NOESIS'22

TECHNOVATION '21
CSI - IT

TECHNOLOGIES
THAT CHANGED THE
WORLD !

LITERATURE

ARTICLES

ARTWORKS

AND MUCH MORE...

PATRONS

Fr. Saturino Almeida
Managing Director

Dr. S. M. Khot
Principal

—— **INSTITUTE VISION** ——

To evolve and flourish as a progressive centre for modern technical education, stirring creativity in every student leading to self-sustainable professionals, through holistic development; nurtured by strength and legitimate pride of Indian values and ethics.

—— **INSTITUTE MISSION** ——

- **To provide industry oriented quality education.**
- **To provide holistic environment for overall personal development.**
- **To foster relationship with other institute of repute, alumni and industry.**

DEPARTMENT OF INFORMATION TECHNOLOGY

DEPARTMENT VISION

To become a leading center of excellence for quality education, advance research and development in the field of information technology for self-sustaining professionals

DEPARTMENT MISSION

- To provide industry oriented quality education and training to student related to cutting edge technologies in the field of information technology.
- To promote multidisciplinary activities that inspires students to serve society through innovative applications.
- To promote entrepreneurship skills in students with overall personality development.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- Graduates will be able to adapt technological changes in the field of information technology.
- Graduates will be able to excel in higher education and professional career.
- Graduates will be able to demonstrate multidisciplinary and entrepreneurial skills.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

- Graduates will be able to adapt to the technological advancements in the field of Artificial Intelligence and Data Science.
- Graduates will be able to develop research strategy in the domain of Internet of Things and Security.

HOD'S MESSAGE

Dr. Vaishali Bodade

With knowledge, one may find solutions to issues that affect them, their environment, and all living things. There are countless instances of how information has enabled different discoveries, such as the light bulb, flying, cure for various illnesses, and technical breakthroughs in all sectors. Certain changes are necessary in the rapidly growing world, and the Department of Information Technology strives to prepare students by teaching them to be adaptable.

Our department works to improve students' critical thinking skills, their capacity to turn information into knowledge, and the strength of their information analysis. The students concentrate on using their conceptual grasp of computer science fundamentals as well as their improved programming skills to spread their analytical capabilities.

Through successful Industry-Institute Interaction, we hope to provide our students with the leadership and lifelong learning skills they need to develop in their careers and assume positions of responsibility. Students are placed in major software firms throughout the world because of the Department's stellar placement record.

The CSI student's division is actively planning events to bridge the gap between industry and academics. Students not only participate but also organize these activities, which helps them develop crucial skills like cooperation, communication, and teamwork. Our yearly activities, such as AITSS and Infobits, provide our students with the opportunity to work with peers from different institutions fostering a feeling of community.

The management, talented staff, and a productive student body have all worked together to make the department successful. The department is working hard to create an IT curriculum that is the ideal blend of theory, practical, and application.

EDITOR'S NOTE

by Yash Chiddarwar

In the past few years, with the advent of new technologies such as virtual reality, AI, Cryptocurrency, and Big Data, the face of the new generation of the IT industry has been completely changed.

From virtual marriages on the METAVerse to the legalization of cryptocurrencies in various countries as an official form of transaction commodity, the world is continuously adapting to the various changes that are happening within the IT domain.

Today, we embrace this knowledge of great complexity and try to explore areas in which we as individuals can truly contribute to enhancing, improving, and updating it in every way possible.

One of the major factors contributing to recent development in the domain of IT has been the COVID-19 outbreak, it has truly made us realize the power technology has over us.

We as humans need to evolve with technology in such a way that we learn to co-exist rather than being totally dependent on it for survival

No one could have predicted that knowledge of such high complexity would be understood and comprehended by humans on such a large scale a few years ago! This is exactly the reason why we chose this year's theme to be-Noesis, which means "highest form of knowledge, something eternal in nature" just like the technology that we are experiencing around us today!

DEPARTMENT FACULTY

Prof. Lakshmi Gadhikar   **Prof. Archana Shirke**   **Dr. Trupti Lotlikar**

Prof. Dhanashree Hadsul   **Prof. Mukta Nivelkar**   **Prof. Poonam Bari**

Prof. Anand Pardeshi   **Prof. Kalpana Wani**   **Prof. Smita Rukhande**

DEPARTMENT FACULTY

Prof. Rupali Deshmukh Prof. Suraj Khandare Prof. Chetana Badgujar

**Prof. Sharlene
Sara Rebeiro**

Prof. Supriya Joshi

LAB ASSISTANTS

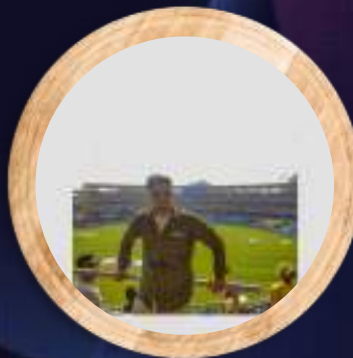**Mr. Binoy Alex**   **Mr. Abhijit Tandale**   **Mr. Shantanu Shukl**

MAGAZINE COMMITTEE

FACULTY HEADS

Prof. Sharlene Rebeiro   **Prof. Supriya Joshi**

SPONSORSHIP TEAM

Tejal Anvekar
Sponsarship Head

Sujal Raina

Adesh Abhang

Soumya Nakhale

Shreyash Jaiswal

Aniket Kittur

MAGAZINE COMMITTEE-EDITORIAL TEAM

Yash Chiddarwar
Editorial Head

Sweekrati Giri   **Anvisha Pathak**   **Joshua Dabhi**   **John Joseph**

Harshali Patil   **Manas Patil**   **Tejas Kale**   **Janet Joseph**

Neil Dsouza   **Abisha Peter**

MAGAZINE COMMITTEE-DESIGN TEAM

Mrinalini De

Design Head

Bharat Reddy   **Sarveshaa Swar**   **Vaibhavi Naik**   **Ritika Kumari**

Ancelia Patrao   **Rhea Gomez**   **Vedika Pagar**   **Shrikant Deshmukh**

DEPARTMENT EVENTS

AGNEL INFORMATION TECHNOLOGY STUDENT SYMPOSIUM
COMPUTER SOCIETY OF INDIA (CSI - FCRIT)

Computer Society of India is the first and largest body of computer professionals in India. Our college conducts the CSI seminar named TECHNOVATION every year wherein all the students of second year engineering, third year engineering and fourth year engineering participate in various events and sessions conducted by the students of our department who are hands on with various ongoing topics related to programming and software developments.
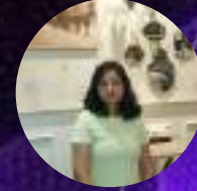
CSI COMMITTEE 2022

Faculty head
Prof. Rupali Deshmukh

President
Lisha Kothari

Vice President
Tejas Patil

Treasurer
Anvisha Pathak

Food Head
Adarsh Jadhav

Documentation Head
Ritika Kumari

Workshop Head
Junaid Kazi

Venue Head
Prathmesh Baviskar

Registration Head
Pranay Mahadik

Contest Head
Divya Vinod

Sponsorship Head
Tejal Anvekar

Hospitality Head
Hishali Rana

CSI-TECHNOVATION

The Intra Department level technical event "TECHNOVATION 2021" organized by IT department under CSI Student Chapter took place from 29th August to 2nd September. The event was led and executed successfully under the guidance of Prof. Rupali Deshmukh. The Event was a part of one of the various technical and social events organised under CSI every year since its inception. These events are organised every year with the objective to provide platform for the students to showcase their talent with a competitive spirit and for them to gain more knowledge in the field. The event was successful enough to attract as many as 156 students of registrations for each day, making it an event attended by more than a 130 students each day.

The webinars were based on upcoming topics namely Neural Networks, Data Visualization, Android Development, Image Processing and Machine Learning. And the online events that took place were Technical Quiz, Site Maker, Coding Contest. Here, the winners were encouraged with a certificate and The participants were also given certificates as a token of encouragement. The event was a great success due to the contribution from the third-year students and the curiosity of the juniors to learn something new.

CSI-Events

Alumni Meet
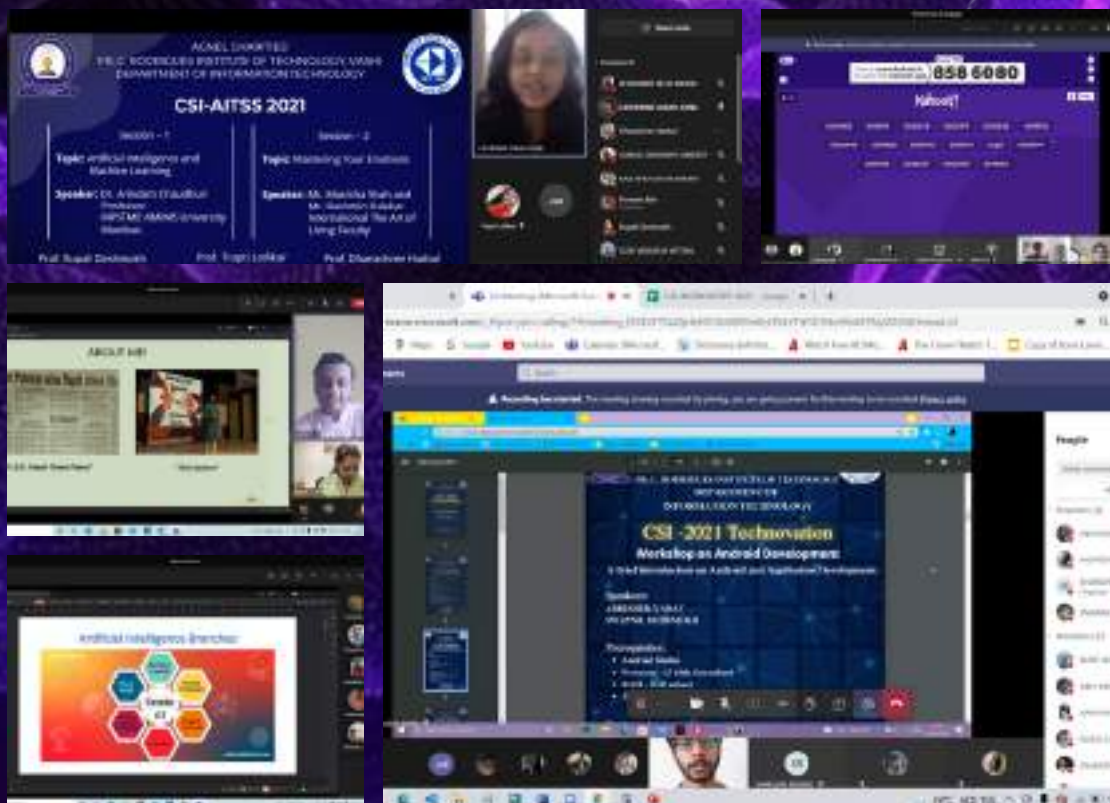
Fr. C. Rodrigues Institute of technology arranged the Alumni Meet 2022. Due to onset of COVID-19, the meeting was held in an online mode. Around 180 participants participated in the meet. The Alumni Meet is held every year in order to connect with the alumni of the college and to celebrate their achievements!

PRAP

Plastic-One of the deadliest things for mother nature, is a big problem for today's environment. It takes as much as 1000 years to degrade naturally and during this period it might end up harming various animals in different ecosystems as animals commonly mistake floating plastic as food and eat it which blocks their digestive systems resulting in a painful death. Not only ingestion but also often times animals get entangled in plastic which is a tough material. This results in deep cuts on their skins and in worst cases can also cause excessive blood loss.

Under the PRAP (Plastic Recycling Awareness Program) taken by Dept. of Information Technology, students, teachers and other staff members were encouraged to make Eco-bricks using plastic waste from their home. As many as 232 eco-bricks were received throughout the semester.
It is a small initiative taken up by the Department of Information Technology to ensure that the future generation of engineers are well aware of the harm plastic can cause and to teach them effective and efficient methods to reduce it in every way possible!

Eco-Bricks

HOW TO MAKE AN ECO-BRICK

A completed eco-brick must be no lighter than 400g and be firm to the touch.

- Only use green and brown 2l or 2.25l cooldrink bottles (clear bottles should be recycled).
- Make sure there are no dirty contents in your eco-bricks

STEP 1
Collect clean and dry plastic waste at home

STEP 2
Find a clean, dry 2-litre cooldrink bottle with a lid

STEP 3
Compress wasteinto the bottle with a stick

STEP 4
Pack tightly throughout the process to ensure it is

STEP 5
Put the lid back on and your EcoBrick is ready to be built

How do you make an Eco Brick?

1. Collect your clean and dry household waste. We recommend only waste that you cannot recycle (like dog food bags), but you can EcoBrick anything non-biodegradable and dry.
2. Twist your waste and insert it into a plastic bottle. Compress it as tightly as you can with a stick.
3. Keep doing this - make sure your bottle is unsquishable.
4. Think your EcoBrick is done? If you can squeeze it by more than 10% with one hand you should add more waste.
5. No longer squishable? It's done!

DAB Session

IT Department organized the Department Advisory Board Session 2021-2022 in the IT wing Lab 312 on 19th March 2022.

DQAC

31/01/2022

8/07/2022

FACULTY ACHIEVEMENTS

RESEARCH PUBLICATIONS

International Journals

Performance Modelling and Analysis of IoT-Based Edge Computing Policies
International Journal of Wireless Personal Communication, September 2021
Electronic ISSN:1572-834X
Print ISSN: 0929-6212
Faculty Incharge: Prof. Archana Shirke, Chandane, M.M.

Auxilium for Search and Rescue
International Journal for Research in Engineering Applications and Management (IJREAM), Vol 07, Issue11, Feb 2022
Electronic ISSN:2454-9150
Faculty Incharge: Prof. Mukta Nivelkar
Students: Rohini B., Binu J, Calista G.

Discovering Market Movements for Making Informed Stock Decisions
International Journal for Research in Engineering Applications and Management (IJREAM), Vol 07, Issue12, March 2022
Electronic ISSN: 2454-9150
Faculty Incharge: Prof. Anand Pardeshi
Students: Ananya Rajesh, Bryan Philip, Maria Johnson

Piano Transcriber
International Journal of Engineering Research in Computer Science and Engineering (IJERCSE), Vol 09, Issue 4
Electronic ISSN: 2394-2320
Faculty Incharge: Prof. Chetana Badgujar
Students: Vedant D, Sriaansh S, Rithik K

RESEARCH PUBLICATIONS

International Conferences

Codify: "Natural Language to Code, for Data Science Applications
7th International Conference on Innovations and Research in Technology & Engineering, (ICIRTE 2022), 8-9 April 2022
Faculty Incharge: Prof. Lakshmi Gadhikar
Students: Abhishek Gupta, Ansh Chhadva, Omkar Bhabal

Completenator: Advance Code Completion
7th International Conference on Innovations and Research in Technology & Engineering, (ICIRTE 2022), 8-9 April 2022
Faculty Incharge: Prof. Lakshmi Gadhikar
Students: Abdul Azim, Nadar Robinson, Juliet Jose

EmotiSync - Music Recommendation system using facial Recognition
2nd International Conference on Emerging trends and technologies on Intelligent Systems (ETTIS) - 2022, 23 March 2022
Faculty Incharge: Prof. Archana Shirke
Students: Selin Sara Varghese, Benitta Mariam Babu, Manjiri Kherdekar

TEYSuR-Text Extraction with YOLO and super Resolution
International Conference for Advancement in Technology, 21-22 jan 2022
Faculty Incharge: Prof. Archana Shirke
Students: Srividya S., Vineet K, Gladina R., Kapil Parab, Shashikant D

ML-Wasm Entropy and Plot: Dataframes and Plotting powered by WebAssembly and Rust, 9-10 December 2021
Springer conference on computer networks, big data and IoT :ICCBI 2021
Faculty Incharge: Prof. Trupti Lotlikar
Students: Dion Pinto, Arpit Bhat, Immanuel Gnanadurai

Linear Algebra in the Browser powered by WebAssembly
IEEE International Conference - ICONAT – 2022, 21 January 2022
Faculty Incharge: Prof. Trupti Lotlikar
Students: Archit Bhonsle, Ved Patil, Tanvi Valkunde

RESEARCH PUBLICATIONS

International Conferences

trAIner - An AI Fitness Coach Solution
7th International conference for Convergence in Technology (I2CT)
(ICIRTE 2022), 7-9 April 2022
Faculty Incharge: Prof. Dhanashree Hadsul
Students: Vaibhav Singh, Atharva Patade, Gaurang Pawar

Hate Detection for Social Media Text with User Alert System
International Conference on Electrical and Electronics Engineering, ICEEE
2022, 14 April 2022
Faculty Incharge: Prof. Mukta Nivelkar
Students: Ashley, J., Nisen, N., Lasrado, R.

Computerized Data preprocessing to Improve Data Quality
Second International Conference on Power, Control and Computing
Technologies (ICPC2T), 1-3 March 2022
Electronic ISBN:978-1-6654-5858-0
Faculty Incharge: Prof. Poonam Prasad Bari
Students: Rohan Gawhade, Lokesh Bohara, Jesvin Mathew

Wyverns Scuffle: An MMO Game Using Unreal Engine 4 and Blender 3D",
6th Intenational conference on Soft Computing: Theories and
Applications (Socta 2021), 17-19 December 2021
Print ISBN:978-981-19-0706-7
Faculty Incharge: Prof. Smita Rukhande
Students: Jay Warke and Swapnil Urunkar

Automated Journalism based on Sports Analysis
4th International Conference on Information Systems and Management
Science (ISMS 2021), 14-15 December 2021
Faculty Incharge: Prof. Smita Rukhande
Students: Eeshan Nanekar, Siddhant Nalawade, Zenden Castelino

RESEARCH PUBLICATIONS

International Conferences

Vehicle Monitoring for Violation and Traffic Density Analysis
4th International Conference on Advances in Science & Technology (ICAST2021), 5 July 2021
Faculty Incharge: Prof. Suraj Khandare
Students: Gowda, Jaideep and Abraham, Akhil and Sabu, Benson.P and Khandare

Elcare:elderly care with fall detection
International Conference on application of Intelligent Computing in Engineering and Science (AICE 2022), 12-13 February 2022
Faculty Incharge: Prof. Chetana Badgujar
Students: Swaroop Gogate,Chirag Jawale

CoviMon - Pandemic Healthcare Monitoring System
International Conference for Advancement in Technology (ICONAT), 2022
Electronic ISBN:978-1-6654-2577-3, 21-22 January 2022
Faculty Incharge: Prof. Sharlene Rebeiro
Students: T. Polly, R. Johnwilson

Personalized College Recommender and Cutoff Predictor for Direct Second Year Engineering
IEEE 2022 7th International Conference for Convergence in Technology (I2CT), 7 April 2022
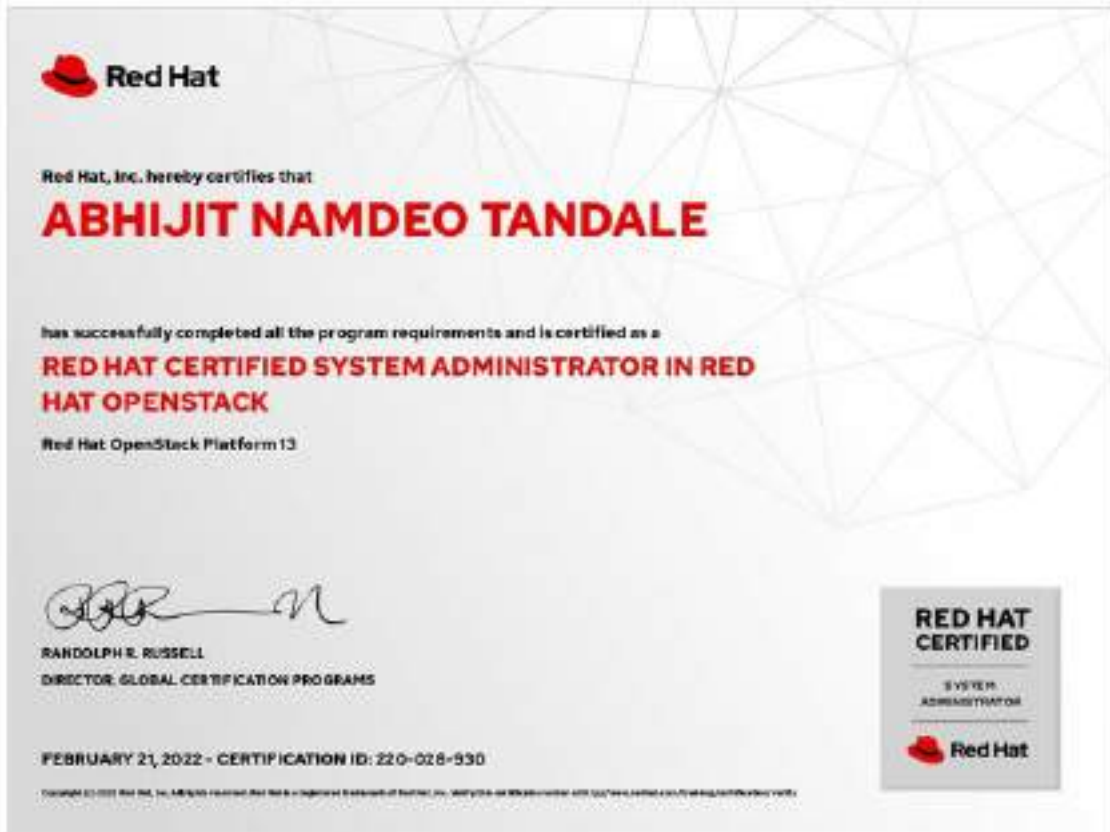*Faculty Incharge: Prof. Supriya Joshi*
Students: Tanmay Mhatre,Majeed Inamdar,Nadar Pravin

REDE - Detecting human emotions using CNN and RASA
International Conference for Advancement in Technology (ICONAT), 2022
Electronic ISBN:978-1-6654-2577-3, 21-22 january 2022
Faculty Incharge: Prof. Rupali N Deshmukh
Students: Gupta, M. A. Raj, K. Singh and R. Deshmukh

FACULTY CERTIFICATIONS

Red Hat, Inc. hereby certifies that

ABHIJIT NAMDEO TANDALE

has successfully completed all the program requirements and is certified as a

RED HAT CERTIFIED SYSTEM ADMINISTRATOR IN RED HAT OPENSTACK

Red Hat OpenStack Platform 13

RANDOLPH R. RUSSELL
DIRECTOR, GLOBAL CERTIFICATION PROGRAMS
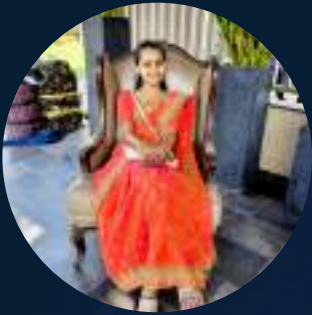
FEBRUARY 21, 2022 – CERTIFICATION ID: 220-028-930

Mr. Abhijit Namdeo Tandale, one of the supporting staff members has successfully completed the RED HAT CERTIFIED SYSTEM ADMINISTRATOR IN RED HAT OPEN STACK.

STUDENT ACHIEVEMENTS

SUMMER PROJECT WINNER

This incredible team of Maheshwari Phalke, Sujal Raina, Niraj Patil and Bhakti Phalke successfully created a sign language recognition app for the physically disabled.

Technologies such as OpenCV and Mediapipe were used in order to implement the project.

PCUBE WINNERS
POSTER MAKING COMPETETION

ACADEMIC TOPPERS

SECOND YEAR

1 **10**

BOMBLE SANSKAR
RAM KRANTI

2 **9.85**

KALSI GURLEEN KAUR
PARAMJEET KAUR

JADHAV ADARSH
DADABHAU SUNITA

3 **9.74**

KOTHARI LISHA DILIP
SONA

PATHAK ANVISHA
HRUSHIKESH BHARATI

THIRD YEAR

1 **10**

KUCKIAN YASHIKA
JAYA SHASHIKALA

2 **9.94**

BHOSALE PRATIK
WILSON SEEMA

CHETTIAR ESTHER
PRAKASAM A MARY

3 **9.91**

KOLI MANASWEE
VIKAS DHANASHREE

ACADEMIC TOPPERS

FOURTH YEAR

1 9.93

BOHARA LOKESH RAMDEV DURGADEVI
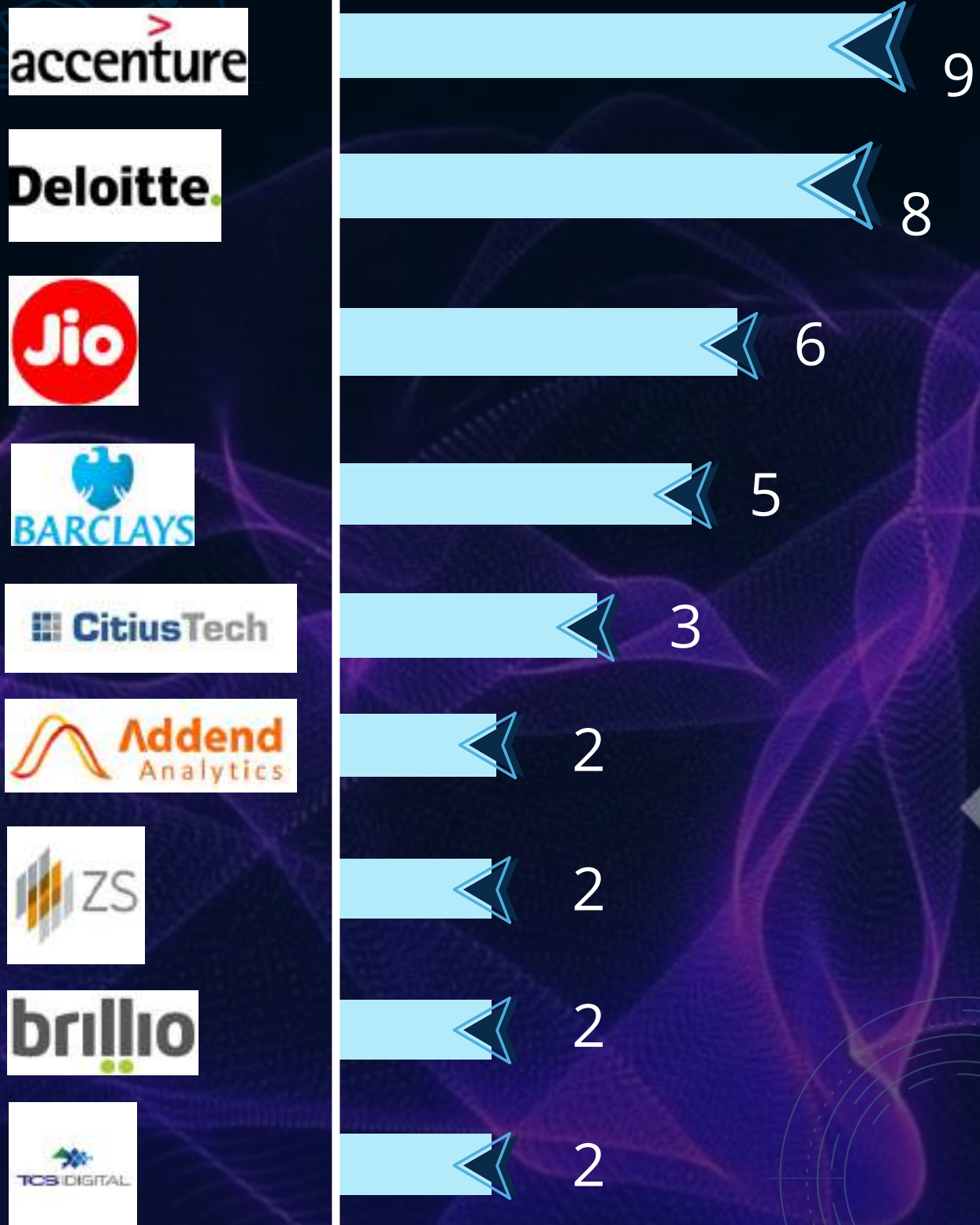
2 9.80

PATIL ANUJA SANJIV JYOTI

3 9.79

KHERDEKAR MANJIRI AVINASH VAISHALI

PLACEMENT RECORDS

accenture — 9

Deloitte. — 8

Jio — 6

BARCLAYS — 5

CitiusTech — 3

Addend Analytics — 2

ZS — 2

brillio — 2

TCS DIGITAL — 2

PLACEMENT RECORDS

Forcepoint — 2

ZEUS LEARNING — 2

aurionpro — 1

cognizant — 1

XORIANT — 1

iON TCS Ninja — 1

PERSISTENT — 1

cybermarine — 1

Interactive Brokers — 1

KANSAI PAINT NEROLAC — 1

Highest CTC : 12.8 Lakhs
Median CTC : 4.5 Lakhs
Total students registered for placement: 53

TECHNOLOGIES
that change the world

The world of Virtual Reality

-Janet Joseph (Sem 3)

Virtual Reality (VR) is the technology of the future. It is one of the tech spheres that is growing by leaps and bounds but have we stopped to think how this technology which was once primarily focused on video games came forth in other domains too?

VR has become more popular over the past few years, especially during the pandemic; People were seeking ways to connect with others remotely in a more immersive way.

What exactly is virtual reality?

Virtual Reality is a computer-generated environment with the surroundings appearing to be real. It places the user in a three-dimensional realm making the user feel they are immersed in their surroundings. In order to interact with the 3D world, the user might need to wear devices such as helmets or goggles.

Though the invention of Virtual Reality might seem to be a recent development in the field of technology, this invention dates back to the mid-1950s. Healthcare, entertainment, education, and architecture are some of the areas that have already taken advantage of this technology. From guided museum visits to the dissection of a muscle, VR allows us to cross boundaries that seem unimaginable.

VIRTUAL REALITY

| NON-IMMERSIVE | SEMI-IMMERSIVE | FULLY-IMMERSIVE |

- **Non-immersive – It refers to a 3D stimulated environment that's accessed through a computer screen. It allows the user to stay aware of and keep control of their physical environment. Video games, websites that enable a user to design a room's décor, etc. are good examples of a non-immersive environment.**

- **Semi-immersive – It provides users with a partial virtual environment. It will still give the users the perception of being in a different reality when they focus on the digital image but at the same time allows users to remain connected with their physical surroundings. Semi-immersive technology provides realism through 3D graphics. It is often used for educational and training purposes.**

- **Fully immersive – This gives the users the most realistic stimulation experience. To experience and interact with fully-immersive virtual reality the user needs the proper VR glasses or a head mount display (HMD). Fully immersive VR has made important advancements in the gaming and healthcare industries.**

When and why to stay away from prolonged exposure of VR?

- **Addiction – People become addicted to the VR experience, especially in gaming and social media applications.**
- **Health problems – Extensive use of VR can create a loss of spatial awareness, nausea, disorientation, and dizziness.**
- **Screen door effect – It occurs when using modern virtual reality headsets. When you use a headset, the display is within inches of your eyes. This means that you see pixels or spaces between them no matter how excellent the display resolution may be.**
- **Excessive dependency on VR can lead to disassociation and depression.**

Web 3.0: The GenZ of World Wide Web

Sweekrati Giri (Sem 5)

Is mankind the only evolution that took place with time? Is it necessary for something to be a 'living organism' to evolve? Can something that we cannot touch evolve?
The answer is no, no, and yes.

The reasoning behind that is the mind of a man. We made the internet- the world wide web fell on everyone's lap, the curious minds grabbed whatever it had to offer, and so, the birth of web 1.0 took place with leisure and curiosity.

The internet then was static and full of information. Type in a few keywords, the web didn't even know english properly, but it still flourished with clicks. But the curious minds I tell you, they wanted to speak on the internet, on the web. They got the information they wanted, but now they wanted to tell what they have acquired. You're understanding what I'm saying? No? I'll explain in tech-english.
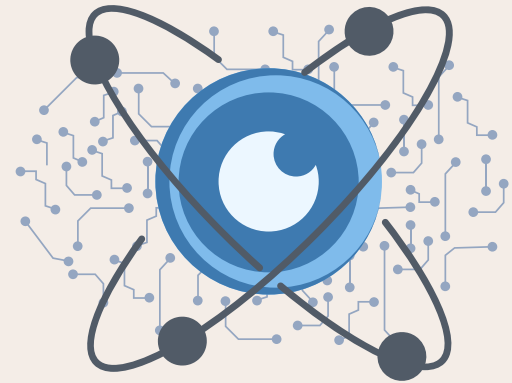
We understand technology with communication better. So let's understand the web with communication. Till now, the communication of man with the web was in simple duplex form.

The keywords we hit and the web would throw the information to the man on the screen. But the man wanted a half-duplex communication set up. Hence, the arrival of web 2.0 . It made a paradigm shift in the web. Our appetite to know more, to say more, to create more, to learn more, to communicate more. It just grew day by day to land where we are today. Yes, we are on web 2.0 . And soon or later the web 3.0 will hit the streets, or laptops, or other electronics devices.

But before that let's understand where we are today. Today's websites and whatever there is in digital space is working on centralized structure A structure made by a higher authority where one could come and use the service provided. See it like a platform. Where people who wanted to use the space used it. For example, Instagram. We wanted to be a part of a community

and create one on digital space. Hence, we all logged into it and used this platform. Instagram being the higher authority. Authority with power of regulation, rule to set and the most benefited from all.

But again, the curious mind I tell you, what they argued was,' why do these corporations who run these platforms have all the power in the world, why should they acquire our data and benefit from it. What if they have malicious reasons to acquire my data. My data is not secured. I don't trust them.' And now we go in full-duplex mode. Hence, the creation of the next generation, web 3.0 .

Blockchain will play a vital role in its creation. Blockchain is a set of blocks that contains information in a sequence. The information stored in them is encrypted using cryptography. A big application of blockchain is crypto currency transactions. Whatever transactions that occur to transfer a crypto is fit into the chain of that crypto block. And the same structure will be used in web 3.0 . But the data to be able to get deleted became the talk of the town. It raised questions over the 'right to be forgotten'.

Web 3.0 is said to be built on a decentralized structure with blockchain technology. The foundation of this web is on openness and increasing consumer usefulness, where everyone over the internet will use zero trust, and network protection will reach the edge.

Thus implementing the blockchain technology in the mainstream will be a bit of a challenge, until and unless the problems have been dealt with. The way Web 3.0 will be adopted in the mainstream and what changes it will bring to the way we are used to is only for the time to table. But one thing is for sure the future of the internet is bound to be interesting.

METAVERSE
A whole new world of possibilities

BY YASH CHIDDARWAR - SEM 5

What is the truest definition of technology? Is it advancement, evolution or just a simple combination of both? In layman terms, technology can be defined as a tool that helps human evolve and advance in various fields of science!
METAVerse is one of the greatest examples of technology that can change lives, but what exactly is METAVerse? The term "metaverse" was coined by Neil Stevenson in his 1992 science fiction novel Snow Crash.

It is virtual world of infinite possibilities and can be accessed by anyone who has access to the internet.
From the first virtual marriage in India to visual representation of some of the greatest works in architecture, METAVerse has it all! It acts as a great platform for individuals with creative thinking and a tech savvy mindset. Launch of new programs related to metaverse such as Google's Project Starline and BMW's Joytopia have proved that this virtual world can only be limited by human imagination.

Let us know how can METAVerse change our lives:

1) Reduce Crime Rates:
When people are given a platform where they can explore their fantasies with less risk and less physical activities, it can significantly reduce the crime rates as the mind will not feel the requirement to try similar stuff in real world.

METAVerse can also provide a virtual representation of various crime scene and help the investigating officers with various clues which would have been missed by the naked eye otherwise.

2) Exploring Oneself:
People in METAVerse can choose their own identity and create their own avatars. This enables people to live as they want in this virtual world and help them explore their true self. Along with the freedom of choosing their own avatars, we can decide the people we want to interact with and also the places we want to visit.

3) Improves collaboration and work-life balance:
COVID-19 made us realize that we can't afford to stop working even in worst conditions possible. METAVerse can help offices and workspaces to improve the work-life balance for the employees by providing them a virtual environment to work in from the comfort of their home.
Along with this it can also help in collaborating and product efficiency by enabling different clients and buyers to experience the product they are about to buy in a real time environment.

4)Helps businesses innovate:
With the help of Metaverse, businesses can release their product in a virtual space before releasing it to the general market. Due to this, they will have access to a customer base which can provide crucial feedback for the product at a very low cost.

Thus METAVerse is a whole another world and an amazing place for people who need a place to discover themselves, showcase their talent, grow their business or help innovate new technologies!

BLOCKCHAIN TECHNOLOGY IN REAL ESTATE

By Joannas Johnraj (Sem 7)

What is Blockchain? Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset can be tangible (house, car, cash, land) or intangible (intellectual property, patents, copyrights, brand). Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and reducing costs for everyone involved.

What is Real Estate? Real estate is defined as land and any permanent structures, such as a home, or improvements attached to the land, whether natural or man-made. Real estate is a form of real property.

A real estate transaction is a process in which rights to a unit of property (or specified real estate) are transferred between two or more parties, for example, in the case of a conveyance, one party is the seller and the other is the buyer.

It can often be quite complicated due to the complexities of property rights being transferred, the amount of money being exchanged and government regulations. Conventions and requirements also vary widely between different countries of the world and between smaller legal entities (jurisdictions).

Real estate technology was mostly concerned with listing and connecting buyers and sellers. However, blockchain can introduce new ways of trading real estate and can enable trading platforms and online marketplaces to support real estate transactions more comprehensively. Blockchain can be used in various ways to make real estate transactions more secure, transparent, and efficient.

A significant application of blockchain in real estate is smart contracts. A smart contract is a self-executing contract whose terms of the agreement between the contract's counterparties are embedded into lines of code. A smart contract is essentially a digital version of the standard paper contract that automatically verifies fulfillment and enforces and performs the terms of the contract.

How do smart contracts work? First, the contractual parties should determine the terms of the contract. After the contractual terms are finalized, they are translated into program code. When the code is created, it is stored in the blockchain network and is replicated among the participants in the blockchain. If the terms of the contract are satisfied and verified by all participants of the blockchain network, then the relevant transaction is executed.

The involvement of a smart contract ensures a more transparent and secured facilitation and fulfillment of the contractual terms. In addition, smart contracts do not require the execution of an intermediary because the smart contract code is verified by all participants in the blockchain network. Eliminating the middleman from the contract helps substantially reduce the cost for counterparties.

Smart contracts help real estate by redesigning documentation processes. Moreover, blockchain technology with smart contracts can enable virtual registry processes that will reduce the workload on authorities and eliminate the waiting time by a significant margin.

Thus, Blockchain Technology would revolutionize the Real Estate System as we know now. Not only by digitalizing the transaction process but also providing accountability, transparency, security and reliability.

NFT'S-NON FUNGIBLE TOKENS

-Lisha Kothari (IT Sem 5)

"People don't understand NFTs, Metaverse, and crypto today the same way they didn't understand online shopping in 1995." — Anuj Jasani

Non-fungible tokens — or NFTs — are causing a paradigm shift across nearly every sector of society. They're transforming everything from finance to art, and there's good reason to suspect that almost no corner of society will be left untouched.

Over the last few years, NFTs have proven to be one of the most significant contemporary innovations in tech, finance, fashion, sports, and the arts. Since going mainstream in 2021, NFTs have been the source of hype, confusion, and drama as they have taken their place as the latest cultural phenomenon.

A non-fungible token (NFT) is a unique unit of data on a blockchain that can be linked to digital and physical objects to provide an immutable proof of ownership.
The data an NFT contains can be tied to digital images, songs, videos, avatars, and more. However, they can also be used to give an NFT owner access to exclusive merchandise, tickets to live or digital events, or be linked to physical assets like cars, yachts, and much more.
In this respect, NFTs allow individuals to create, buy, and sell items in an easily verifiable way using blockchain technology. But bear in mind that, unless otherwise stated, you're not buying the copyright, intellectual property rights, or commercial rights to any underlying assets when you buy an NFT. However, all the legal details can get pretty complicated, so we'll dive into this more in subsequent sections.

When it comes to creating and selling NFTs, the process is rather simple. It works like this:

- An individual (or company) selects a unique asset to sell as an NFT.
- They add the object to a blockchain that supports NFTs through a process called "minting," which creates the NFT.
- The NFT now represents that item on the blockchain, verifying proof of ownership in an immutable record.
- The NFT can be kept as part of a private collection, or it can be bought, sold, and traded using NFT marketplaces and auctions.

If you're keen to start your own NFT collection, you'll need to acquire some key items:

First, you'll need to get a digital wallet that allows you to store NFTs and cryptocurrencies. You'll likely need to purchase some cryptocurrency, like Ether, depending on what currencies your NFT provider accepts. You can buy crypto using a credit card on platforms like Coinbase, Kraken, eToro and even PayPal and Robinhood now. You'll then be able to move it from the exchange to your wallet of choice.

You'll want to keep fees in mind as you research options. Most exchanges charge at least a percentage of your transaction when you buy crypto.

Just like the money in your bank account, cryptocurrency is what you use for any and all transactions on the blockchain. Cryptocurrency can be purchased or converted into fiat currencies (dollars, euros, yen, etc.) via crypto exchanges. By contrast, an NFT is a unique and irreplaceable asset that is purchased using cryptocurrency. It can gain or lose value.

DATAFICATION

- Joshua Dabhi (IT Sem 5)

"Information is the oil of the 21st century, and analytics is the combustion engine."
-Peter Sondergaard

In today's day and age one of the most powerful and essential service is "Data". It has become the driving force behind many upcoming and established ventures. It essentially controls today's IT industry. People spend top dollars to get hold of data, to analyze it to name a few. Here materializes "Datafication".

Datafication has been a buzzword of the last several years, that is used actively along Big Data industry. Even googling "Datafication" you aren't able to find a trove of information on it.

Datafication is a technological trend turning many aspects of our life into data which is subsequently transferred into information realised as a new form of value. Kenneth Cukier and Viktor Mayer-Schönberger introduced the term datafication to the broader lexicon in 2013. Up until this time, datafication had been associated with the analysis of representations of our lives captured through data, but not on the present scale. This change was primarily due to the impact of big data and the computational opportunities afforded to predictive analytics

Organizations require data and extract knowledge and information to perform critical business processes. An organization also uses data for decision making, strategies and other key objectives. Datafication entails that in a modern data-oriented landscape, an organization's survival is contingent on total control over the storage, extraction, manipulation and extraction of data and associated information.

Facebook or Instagram, for example, collect and monitor data information of our friendships to market products and services to us and surveillance services to agencies which in turn changes our behavior; promotions that we daily see on the socials are also the result of the monitored data. In this model, data is used to redefine how content is created by datafication being used to inform content rather than recommendation systems.

However, there are other industries where datafication process is actively used:
•Insurance: Data used to update risk profile development and business models.
•Banking: Data used to establish trustworthiness and likelihood of a person paying back a loan.
•Human resources: Data used to identify e.g., employees risk-taking profiles.
•Hiring and recruitment: Data used to replace personality tests.
•Social science research: Datafication replaces sampling techniques and restructures the manner in which social science research is performed.

Meditation
food for the soul

- Prof. Suraj Khandare

What is Meditation?

Meditation is said to be the food for the soul. The ultimate relaxation technique for the mind, body and soul. Spiritual Leader H. H. Sri Sri Ravi Shankar puts it, "Meditation is not concentration. It is de-concentration." One need not put in effort to perform meditation, it is effortlessness.

Why should you meditate?

You should meditate to be happy and let other's around you be happy and in peace. This might be a bit direct for some but, doesn't everything in life that we do is for happiness?

Meditation helps us to keep our mind calm, focused and relaxed. Meditation combined with a few warm up exercises is a complete nourishment for the mind, body and soul. Any work you wish to do in life will be done through your mind and body. Hence, it is the first and primary thing you must be taking care of.

Practicing just 20 minutes of meditation everyday can do wonders in your daily life. It will help you be more efficient and focused on your work, a happy and stress free mind spreads the same positive vibes. So, you have better relationships as you can deal with people around you better and effectively.

I have been practicing meditation for so many years now. And after meditation you feel happy, blessed, light, and in a state in which everything just seems alright.

Here physical and emotional benefits of meditation that will inspire you:
1. Helps in managing mental health
2. Reduces ageing
3. Provides more energy & efficiency 4. Helps Overcome anxiety and depression
5. Improves focus, attention, and memory
6. Helps in Healing and managing pain
7. Benefits your overall health
8. Improves relationships
9. Teaches you to let go and be firm

Activities associated with left brain are logical, focused on facts, math and science minded whereas activities associated with right brain are focused on art and creativity, intuition. Throughout the day engineers use left part of the brain and so after working for about 8 -12 hours meditation can give the much needed activity to right part of the brain.

Few Tips for Beginners:
- If you can't make time or become restless (common query) by the thought of mediation with closed eyes, start small. Begin with just taking out only 10 minutes from your schedule for yourself and just commence.
- It will be great if you wear loose and comfortable clothes while meditating
- Meditate on a relatively empty stomach. Hence, I prefer doing it in the morning. You can practice it anytime during the day. It is said that the hours of sunrise and sunset, are also ideal for the practice.
- It is advisable to start with light warm up and then go into mediation to get a deeper experience.
- Choose a convenient time, place and Asana or mat. (A simple cotton bedsheet will also work)
- You can start with guided meditations and then learn meditation from experienced teachers.

The Creative Pod

By Vaibhavi Naik (SEM-5)

By Rhea Gomez (SEM-3)

By Vedika Pagar (SEM-3)

By Faisal Sarang (SEM-5)
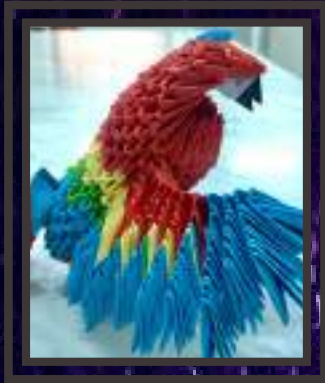
By Harshali Patil (SEM-3)

By Abisha Peter (SEM-3)

Shayari Corner

1) करने के लिए तो जमाने को चरचे बहुत है
इन हाथों को यू सवारने को जुल्फें बहुत है
इन ननघाहो को चाहत है तेरी
वरना देखने के लिये इन आखों को चेहरे बहुत हैं

2) कुछ दन बीते उनके यादों में थे
तो कुछ ददन उनके ख्यालों में थे
उनकी बात कुछ जवाबो में थी
और हम उनके सवालो में थे।

3) तेरी यादों की बरसात में
हर रात एक जाम हो जाये
तु देखती रहे लसफफ मुझे
और देखते देखते शाम हो जाये।

4) तेरी पिको में खदु को सामना चाहता हु
क्या होती है खबुसुरती ये इस दिल को
बताना चाहता हु
तमु सिर्फ साथ मेरे चलदो
में तो पूरे जहाँ को जिना चाहता हु ।

5) तेरे हर तारे को नया आसमान दूंगा
तेरे हर बहते आँसू को एक नयी मस्कान दूंगा
सिर्फ साथ साथ हर दम देना
अपनी हर कलमयाबी को तेरा नाम दूंगा।

6) आदत सी होगयी है तुम्हारी
जो तुम्हे भूल न पाये हम
ददन भर तुम्हे देखकर भी
रात में सो न पाये हम।

-By Piyush More

Poetry

थोडा प्यार मिल जाएगा तो अच्छा होगा ।

थोडा प्यार मिल जाएगा तो अच्छा होगा।
अरसो से बिखरे पड़े है
भीतर आँसुओं का समंदर लेकर
किनारे कोई बाहें मिल जाएँ तो
दिल थोडा पक्का होगा,
थोडाप्यार मिल जाएगा तो अच्छा होगा।

ना चाहिए कोई हुस्नपरि
ना ही किसी अपसरा का शौक है
किसी शाम कोई कंधा मिल जाएँ तो
सिर रखने का सुकून होगा
थोडा प्यार मिल जाएगा तो अच्छा होगा ।

सीने से लिपटने के लिए,
अभी तो फिर कोई तकिया भी बाकी नहीं
किसी चांदनी रात कोई आँखे मिल जाए तो
दिलकश दर्द बाँटनाआसान होगा,
थोड़ा प्यार मिल जाएगा तो अच्छा होगा।

~ *Piyush More*
(SEM – 3)
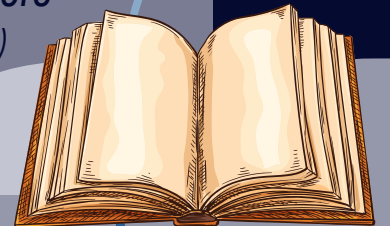
Photo Gallery

Batch of 2018-2022

Batch of 2019-2023

Photo Gallery

Batch of 2020-2024

Batch of 2021-2025

Our Sponsor

NOESIS

Department of Information Technology

www.fcrit.ac.in

2022