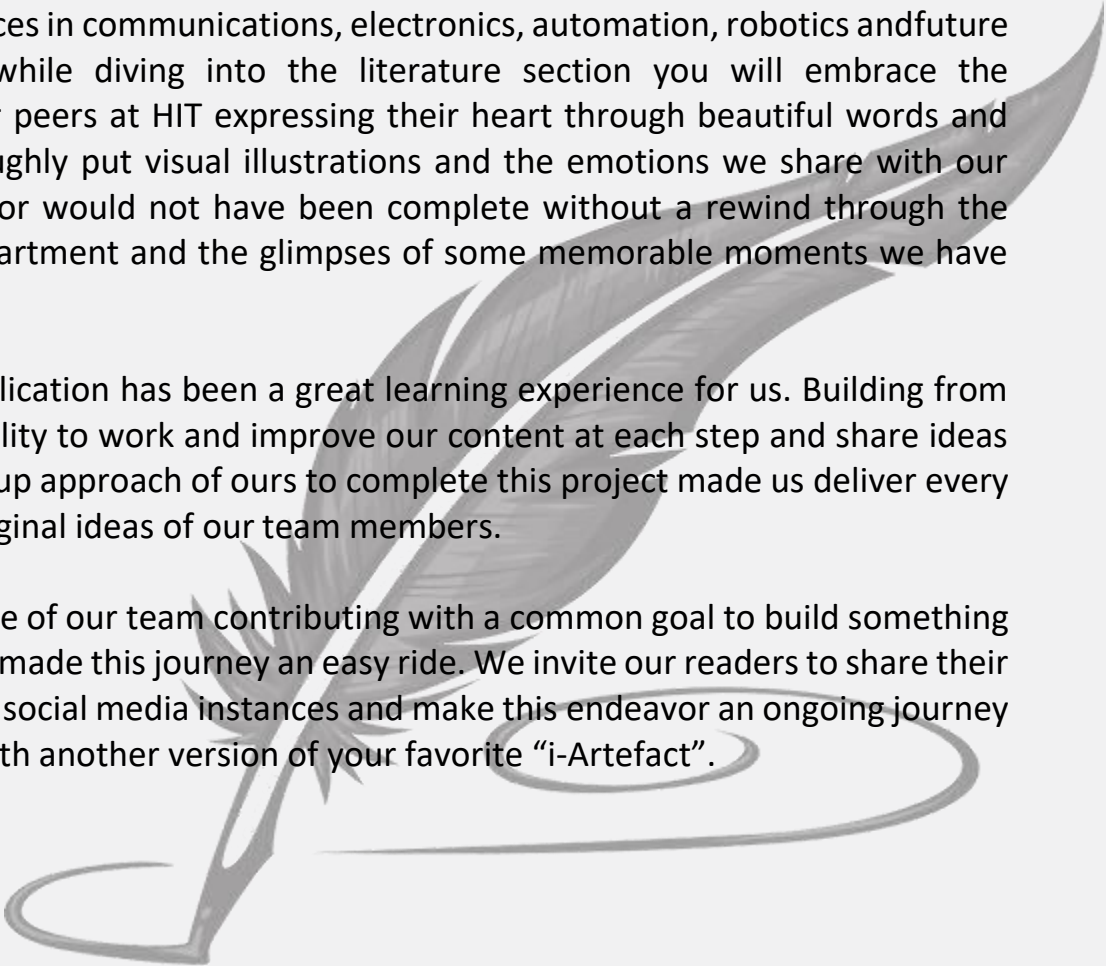
Storytelling is an art of sharing ideas that humans have mastered over the course of time, the impact it brings in the formation of culture and societies can be seen through the extraordinary narratives of great minds. It involves constant observation and lots of creativity to make the process interesting and informative at the same time.

Making a subtle balance over the use of technical jargons and the ideas we attempt to share with our audience, we embark on making this magazine interactive and easy to comprehend. In this digital version we have put dynamic content to provide the best reading experience.

Believing in the best and maintaining the highest standards is what has been our legacy. We have given our best to uphold this. As a reader you will feel a dopamine rush while going through the recent advances in communications, electronics, automation, robotics and future end technologies. And while diving into the literature section you will embrace the remarkable efforts of our peers at HIT expressing their heart through beautiful words and pictures. We have thoroughly put visual illustrations and the emotions we share with our readers. And this endeavor would not have been complete without a rewind through the achievements of ECE department and the glimpses of some memorable moments we have lived together.

The entire process of publication has been a great learning experience for us. Building from scratch gave us the flexibility to work and improve our content at each step and share ideas throughout. This bottom-up approach of ours to complete this project made us deliver every bit of this magazine as original ideas of our team members.

Our strength lies in the size of our team contributing with a common goal to build something great, whose efforts have made this journey an easy ride. We invite our readers to share their views and remarks on our social media instances and make this endeavor an ongoing journey until we are back again with another version of your favorite “i-Artifact”.

A large, faint, light gray illustration of a quill pen is positioned diagonally across the lower half of the page, serving as a background element. It is similar in style to the quill in the top left corner but much larger and less detailed.

TECH TRENDS



SD

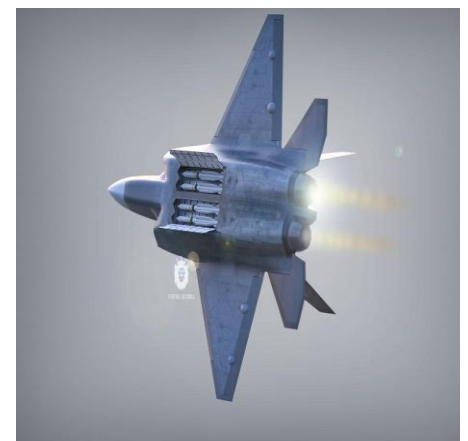




A large portion of the contender airplane of IAF are fourth-gen fighter planes. IAF at present works no fifth-gen fighter airplane. Driving military powers of the world have either currently fostered their fifth-age streams or are in the high-level phase of their turn of events. For instance, the US had F-22 Raptor and F-35, Russia has created Su-57. China has created J-20. India is viewed as the fourth biggest military power after them. Accordingly, India should go for a fifth-age warrior stream and when China is there as an enemy it turns into a critical need.

Progressed Medium Combat Aircraft (AMCA) is an Indian fighter jet presently being worked on. It will be the primary fifth-age warrior utilized by the Indian Air Force. This warrior will give many progressed and advanced advances to the IAF. Hindustan Aeronautics Ltd (HAL), Aeronautical Development Agency (ADA), and Defence Research and Development Organization (DRDO) are mutually creating AMCA for the necessities of the Indian Air force. China's fifth-age warrior J-20 has gone into administration in 2017.

Till now no less than 40 units have been made. According to reports, China might have around 200 of them by 2027. This is a significant worry for India. Anyway, numerous specialists bring up issues on the ability of the J-20 as a fifth-age secrecy contender. Be that as it may, a considerable lot of the issues are being settled. Assuming the new more impressive motor is created, J-20 will accomplish its maximum capacity and that will be a genuine migraine for India. Fifth-age warriors offer a full range of new innovations that are not there in fourth era jets. These are secrecy, super cruise, and so on. Additionally, numerous modern advances like Directed Energy Weapons, Flyby Optics can work at their best in these fifth-age contender jets.



The USA isn't probably going to offer such a stage to India as it hasn't yet given them to a considerable lot of its nearest partners. Additionally, getting and working the F-35 is now a financial weight for US flying corps itself. IAF can scarcely manage the cost of this. India was working with Russia on the fifth-age contender airplane (FGFA) project. Yet, it pulled back because of many issues like estimating and move of innovation. Cost is a significant issue while getting unfamiliar stages. Hence a native stage is the most coherent choice. This likewise helps in coordinating weapons and advances of our decision. There are restrictions for such combinations with unfamiliar stages. Likewise, it is in accordance with the Aatmanirbhar Bharat strategy of the public authority.

The program was before known as Medium Combat Aircraft (MCA). It was re-outlined in 2010 with its name as AMCA. The essential plan setup was concluded in 2015. In 2018, Defence Minister proclaimed that the achievability study was finished. Finishing this undertaking in two phases was additionally settled. The itemized plan period of AMCA began in 2018. It is normal that the public authority will give endorsement for next ease in last part of this current year for example 2021. 15,000 crore Rupees will be distributed for plan, advancement, and making models. As referenced above, AMCA will be created in 2 stages.

They are called AMCA mk1 and AMCA mk2. AMCA mk1 will be a fifth-gen contender airplane and AMCA mk2 will be further developed for certain elements of 6th-gen fighter airplane. AMCA mk1 will be carried out by 2024. Its first flight is normal in 2025. The acceptance in assistance might begin from 2030. For AMCA mk2, we need to hang tight for additional. It might take more time than a long time from this point for the improvement of AMCA mk2. At this point, it is normal that IAF will arrange 40 AMCA mk1 and 80 mk2. Along these lines IAF is presently searching for absolute of 120 fifth-gen subtle contenders.

Here we need to comprehend that with the approaching up of fifth-age warrior flies, the fourth-age contenders won't vanish. Even USA isn't intending to supplant its whole warrior jets armada with fifth-age contenders. Fourth-age contenders with their redesigned forms will keep on assuming a significant part in impending years. Fifth-age contenders are probably going to be sent for the most part in specific extraordinary missions. The advancement of AMCA is seeing speed over the most recent couple of years. AMCA models in Aero India 2021 showed that plans are additionally practically settled. We can expect that the courses of events will be met, not normal for the previous experience.



Hypersonic Missile System

Oisik Das 19/ECE/89

Prior, India joined select countries by effectively directing the maiden test of the High-Speed Technology Demonstrator Vehicle (HSTDV) utilizing a natively evolved drive framework. The fruitful test was a huge accomplishment in creating hypersonic conveyance stages including improvement as a carrier vehicle for cruise missiles and for the starting of satellites at an affordable expense.

DRDO is additionally believed to be dealing with BrahMos-II hypersonic anti-ship missiles. As per reports, it is expected to get more than six times the speed of sound on hypersonic scramjet innovation. It is two times as quick as BrahMos-1 and can arrive at a speed of over Mach 6. Despite the fact that the normal reach is 600 km, experts guarantee that the BrahMos II, which could be much the same as Russia's Zircon hypersonic rocket, can surpass its scope of 1000 km and can float at a speed as high as Mach 8.



As indicated by a new report by the Congressional Research Service (CRS), a US Congress think tank, India is among the not very many countries that is creating hypersonic weapons. US, Russia, and China have one of the most progressive hypersonic programs on the planet, in any case, different countries like India, Australia, France, Germany, and Japan are likewise fostering the innovation. Albeit initially intended to be conveyed by 2017, it confronted significant postponements and is presently expected to accomplish starting functional ability somewhere in the range of 2025 and 2028.

India's DRDO effectively as of recent tested the Vertical Launch Short Range Surface to Air Missile (VL-SRSAM) from the Integrated Test Range in Chandpur, off the shoreline of Odisha. The testing of the rocket, which was discharged from an upward launcher and focused on an electronic objective at an extremely low elevation, was directed to approve the coordinated activity of the multitude of parts of the weapon framework. These incorporate the upward launcher unit with a canister zed flight vehicle, regulator, and weapon control framework, and so forth.

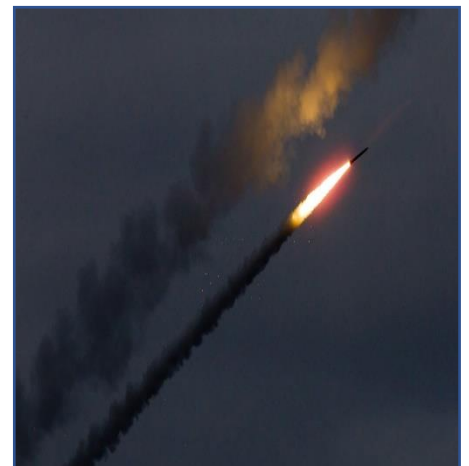
These parts will be urgent for future send-offs of the rocket from Indian Navy ships. Both the rocket and the Vertical Launch System (VLS) make a lethal combo. The VL-SRSAM has been planned and developed together by three offices of the DRDO.



During the period of the Cold War, rocket dispatches were subject to turning arm launchers that terminated each or two shots in turn. Rather than this, the more current VLS innovation comprises of many send-off tubes that are designated "cells". These cells serve the purpose of holding as well as firing missiles from a moving naval platform such as a warship or a submarine. Most VLS utilizes two distinct strategies for terminating: the hot send off or the cold send off. Other than this, there is additionally the concentric canister send off. In the hot send-off framework, the rocket ignites in the launch tube while in the latter option, it gets lighted subsequent to being removed by gas created by a gas generator which is isolated from the actual rocket. The concentric canister send-off component can utilize both hot and cold strategies. India utilized the hot send-off technique to flight test the VL-SRSAM. While this strategy needn't bother with a launch component, it actually requests a good method for disposing of the rocket's exhaust and hotness when it leaves the cell. Assuming the rocket touches off in a cell that doesn't have a discharge component, the cell should bear the tremendous measure of hotness that gets created without lighting the rockets in the abutting cells.

This technique is profitable as it wipes out the requirement for a different framework for the discharge of the rocket from the starting cylinder.

It is constructed to such an extent that the rocket is to move itself out of the starting cell utilizing its own motor. Accordingly, the hot send-off vertical send-off framework itself is similarly lighter, more modest, and savvy. Furthermore, these frameworks have a lot quicker engagement time attributable to the way that the rocket is let out of the ship when the engine is lighted. Be that as it may, the framework has one extremely intense gamble: in the event of a rocket breaking down, the send-off tube or the cell could be totally demolished. This hazard is absent in the virus send-off technique as that framework can discharge the rocket assuming its motor comes up short during send off. Generally, the fixed, multi-rocket VLS actually represents a major danger to adversary stages as it permits maritime vessels to build their pace of fire complex. It likewise saves the time that prior rail launchers used to take more time to get "re-stacked" after a send-off. As most hot send-off VLSs (particularly the Mark 41) follow a technique wherein the rocket dispatches upward upwards first and afterward moves in the direction of its objective, there is no necessity for the launcher to be focused on the objective, or for the boat to move before the send-off to allow the rocket to arrive at its point.





Lifi Technology

Ayush Roy 19/ECE/44

Imagine surfing the web just by pointing your smart devices towards a source of light or even by standing below a light source like streetlamps. Isn't it sounding funny and unreal? As unreal as it seems, it is possible with the help of Light Fidelity or Li-Fi (also written as LiFi). Introduced during a 2011 TED Global talk in Edinburgh by Harald Haas, Li-Fi uses light from lamps, streetlights and LED televisions to transmit data and position allowing us to connect to the internet for seamless wireless communication.

Now the main question is why Li-Fi? Why not Wi-Fi? We all know Wi-Fi operates within the radio spectrum and transmits data using radio frequency (RF) with the help of Wi-Fi routers. Present for around 24 years, Wi-Fi has invaded virtually all aspects of human society, so why there's a need for another technology? Simply speaking, Li-Fi is 100 times faster than Wi-Fi. Li-Fi makes use of Visible Light Communication (VLC) technology instead of radio waves. Due to Wi-Fi's wide signal range, it allows network to be accessed within a 20 to 50-meter radius giving rise to a general lack of security. Also, others may attempt to hack into the network even when the connection is password protected.

To counter this, organizations implement sophisticated technologies which have their own weaknesses and are expensive. Wi-Fi connection tend to be unreliable due to various external interferences. This can cause variety of problems such as poor reception, weak signals or even loss of connection.

In Li-Fi, transmission of data and providing access to the internet is done through solid-state lighting (SSL) such as LED bulbs. This is achieved by modulating the light given off by the source (the transmitter) and is received by a photodiode (the receiver). The received signals are then translated into usable data that can be readily consumed by the user. Since, Li-Fi uses visible light it has access to a greater range of frequencies as the visible light spectrum is 10,000 times larger than the entire radio spectrum. The biggest advantage of Li-Fi is efficiency. Since it uses VLC technology, highly-efficient LEDs lower the energy consumption and installation costs. Li-Fi connection occurs almost instantaneously because light travels extremely fast – about 100 times faster than Wi-Fi.



There are 14 billion light bulbs all over the world, therefore its availability will never be in question. Li-Fi adds another layer of security to the network since light is confined within opaque walls thereby confining the connection to the space it is shone.

It would be difficult to choose one over the other as both have their own merits and demerits. One of the biggest demerits of Li-Fi is that users are rendered immobile due to the limited range of light given off by the light bulbs. Light sources need to be kept on constantly to provide network access. It becomes highly susceptible to outside interference and can induce noise within the receiver. Lastly, this is a new concept and is in its introductory stage, the infrastructure required to implement it in large scale is still virtually non-existent. A big misconception about Li-Fi is that it was created to replace Wi-Fi systems. Since most of the infrastructure is already built to provide RF technology, it is impossible to replace it entirely. For this reason, to provide relief to the already existing congested radio signals, Li-Fi needs to be looked as a complementary technology.



Smart Glasses

Satyam Singh Rajpoot 20/ECE/140

Have you ever imagined that the glasses you are wearing can be smart glasses? In the world population, nearly about 57% of people wear glasses.

In the year 2011, the first smart glasses were created by google but at that time Google was failed to launch its product worldwide because from a consumer's perspective the design of the product was old fashioned or it looks awkward over the face and the creators of the glasses were not able to define exact benefits of smart glasses.

In the year 2020 the news that smart glasses are making a comeback flashes everywhere. when A 16-year-old mars Kapadia from Arizona modified the smart glasses with her ideas and made the smart glasses of very compact size and attractive -something at which big tech companies like google have failed. Mars Kapadia spent her 18 months perfecting his prototype model of smart glasses. After a successful launch of a modified version of smart glasses, Kapadia said in an

interview that "I've always found them interesting, but I never really saw a concept that was very intriguing until I saw The Avengers," a movie that changed her perspective to innovate such a new thing.

In the last pandemic year when the whole country was locked up. A big innovation took place during the time of covid 19. The novel coronavirus pandemic brought unique challenges to entrepreneurs and the business ecosystem at large. Indian-based company Ajna Lens used this pandemic period to innovate new technology. The company launched AjnaTX smart glasses in March of last year, exclusively for COVID-19 workers, healthcare workers, and security personnel. These smart glasses can do thermal scanning to scan up to 300 people within three minutes, from three meters of distance, and identify people with COVID-19 symptoms in crowded places. A very big innovation came out in those pandemic days.



Recently Apple launched highly advanced smart glasses that are directly connected to your phone and bring all information from your phone to your face. you can do all those works from your glasses such as reading text, emails. This technology will modify normal glasses into a new modified version. This hands-free feature also provides greater flexibility for workers while they are performing their tasks. Smart glasses will make you live in real-time access to various information and data.



```

        internal xml or external
        * external is needed when running in static mode
        *
        * @var boolean
        */
define('PSI_INTERNAL_XML', false);

if (version_compare("5.2", PHP_VERSION, ">")) {
    die("PHP 5.2 or greater is required!!!");
}
if (!extension_loaded("pcre")) {
    die("phpSysInfo requires the pcre extension to php in order to work properly.");
}

require_once APP_ROOT.'/includes/autoloader.inc.php';

// Load configuration
require_once APP_ROOT.'/config.php';

if (!defined('PSI_CONFIG_FILE') || !defined('PSI_DEBUG')) {
    $tpl = new Template("/templates/html/error_config.html");
    echo $tpl->fetch();
    die();
}

```

PHP is NOT Dead

Rajat Ganguly 19/ECE/108

Is PHP dead? People often say “Do not learn PHP. It’s a dead technology. Learn React, Node and other fancy stuffs”. But is it true? Once every company used it as their main backend language. Then what happened that people start bullying PHP developers? Let’s try to figure it out and let’s build a fair understanding that you should learn PHP or not.

So, the story begins in 1994 by Rasmus Lerdorf. In the beginning PHP stands for PERSONAL HOME PAGE. Nowadays 78.9% websites with a known Server-Side Programming Language uses PHP. So how can it be dead?

You may ask then why people are so crazy about other languages like Python or Java. The answer is simple, it’s a basic nature of human being to follow the trend. Let’s talk about Python. If you want to build a career on Web Development, Python offers you two beautiful frameworks: Flask, Django. Java offers you Spring. But these are not suitable for applications.

Let’s discuss how PHP works:

It is a Server-Side Scripting Language. So, basically it handles requests from client side and return relevant response from Server Side.

Suppose your domain name is: techprimenews.in. When someone search it in his/her browser, a web page is rendered. This page is in simple HTML with CSS, JS. But in server you can write the same html in a .PHP file.

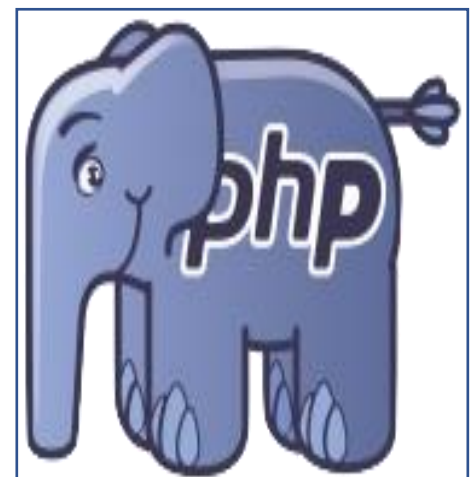
Let’s understand with an example. We all know Facebook was built on PHP. So, when you search <https://www.facebook.com>, a request is sent from your browser to the server of Facebook. Then it asks for your user name and password. Then it checks in its database if these two values exist there or not. If yes it returns the homepage of Facebook if not you will visit login page again.

It is quite simple to implement such logics in PHP in just 5-6 lines of codes. On the other hand, if you use Node or Django it is really complicated. You can connect your database with your html file in just two lines. Is not it great? No need to create any API. It’s like heaven for the developers.

Now come to the most interesting part, earning. How much does a PHP developer earns? Well, it may be lesser than other developers. But here comes freelancing in the picture. As PHP is the mostly used Backend language you will always get some great clients.

PHP may not be the best choice for large scale applications because of sql-injection and other causes, but it can be your best friend in the starting days of development. Frameworks like Laravel and Code Ignitor, make PHP more powerful.

So, basically PHP can say “AVI TO HUM JAWAN HAI”.





Edge Computing

Ramit Podder 19/ECE/113

As of Recent, a rising measure of trust is appended to edge computing. The business is humming with striking thoughts, for example, "the edge will eat the cloud" and constant mechanization will spread across medical services, retail, and assembling. Specialists say that edge processing will play a critical part in the advanced change of pretty much every business. In any case, progress has been sluggish.

For most ventures, the possibility of the edge has been firmly connected with the first wave of the Internet of Things (IoT). At that point, a significant focus was on gathering information from little sensors attached to all that and afterward moving that information to a central location like the cloud or data centre. These information streams then must be corresponded into what is generally alluded to as sensor-combination. At that point, sensor economies, battery lifetime, and inescapability frequently brought about information streams that were excessively restricted and had low constancy. Likewise, it was many times cost restrictive to retrofit existing hardware with sensors. .

While the actual sensors were modest, the establishment was tedious and expected prepared staff to perform. At long last, the skill expected to break down information utilizing sensor-combination was implanted in the information base of the labour force across associations. This prompted easing back reception paces of IoT. Also, security concerns cooled discount reception of IoT. The math is pretty much as straightforward as this: a great many associated gadgets across different areas rises to an enormous and frequently obscure openness. As the potential gamble offset the problematic advantages, many felt taking a pensive attitude was reasonable.

The edge is wherever we are - wherever we live, wherever we work, wherever human movement happens. Scanty sensor inclusion has been settled with more up to date and more adaptable sensors. New resources and innovation accompany a wide cluster of coordinated sensors. What's more, presently, sensors are frequently expanded with high goal/high loyalty imaging (x-beam hardware, lidar). The mix of extra sensor information, imaging innovation, and the need to

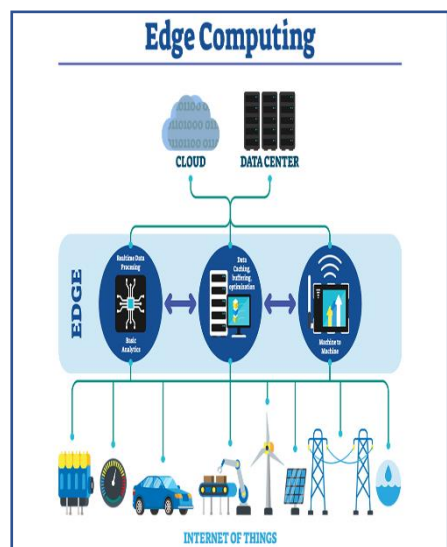
associate these together loses megabytes and megabytes of information each second. To drive results from these tremendous information streams, register capability is currently being conveyed near where the information is produced.

The explanation is basic: there just isn't sufficient transfer speed and time accessible between the edge area and the cloud. The information at the edge makes the biggest difference for the time being. Rather than being handled and examined later in the cloud, information can now be investigated and utilized at the edge continuously. To acquire a higher degree of effectiveness and functional greatness, processing should occur at the edge. It is not necessarily the case that the cloud doesn't make any difference. The cloud actually plays a part to play in edge processing since it's an incredible spot to convey capacities to the edge and the executives across all areas. Along these lines, the edge is tied in with sorting out huge information streams across countless geo-scattered areas. One should embrace this new impression of the edge to really get what is presently

conceivable with edge processing. What should be possible at the edge today is faltering contrasted with a couple of a long time back. Rather than the edge being restricted to a couple of sensors, information presently can be produced from overflowing measures of sensors and cameras. That information is then examined at the edge with PCs that are large number of times more remarkable than they were only twenty years prior - all at sensible expenses.

How about we consider a couple of instances of the present constant edge investigation:

Today, an assembling plant can be outfitted with scores of cameras and sensors at each progression of the assembling system. Ongoing investigation and AI-driven derivation can uncover in milliseconds, or even microseconds, assuming that something isn't right or on the other hand in the event that the cycle is floating. Perhaps a camera uncovers an excessive amount of sugar is being added or too fixings cover a thing. With cameras and ongoing examination, creation lines can be tuned to stop the float, or even halted in the event that fixes are required - without causing horrendous misfortunes.



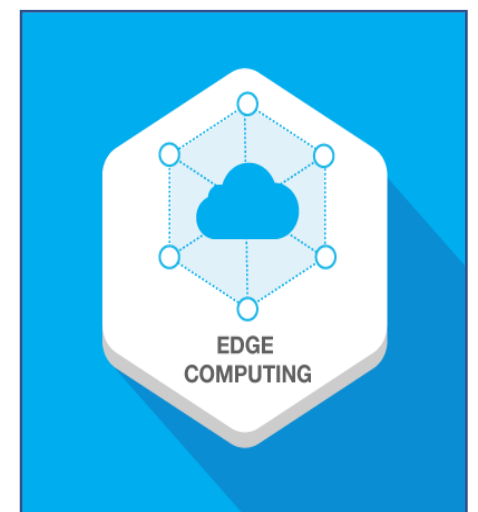
In medical services, infrared and X-beam cameras have been down changing on the grounds that they give high goal and convey pictures quickly to professionals and doctors. With such high goal, AI can now channel, evaluate, and analyse irregularities prior to getting to a specialist for affirmation. By conveying AI-driven edge processing, specialists save time since they don't need to depend on sending information to the cloud to get a finding.



Independent vehicles are conceivable today in light of the fact that somewhat modest and accessible cameras offer 360-degree stereoscopic vision. Investigation additionally empower exact picture acknowledgment, so the PC can unravel the distinction between a tumbleweed and the neighbour's feline and choose if now is the right time to brake or direct around the obstruction to guarantee security. The reasonableness, accessibility, and scaling down of powerful GPUs and CPUs empowers the continuous example acknowledgment and vector arranging that is the driving insight of independent vehicles.



Whenever very strong processing is conveyed at the edge, organizations can upgrade tasks better without stress over deferrals or lost network to the cloud. Everything is presently circulated across edge areas, so issues are tended to continuously and with just inconsistent network. We've progressed significantly since the primary rush of edge innovation. Organizations are presently taking a more all-encompassing perspective on their activities because of innovative advances at the edge. The present edge innovation isn't simply supporting organizations reinforce benefits, yet truth be told, it's assisting them with lessening risk and further develop items, administrations, and the encounters of individuals that draw in with them.





Role of Technology in Sports Training

Aman Sarthak 19/ECE/19

Previously, sports training required broad desk work and post-practice exertion from both the mentor and the competitor. While the competitor rehearsed, notes and video were perseveringly taken and afterward gathered into diagrams and charts addressing that competitor's presentation. After training, mentor and competitor would cooperate examining hurts, torments, and considerations about actual developments that happened a whole lot sooner. The framework was exhausting, yet functioned to the extent that competitors and mentors knew. That is until ongoing innovation changed the field of sports preparing.

Cutting edge innovation has decreased, stronger, and less troublesome over ongoing years, preparing for new open doors, particularly in games. Presently competitors wear sensors that pass constant data on to a mentor's tablet, GPS precisely pinpoints movement, cell phones keep everybody current and wearable tech can forestall wounds. Contrasted with whiteboards and post-practice audits, innovation has significantly expanded athletic potential. Innovation is upsetting games preparing by live-following exhibitions, idealizing athletic developments, improving correspondence and for all intents

and purposes killing wounds. Utilizing sensors put on the body or in "shrewd dress" (dynamic wear with detecting strands woven in), sports mentors can gauge and track execution continuously. Nearly anything about the competitor can be estimated, from breathing and pulse, to hydration and temperature. These live measurements can assist the mentor with figuring out what perspectives every competitor needs to zero in on additional. Competitors are special, and ongoing individual execution estimations can set a more exact and precise pattern. During training, mentors can peruse live measurements and conclude when now is the right time to rest, stretch or train harder. Lasers and GPS have been consolidated into different parts of the games preparing world. Rather than depending on times and parts, coaches can gauge the specific position, distance, speed and speed increase of competitors to more readily comprehend where they can move along. Distinguishing more complex information prompts further developed execution with less pressure and opportunity for injury. Mounir Zok, the Director of Technology and Innovation for the U.S. Olympic Commission, asserts that sports innovation is progressed to the point that it can make a 'computerized code' for winning the gold decoration. Innovation has

expanded a competitor's ability essentially on the grounds that it amplifies execution related activities and occasions that have been already concealed. Swimmers and jumpers take part in a very specialized sport and have adjusted sensors into their practices too. While swimming or jumping, the sensors measure more than the standard time and exertion measurements. They map developments like rotational speed, jump point, leg development and hydrodynamics. Noticing developments like this is noteworthy, and permits coaches to assist competitors with consummating their developments. They may just shave milliseconds off their presentation, yet a millisecond in a race can be all the distinction. Maybe the main side-effect of innovation in sports training is that wounds have been seriously diminished and presently can be distinguished a whole lot sooner. Following execution, culminating developments and upgrading correspondence are not just advantages; they really assist with establishing less injury-inclined conditions. Preparing the executives programming can help mentors and coaches in checking all parts of preparing: diet, energy, rest, and so on. Whenever mentors and coaches can characterize individual practice for ideal outcomes Other, the future may some time or another see sans injury sports.

Smart Antenna For Wireless Communication

Ankit Goswami 20/ECE/027

Today, the significance of the wireless communication is known all over the world. In order to achieve the better communication, many techniques and methods have been introduced. Among these techniques, smart or adaptive antennas are trending topic in the research domain.

The smart antennas consist of various antennas arrays and have the ability to optimize the radiation and reception of the desired signals dynamically. Also, in order to avoid or mitigate the interferences, smart antennas can introduce nulls in the interferers direction by adaptive updating of the weights linked at every antenna element.

The smart antennas can also enhance the quality of reception and reduce the dropped calls. Smart antennas have received increasing interest for improving the performance of wireless radio systems. These systems of antennas include a large number of techniques that attempt to enhance the received signal, suppress all interfering signals, and increase capacity, in general.



The main purpose of this article is to provide an overview of the current state of research in the area of smart antennas, and to describe how they can be used in wireless systems. Thus, this content provides a basic model for determining the angle of arrival for incoming signals, the appropriate antenna beam forming, and the adaptive algorithms that are currently used for array processing. Moreover, it is shown how smart antennas, with spatial processing, can provide substantial additional improvement when used with TDMA and CDMA digital-communication systems

- A smart antenna receiver can decode the data from a smart antenna transmitter this is the highest-performing configuration or it can simply provide array gain or diversity gain to the desired signals transmitted from correct transmitters and abolish the interference. It doesn't require a manual control.

- This can dramatically increase the performance characteristics of a wireless system. Multipath of propagation are created by reflections and scattering. Also, interference signals such as that produced by the microwave oven. Measurement comments that each path is really an array or body of paths, resulting from surface gruffness or irregularities. The random gain of an array is called multipath fading.

- There are two types of smart antenna's system are present in the wireless communication system, those are Switched Beam (a finite number of fixed, predefined patterns or combining strategies) and Adaptive Array (an infinite number of patterns that are adjusted in real time).

Smart antennas with spatial processing can also provide substantial improvement when used with the TDMA and CDMA digital communication systems. Spatial filtering using smart antennas has emerged as a promising technique to improve the performance of cellular mobile systems.

Exploiting different characteristics of smart antennas can lead to several operational benefits for a communication system. It is rightfully claimed that the performance requirement of a future cellular communication is impossible without using Smart antennas. To improve the path of communication system it's a very important to understand the uses and properties of smart antenna and it's going to be beneficial for us to enlarge the field of communication system to the world of electronics.

HALL OF FAME

Alok Shaw
Founder of Roboshala



Avinash Pandit, 2015



Sourodip Sarkar
Co-founder, TheHITTimes

Sumit Anand
JS of SWC & IETE, 2019



Avinash Singh
JS of SWC & IETE, Co-founder of Hitian
Inside, 2016



Rajarshi Ghosh
JS of SWC & IETE, 2017



Piyush Sinha
Data Scientist



Abhineet Saurabh, Best Speaker in District, conducted by The Times of India, January 2020



Cricket Trophy, 2018



Volleyball Tournament

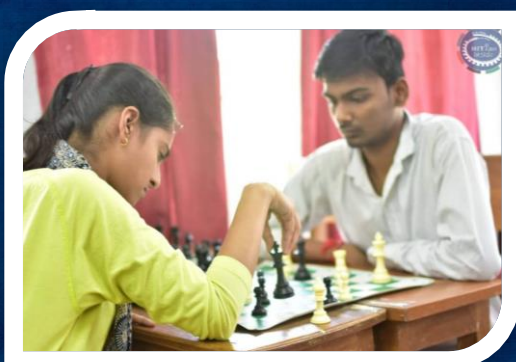


Football Tournament



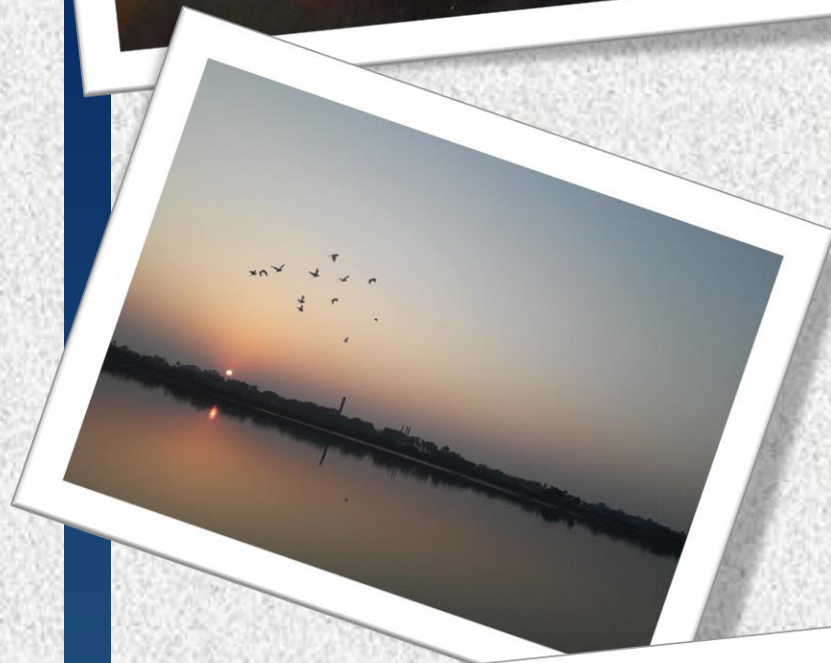
Team iArtefact, 2018

Aman Srivastava, Chairman & Kunal Prasad, JS (IETE) 2021



Shivesh Kumar (18/ECE/26), Robowar Prayukti

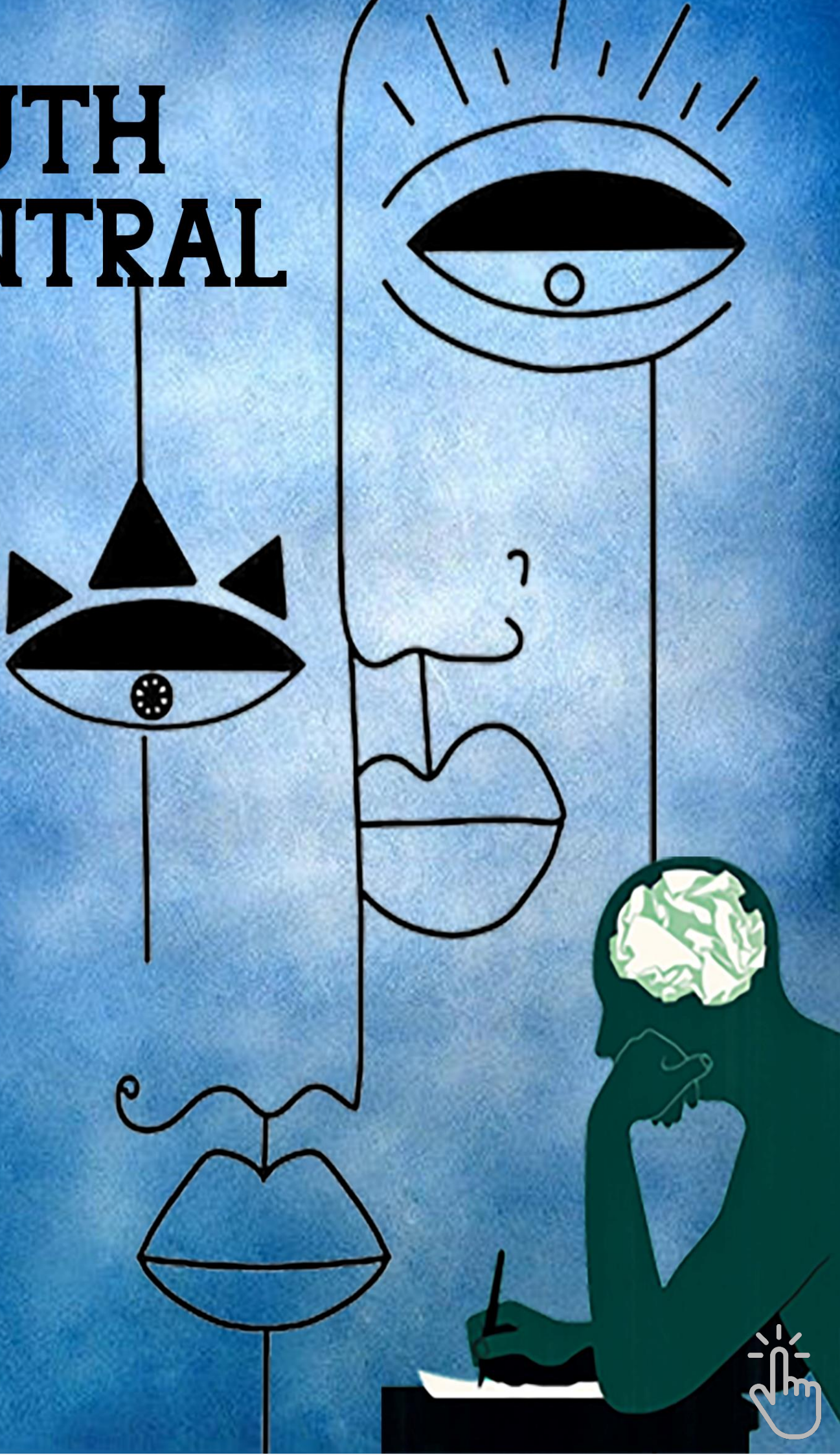
Sourav Kumar (18/ECE/18), 6th position, Inter College Chess Tournament (2018-19)



“
Photography is an
austere and blazing
poetry of the real.”



YOUTH CENTRAL



SD





প্রিয়তমা

হলাম তোমার মুখোমুখি, সে যেন
এক অপ্রাকৃত বিরল সোনালী
বরফে মোড়া পাহাড়চূড়ায়, যখন
অনুভূতি, যেন নগ্ন চোখে
প্রেমিকার সাথে প্রথম চোখাচুখি....

তির্যক কিরণে জাজ্বল্যমান তোমার
স্বর্ণমুকুট! তবু রাত পোহালে মাথা
নোয়াও শুভ্র মেঘের কোলে, বুক
জুড়ে তুমি কেন সাজিয়েছ
রডোডেনড্রনের সারি? হাঁটু গেড়ে
ওই কুসুমকলি দিয়ে প্রেম নিবেদন
করবো বলে?

ক্ষুদার ক্যানভাসে এক
অদ্বিতীয়, অপরূপা সৃষ্টি তুমি...
হয়তো নীরবতাই আজ তোমার
প্রকৃত অলঙ্কার, তোমার স্রোতস্বিনী
নদীর আহ্বান কিংবা পাইন গাছের
অলীক মাদকতা, কেন? কেন,
সম্মোহিত করে চলেছে আমায়
বারংবার?

তবে কি রাতের শুকতারা ঠিক নিয়ে
যাবে তোমার ঠিকানায়? তোমার
পাষাণ হৃদয় কম্পিত হবে আমার
কলরবে.... পাহাড়ের বুক থেকে ছুঁড়ে
দেওয়া প্রশ্ন প্রতিধ্বনিত হয় বিঁধবে
তোমার

বুকে,

'বলো তুমি কি আমার হবে?
প্রিয়তমা, তুমি কি আমার হবে?'

SAYAN MALLICK

20/ECE/141

तुम शहीद हो गए...

जब तुम छोटे थे,
मेरे पास ही सोते थे।
बचपन में मेरे इतने करीब हो गए,
तुम शहीद हो गए.....
विद्यालय में कक्षा में कम,
बाहर ज्यादा रहते थे,
लोग तुम्हारे इस रूप के भी मुरीद
हो गए
तुम शहीद हो गए.....
जिस मिट्टी में खेले तुम
उसकी कीमत रक्त से चुकाकर,
तुम जिंदा रहने की उम्मीद हो गए
तुम शहीद हो गए.....
किसी के दोस्त सखा, भाई, पुत्र,
कुलदीपक,
श्रीराम की दीपावली, मोहम्मद की
ईद हो गए।
तुम शहीद हो गए.....



तुम्हारे बलिदान का ऋण चुकाते
हुए
सारे देशवासी गरीब हो गए
तुम शहीद हो गए.....

SHIVAM PANDEY
20/ECE/146



पहचान

किस्मत को बदल दे अपनी
बना खुद की पहचान नई ।
ताकत है बंद मुठ्ठी में तेरे,
इन लक़्क़ीरों में कुछ जान नहीं ।

मुश्किलों से ना डर तु
बढ़ा कदम कुछ दूर सही,
थोड़ा दूर और चल तु
मंज़िल अब तुझसे दूर नहीं ।

कर हासिल हर मंज़िल को

रुकावट हो अब हज़ार सही ।
लगा दे पूरा जोर तु
हार कभी भी मान नहीं ।

ठान अब कुछ कर दिखाने की
चुनौतियों से तु भाग नहीं,
हर मुश्किल से जीतेंगे
अब तु रख विश्वास यही ।

कर कोशिश अब बढ़ आगे
चाहे मिले अब हार सही,
बतला दे इस संसार को
लायक है तु बेकार नहीं ।

AKSHAT KUMAR BARANWAL
20/ECE/16

HER EYES

Okey,
So, let's start with eyes,
Can't stop self, to look in it
twice
Neither are they brown nor
seem blue,
Are they a treasure, without any
clue?
The way they whisper, the way
they shine,
Doubt, are they eyes or an old
wine?
Staring,
Just looking still, still like rock in
sea,
Imagining you, you as my would
be.
My eyes were high, high
without bear,
Telling you something, can you
please hear?



Caught,
Felt I am caught, caught in its
traps,
Your eyes are moon and am
just a trash

ANKIT KUMAR
20/ECE/28

THE LIFE'S RHYME

Dust in the eyes, storm in
the heart,
Night fall asleep, day kicked
start.
Woke up at six, school was
at ten,
Shivering eyes were waiting
for a rain.
Day was first, the bag was
new,
The line was drawn, the path
was due.
" Hurry up son, I am waiting
on the Gate ",
" It's your first day and
you're already late.
Reached school, legs were
dying ,
" Where's mom ?" Eyes were
crying.
"What's your name?" The
teacher asked,
Hardly spoke and the eyes
went masked.
Chocopie , biscuits and a
piece of munch,

Hardly spoke and the eyes
went masked.
Chocopie , biscuits and a piece
of munch,
Clock ticked twelve , it was his
first lunch.
The day passed, the boy
reached home,
Cried and shouted - " where's
mom ?"
Weeks passed, he met new
friends,
Some shared hugs, some
shaked hands.
A year passed , it was the
result's day,
Dad reached class , said son -
" stay ".
He lived his days, a journey he
could tell,
The last day of school, it was
his fairwell.
Tenth was smooth , twelveth
was bit shaky,
Memories were coupling his
self made coffee.
The first day of office, wasn't
that easy,
Nothing was same, lines went
busy.



The day spent numb, the
night had rush,
It was the day he proposed,
his college crush.
It was something like a dream
come true,
When she shared ring, he had
no clue.
Few years passed,
The bag was packed, the
lunch was done,

He relived his journey with his
little son.
The line was same, the path of
concern,
Father relieved , it was his son's
turn.

ANKIT KUMAR
20/ECE/28

```
.roses {  
    color: red;}  
.violets {  
    color: blue;}
```

Programmer can also be a poet...

I love a programmer
He is always there making
codes
On different ways in order
To show how much he loves
you so

There are times when he
would
Just throw some complex
hints at me
With utmost best I could
Try to find the meaning and
see
See that maybe I'm right
With the theory that I have
made
And maybe, just maybe
My words rhyme with what's
in your head
But sometimes I want to
Just let go and then erase it

Sometimes I want you to
Be brave enough to just
admit
That I'm something to you
Not a computer you play with
That your feelings are true
There's no condition that you
need

I am afraid to feel
The tragic end of a sonnet
Where two lovers for real
Are mere strangers who'll never
ever meet

ABHISHEK ANAND
20/ECE/07



A YEAR OF COVID “OUT OF THE MOUNTAINS OF DESPAIR, A STONE OF HOPE.”

I hope we remember
The urgency to protect our
environment
Make our seas bluer
Our land greener
Our air purer

Sustainability is the only possible
alternative
ahead
We wait through day for that word
of relief
Citizens spiral into psychotic belief,
To do our part
In restoring our planet and save
the most beautiful fragment of this
universe.
We all knew 2020 would be
unique,
The days turned into weeks, then
months,
The government repeatedly gave
warnings of social
distancing,
And the world sat there listening.
Where to go; what to do,
We try our best to struggle
through,
Tomorrow's the same

Our lives on repeat
The Sun's at last set, another
day is complete
Can we survive this helpless
attack?
A life with no colour: only
black.
A disease that spreads person
to person,

And the cases get worse and
worse and,
The world feels smaller and
smaller but,
We cannot be discouraged, no
not us!

SHWETA KUMARI
20/ECE/155

POWER OF YOGA

This is the power of yoga when
such an inspiring 123 years old
yoga guru Swami Sivananda -
received the Padma Shri award
recently. In the past couple of
days, a video is trending on social
media, in the

video, the yoga
guru can be seen
bowing before the
prime minister and
then the president
drawing a huge
round of applause
from the guest at
the ceremony.

India is full of achievements and
we are blessed to be born in
such a glorified historic country.
The word 'Yoga' is derived from
the Sanskrit 'YUJ', meaning 'to

'to join' or 'to unite. Yoga's
origins can be traced to
northern India over 5,000 years
ago. the term yoga was first
mentioned in one of the
ancient Indian texts RIGVEDA.
Tirumalai Krishnamacharya



was an Indian
yoga teacher, and
known as "the
father of modern
yoga".

There are many
more who
redefined yoga

internationally. Swami Ramdev
has also known among them.
Recently last pandemic years
we experience the worst days of
our life.

At a time when science failed to save a life, Yoga plays a significant role in the mental and physical care and rehabilitation of COVID-19 patients in quarantine and isolation. They are particularly useful in allaying their fears and anxiety. There are numerous benefits of yoga, especially in student life,

Meditation and yoga can contribute directly to improving mental focus and concentration among them. practising yoga on daily basis will bring positive changes in your body and help you to boost your immunity to fight against several diseases.

SATYAM SINGH RAJPOOT

20/ECE/140



GLOBAL WARMING

Global warming or climate change has today become a major threat to the mankind. The Earth's temperature is on the rise and there are various reasons for it such as greenhouse gases emanating from carbon dioxide (CO₂) emissions, burning of fossil fuels or deforestation.

Impact of Greenhouse Gases The rise in the levels of carbon dioxide (CO₂) leads to substantial

increase in temperature. It is because CO₂ remains concentrated in the atmosphere for even hundreds of years. Due to activities like fossil fuel combustion for electricity generation, transportation, and heating, human beings have contributed to increase in the CO₂ concentration in the atmosphere. Global Warming: A Gradual Phenomenon Recent year have been unusually warm, causing worldwide concern.

But the fact is that the increase in carbon dioxide actually began in 1800, due to the deforestation of a large chunk of North-eastern American, besides forested parts of the world.

The things became worse with emissions in the wake of the industrial revolution, leading to increase in carbon dioxide level by 1900. Cause of Concern According to the Intergovernmental Panel on Climate Change (IPCC), global temperature is likely to rise by about 1-3.5 Celsius by the year 2100. It has also suggested that the climate might warm by as much as 10 degrees Fahrenheit over the next 100 years. Impact of Global Warming The sea levels are constantly rising as fresh water marshlands, low-lying cities, and islands have been inundated with seawater. There have been changes in rainfall patterns, leading to

droughts and fires in some areas, and flooding in other areas. Ice caps are constantly melting posing a threat to polar bears as their feeding season stands reduced. Glaciers are gradually melting. Animal populations are gradually vanishing as there has been a widespread loss of their habitat. Conclusion As per Kyoto protocol, developed countries are required to cut back their emissions. There is a need to reduce coal-fired electricity, increase energy efficiency through wind and solar power, and also high efficiency natural gas generation .

AYUSH ANAND

20/ECE/45



Cultural Relativism -

A seductive Yet Disturbing theory

Does this sound familiar?

"What's right and wrong? I believe one thing, but others

may believe something different. For example, the idea of arranged marriages, which is the concept of two families marrying their son and daughter even though they don't particularly know each other, is fairly common in Indian culture but non-existent in Western culture. Who's to say? What is true about right and wrong depends on what culture you're in."

Cultural relativism is the view that claims about what is right and wrong are, in some sense, relative to a cultural group. A Cultural relativism is the principle that an individual human's beliefs and activities should be understood by others in terms of that individual's own culture. It is not a normative ethical theory as it doesn't give a criterion of rightness. It says that these claims are not objectively true or false; their truth or falsehood is relative to the culture in which they are evaluated. One way of understanding this claim is by saying that different cultural groups express different

propositions when they make same moral judgement.

Cultural anthropology is replete with examples of cultures that have different moral codes. Example: views about marriage, sex, justice, funeral practices, treatment of the elderly, etc. In addition, communities cannot pour ridicule on different cultural practices or compare their traditions with those of other people since every culture is important to its members. In addition, it explains that nobody should discriminate against people from various backgrounds and origins or judge them because of their beliefs and practices since they have no cultural or social justifications to do so.





It is arrogant to assume that other cultures' moral systems are incorrect just because they differ from our own. We ought to recognize that our moral system is just one among many, not uniquely correct because it is familiar to us. We should be unbiased of the practices of other cultures. We shouldn't be ethnocentric. Human nature itself depends on culture-culturally relative. Different cultures may have other values, norms, customary laws to protect human dignity. Good life of community preferred over individual right.

The Cultural Differences Argument:

- Different cultures have different moral beliefs.
- And if the above is true, then there are no objective truths in morality.
- There are no objective truths in morality.

The Cultural Differences Argument fails to establish The Cultural Differences Argument fails to establish

Cultural relativism. If we think it's correct to value tolerance in a culture independent way, then we have a positive reason for rejecting Cultural relativism. It is important to explain that people understand that some aspects of their culture cannot be compromised because of westernization; therefore, they cling to their customs despite their levels of education or exposure to other cultural tradition.

Using the outlook of cultural relativism leads to the view that no one culture is preferable than another culture when compared to systems of morality, law, politics, etc. It is a notion that cultural norms and values derive their meaning within a specific social context. However, this theory considers all the cultural tradition to be good irrespective of their effects on their members or those close to them.

SHWETA KUMARI

20/ECE/155





PICTURE PERFECT



SD



• Priya Singh, 2nd Year

Oisik Das, 2nd Year •

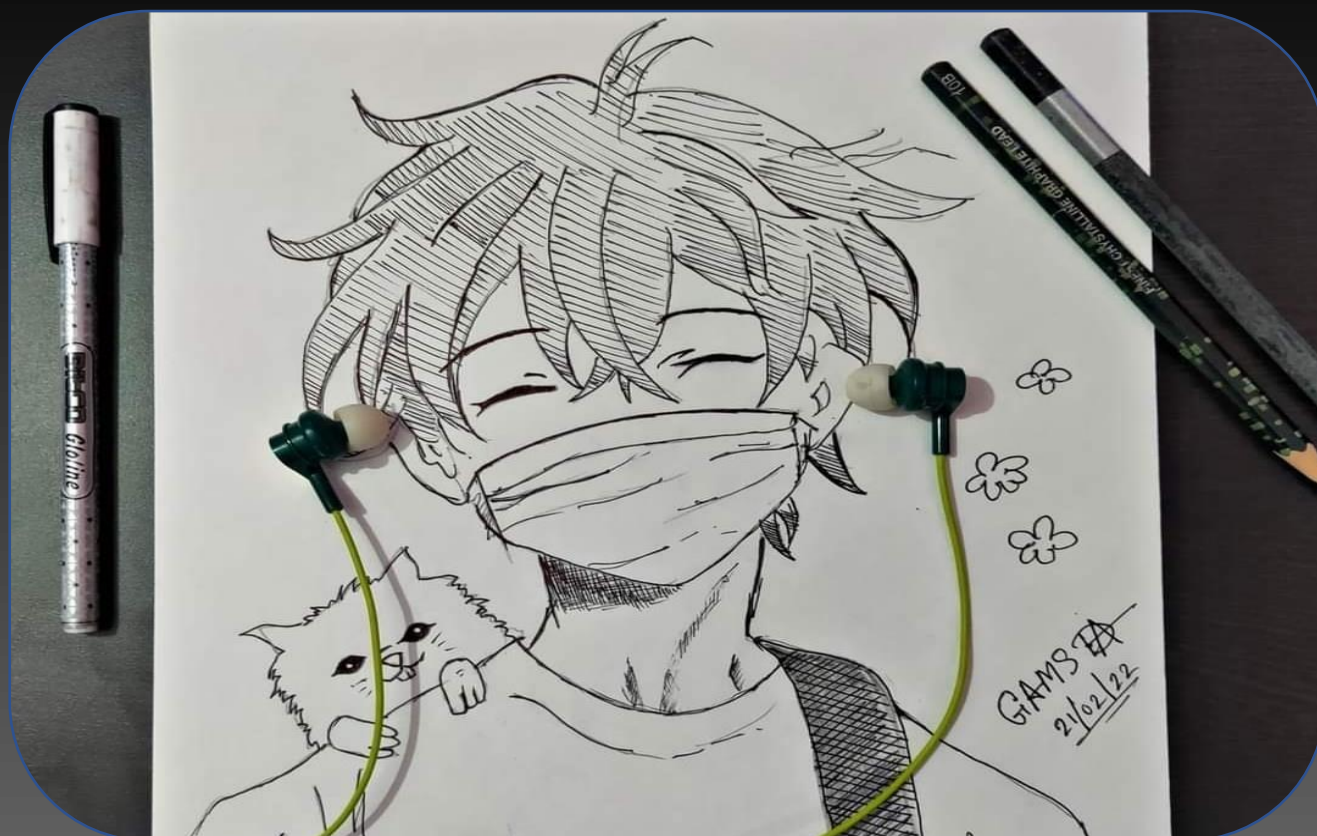




● Soumyadeep Manna, 2nd Year

Sandhya Rani, 1st Year ●





• Goutam Saha, 2nd Year

Sandhya Rani, 1st Year •





• Aryajeet Ghosh, 1st Year

Soumyadeep Manna, 2nd Year •



STUDENTS' ACHIEVEMENTS:

FOURTH YEAR:

1. PUJA KUMARI(17/EC/54): Achieved first position in painting ,MRA Junior Diploma
2. JAI KUMAR(17/EC/82): Achieved third position in an event,Requizzit,held at Prayukti 2018
3. HARSH KUMAR(17/EC/85): Achieved first position in Robowar (IIT ISM Dhanbad) , first position in Robowar (BIT Sindri,Dhanbad), third position in the lift off (IIT Kharagpur) and second position in Robowar IEEE , HIT Haldia
4. YASHWANT AGARWAL(17/EC/02): Achieved second position in ICARE Inter College Table Tennis Championship

THIRD YEAR:

1. RITABAN BISWAS(18/EC/42): Achieved second position in CreativeWriting,ACM'19 , Third position in Face Painting,ACM'19 ,Third position in creative writing, Recognito(organized by ME Club)
2. ABHINEET SAURABH(18/EC/121): Achieved second position in English Debate Competition ,Extravaganza'19 , under top four in Debate Competition District(Paschim Medinipur), conducted by the Times of India and Federal Bank.
3. ANUP JHA(18/EC/99): Achieved third position in Aqua Drift Prayukti'19
4. MANISH KESHRI(18/EC/69): First Position in Robo War,BIT sindri , second position in Armagedon at HIT, first position in Death Race at IIT ISM Dahnbad
5. ANIKET SAHU(18/EC/105): First position in Death Race,at IIT ISM Dhanbad
6. BHUSHAN YADAV(18/EC/87): Achieved first position in Dive Bomber and second position in Udaan,Prayukti'19
7. KUMAR ABHISHEK(18/EC/74): Third position in Aqua Drift,Prayukti
8. MRITYUNJAY KUMAR(18/EC/003): Third position in Aqua Drift,Prayukti
9. ZAIUL RAHMAN(18/EC/63): Third position in Aqua Drift,Prayukti
10. Sourav Kumar (18/ECE/18) Intra college Badminton tournament (B2PL - 2k19).- Winner Inter college chess Tournament (2018-2019)-6th position
11. Smriti Sinha(18/ECE/21) Intra college Basketball tournament (B2PL - 2k19).- Runner up and Rising player of the tournament.
12. Ankita Patra(18/ECE/101) ICare inter college table tennis tournament(2k19) First position in girls single.
13. Ritaban Biswas(18/ECE/042) - RETRACE 2019 (Award for Academic Excellence, Session- 2018 to 19)- Requizzit Final, Prayukti 2019
14. Samadrita Mazumder (18/ECE/035) 1st Position in Open Art Competition (SPLASH) 2019
15. Abhijeet bose (18ece124) Selfie contest 1st prize winner Organized by Admisure.
16. Manish keshri(18/ECE/069)- First position in Death Race in CONCETTO IIT ISM DHANBAD TECH FEST 2019- Second position in Robowar(Armageddon) in Haldia Institute Of Technology 2019 - First position in Robo war in BIT SINDRI in 2019.
17. Sourav Kumar (18/ECE/18) Intra college Badminton tournament (B2PL - 2k19).- Winner Inter college chess Tournament (2018-2019)-6th position

SECOND YEAR:

1. ARKABHA MUKHERJEE (19/ECE/33) : Achieved second division from Arians club (state level from school), district level from sangram samiti football club
2. ALYONA ROY (19/ECE/16) : Achieved first position in ICARE debate competition, first position in Extempore in HIT Annual Cultural meet
3. ANIKET CHATTERJEE (19/ECE/22) : Achieved second position in ICARE solo dance competition
4. SACHIN KUMAR (19/ECE/128) : Achieved second position in Musical Instrument playing competition
5. SHUBHAM KUMAR (19/ECE/150) : Achieved first position in Quizzit event conducted by ME CLUB
6. SEJAL GUPTA (19/ECE/143) : Achieved first position in Armageddon (Auto Bot)
7. SNEHA RANI (19/ECE/154) : Achieved first position in Armageddon (Auto Bot)
8. PRIYA SINGH (19/ECE/102) : Achieved first position in Armageddon (Auto Bot)
9. RASHIKA RAJEEV (19/ECE/115) : Achieved first position in Armageddon (Auto Bot)
10. SUMANA DAS (19/ECE/168) : Achieved first position in Armageddon (Auto Bot)
11. ROHAN KUMAR NONIA (19/ECE/122) : Achieved third position in video making organized by ME CLUB
12. PIYUSH KUMAR SINGH (19/ECE/94) : Achieved third position in video making organized by ME CLUB
13. PRASHANT KUMAR (19/ECE/96) : Achieved third position in video making organized by ME CLUB
14. MANISHA KUMARI (19/ECE/70) : Achieved third position in video making organized by ME
15. AMAN SARTHAK (19/ECE/19) : Achieved third position in Armageddon (Robo Rush)
16. GAUTAM KUMAR (19/ECE/51) : Achieved third position in video making organized by ME CLUB
17. SAMEER KUMAR (19/ECE/131) : Achieved second position in video making organized by ME CLUB
18. SHREYAN GAUTAM (19/ECE/149) : Achieved third position in Painting competition organized by Art and Craft club
19. AKSHAY KUMAR (19/ECE/15) : Achieved first position in Armageddon (Robo Rush)
20. TASNEEM AHMAD ANSARI (19/ECE/178) : Achieved third position in circuitrix event organized by IEEE
21. ARYAN KUMAR (19/ECE/38) : Achieved first position in Armageddon (Robo Rush), second position in circuitrix event organized by IEEE
22. JYOTIRMOYEE SANTRA (19/ECE/61) : Achieved first position in Armageddon (Robo Rush)
23. AVINASH KUMAR JHA (19/ECE/41) : Achieved first position in Armageddon (Robo Rush)
24. ARTHA BISWAS (19/ECE/36) : Achieved third position in Chess competition (Shatranj)
25. PARTHIB SEN (19/ECE/93) : Achieved second position in Mechnovate 2K20 (Meaningful assembly)
26. AMAN SNEHI (19/ECE/20) : Achieved third position in Armageddon (Robo Rush)
27. DAYEETA ADHIKARY (19/ECE/47) : Achieved third position in Armageddon (Robo Rush)

Cultural Fiesta



Fiesta Like There's no manana

Sports Triumph



OUT HUSTLE, OUT WORK, OUT THINK, OUTPLAY, OUTLAST!

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Prof. Malay Kumar Pandit	Professor
Sri Asim Kumar Jana	Associate Professor
Dr. Jagannath Samanta	Associate Professor
Dr. Avisankar Roy	Associate Professor
Sri Kushal Roy	Assistant Professor
Sri Amit Bhattacharyya	Assistant Professor
Sri Raj Kumar Maity	Assistant Professor
Sri Trithadip Sinha	Assistant Professor
Sri Banibrata Bag	Assistant Professor
Sri Surajit Mukherjee	Assistant Professor
Sri Akinchan Das	Assistant Professor
Sri Dibyendu Chowdhury	Assistant Professor
Sri Avishek Das	Assistant Professor
Sri Suman Paul	Assistant Professor
Sri Pinaki Satpathy	Assistant Professor
Sri Santanu Maity	Assistant Professor
Ms. Razia Sultana	Assistant Professor
Sri Dipak Samanta	Assistant Professor
Mrs. Moumita Jana	Assistant Professor
Sri Tilak Mukherjee	Assistant Professor
Sri Jayanta Kumar Bag	Assistant Professor
Ms. Sayani Ghosh	Assistant Professor
Ms. Pallabi Pahari	Assistant Professor
Sri Pulak Maity	Instructor
Sri Subhendu Barman	Instructor
Sri Atanu Pradhan	Instructor
Sri Tapan Maity	Instructor
Sri Sourav Kumar Das	Demonstrator
Sri Sachindeb Jana	Demonstrator
Mrs. Ira Samanta	Demonstrator
Sri Asim Kuilya	Demonstrator
Suman Mitra	Demonstrator
Tanushree Bera	Demonstrator

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Ankrit Samanta



Aryajeet Ghosh



Shweta Kumari



Shruti Raj



Anupama Mondal



Sandhya Rani



Rohit Kumar Yadav



Prachi



"A tree that wants to touch the sky
must extend it's root into the earth.
The more it wants to rise upwards,
the more it has to grow downwards.
So, to rise in life we must be
down to earth,
humble & grateful. "

- by " a world renowned space scientist"

Dr. APJ Abdul Kalam
(1931-2015)