

# KIPM Campus Root

JULY 2022



Ashtavakra Technical Society



@kipmatscse



## **Message From The Editor's Desk**

With a perfect blend of ingenuity and contraption, we the editorial board of ATS, the association of CSE brings to lime-light, the CAMPUS ROOT, an embodiment of cutting-edge technologies and astounding facts, flashing some light on the innovative minds of our blooming engineers. Computer science is an ever expanding field and the power of what technology holds today is definitely beyond one's imagination, rendering dazzling set of ideas and therefore, "CAMPUS ROOT" is themed as "Idea is dawn. Dawn is an inception".

We use this opportunity to express our fervent gratitude and recognize the steady dedication of our Placement Coordinators who paved way for talent to meet opportunity. We express our sincere thanks to all association facilitators for their eminent efforts in organizing and indulging students in activities conducted by our association. At the outset, we thank our beloved faculty members for their perpetual brace and supervision in all our endeavors. We hope, you, the readers, will enjoy reading as much as we loved creating CAMPUS ROOT.

Happy reading buddies!!!

## **Message From Our Chairman**

**ER. R. D. Singh**  
**Chairman KIPM Technical Campus**  
**GIDA, Gorakhpur**



Dear students, these four years are very important in your life. The choices that you make and the effort you put in, will be a major determinant for success in your professional and personal lives.

### **Our Features**

- An Institute that has a good reputation, and where the best faculty, students and recruiters come.
- An institute that gives you personalized attention so that you don't remain just a face in the crowd.
- A program that is so rigorous and continuously evolving that it places you ahead of your peers.
- Faculty who are dedicated, hard-working and passionate towards your success, and who can be role models for you.
- A Hi-Tech environment that constantly exposes you to the latest technology and utilizes the latest techniques.
- An environment which encourages your all-round development besides focusing on academic excellence.
- An institute that lays strong emphasis on traditional values so that tomorrow you not only become a successful professional but also a responsible human being.
- An institute that works hand-in-hand with the corporate world so that tomorrow you are fully equipped to handle any challenges in the real life corporate situations.

## **Message From Our Managing Director**



**Mr. Vinod Kumar Singh**  
**Managing Director KIPM Technical Campus**  
**GIDA, Gorakhpur**

'Shaping young minds with skill-oriented and value-based education'- these words acceptably symbolize the mission and execution of KIPM Technical Campus. KIPM aspires to advance knowledge and educate students in various disciplines of Engineering, Management, Computer Applications and Pharmacy.

My dear students, KIPM is not elitist in its approach. While we do try to select brilliant students, we also accept those who are potentially sound. KIPM rather than restricting itself to the quality of students coming in, emphasizes on the quality of students going out from the Institution. A strong academic orientation lays the foundation for life-long learning. Thus, all activities at KIPM are oriented towards creating opportunities for students to discover, explore and learn not just within the confines of their curriculum but also outside the boundaries of classroom.

I welcome you all at KIPM which is not only an institute, but also a place of culture that strives at producing the new breeds of professionals.



## **Message From Our Director**



**Professor(Dr.) Suryakant Pathak**  
**Director KIPM -College of Engineering & Technology**  
**GIDA, Gorakhpur**

Dear Students,

My every endeavor for this college will be dedicated towards advancement of knowledge and educate our students in Science, Technology, and other distinguished areas of scholarship that will best serve the community, society, Nation and the world in the 21st century at large.

I hope to serve my students with all my might for as long as I could and provide them every assistance, be it in academics, or in co-curricular field, which is possible from our side. I wish that every student that enters this institution is of some worth after leaving this institution and we will ensure that this does happen.

## **Message From Our Assistant Director**



**Professor P C Srivastava**  
**Assistant Director KIPM -College of Engineering & Technology**  
**GIDA, Gorakhpur**

Dear Students,

A strong academic foundation supports most of the pillars of life and so, we, at KIPM ensure that the students here are served with the best knowledge that is possible at our level. I assume that you all might have some expectations from a college and thus we always strive to live up to your expectations.

The faculty here are well experienced and will be helpful in providing all sorts of information, knowledge and wisdom.

## **Message From Our Dean**



**Dr. Rakesh Kumar Pandey**  
**Dean Academics**  
**KIPM - CET**  
**GIDA, Gorakhpur**

It is with tremendous pride that I am serving as the Dean Academics of KIPM-College of Engineering & Technology during this time of continued growth and opportunities for the college and for our students. It feels great to see the initiative of our CSE department, including all the faculties as well the students that come up with innovative ideas to stand apart from the crowd and achieve new heights.

## Message From Our Mentors

Nurturing creativity and inspiring innovation are two of the key elements of a successful education, and this technical magazine CAMPUS ROOT 2021, is the flawless amalgamation of both. No doubt this creative endeavor will bring out an assortment of technical, artistic and scientific articles with distinct individual autographs of CSE students. It harnesses the creative energies of the students' community and distils the essence of their inspired imagination in the most brilliant way possible.



**Er. Ranjeet Kumar Rai**  
Chief Proctor



**Er. Anurag Singh**  
Assistant Professor

"Knowing and believing in our own potential is the primary requisite for being successful in all our endeavors". Believing in our own potentials more, motivates to prove ourselves. "Strive for progress, Move towards perfection" is the slogan behind ATS. It works with the motto of try, progress, never give up even if you make mistakes and improve continuously until perfection is reached. ATS has been functioning, successfully in full swing throughout the academic year 2021-2022. ATS secretary is the backbone behind all the activities of ATS. Office bearers and facilitators as the pillars of ATS have raised the students' association to the elegant level. We take this opportunity to appreciate all the ATS members for their magnificent efforts.

We, as CSE Students Association (ATS) faculty in-charges feel proud in writing this cover note for the technical Magazine 'CAMPUS ROOT 2021'. It gives us immense pleasure to work along with the editorial team and association office bearers in giving shape to CAMPUS ROOT 2021 and releasing it successfully as per schedule, which in itself is an achievement, considering the effort and time required.



**Er. Alok Kumar Srivastava**  
Assistant Professor



**Er. R. K. Singh**  
**Assistant Professor**

The association members of CSE are rapidly progressing towards zenith of Computer Science knowledge. It helps to depart from the existing academic world and to explore the new trends in technologies and development.

I wish to extend my deep appreciation to all those who have so generously volunteered their time and talents for publication of the ATS Magazine. Special thanks goes to our Publications Team and Editor who have shared their valuable effort in shaping the magazine and bringing out with a nice collection of articles.



**Er. Ranjeet Kumar Dubey**  
**Assistant Professor**

## **A Few Words From ATS Members**

As the President of ATS 2021-22, I feel dazed with the splendid experience I've procured by working with concurring peers and networking with budding juniors. ATS has provided me with the dais to elevate my standards to one more level. My journey as a fragment of ATS has been prolific and fun filled by organizing events and activities for juniors, mentoring them with industrial requirements and enhancing their skills in technical aspects. ATS is all about team spirit and there is no place for trivialities. We are not a team because we work together.. we are a team because we respect, trust and shoulder each other. I extend my genuine gratitude to the ATS staff in-charges for putting their faith in me and granting me freedom to accomplish my plans to actions. I use this opportunity to thank all those who spared a couple of minutes to take a peek into 'CAMPUS ROOT', an evidence of our zealous efforts. Lastly, my best wishes for those who become a part of ATS in the impending years, for they play a vivacious in escalating ATS to greater heights.



**Ayush Pratap Singh**  
**CSE - III Year**



**Alka Mishra**  
**CSE - III Year**

Being one of the office bearers of ATS 2021-22, I, personally had a lot of experience in managing events and people. We planned various events for the academic year 2021-22 including Mock Interview and Syllogism. The whole team of ATS 2021-22 had a lot of fun while working together as a team. ATS gave us a platform to interact with our juniors, helping them understand the industrial requirements, recruitment process and other technical aspects. I wish to thank the ATS Staff-in-charges for having trust in my skills and abilities. I would like to advise my juniors to never stop progressing in the process of learning.

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# Crypto Currency

Cryptocurrency is basically a decentralized digital and virtual currency which is not regulated, monitored or controlled by any supervising authority. The only thing that upholds our integrity is cryptography and blockchain technology. And this is exactly where crypto currency and technology comes together, through blockchain. Blockchain and cryptocurrency, being two very different technologies, are very deeply intertwined and the digital money is able to function because of blockchain. Blockchain also developed further with the popularity of crypto even though it is used in many other areas. Blockchain is a collection of blocks, i.e., digital information that is stored across various computers to form a database. When transactions through crypto take place, they are added to these blocks which later on form a chain. These chains are protected and are difficult to manipulate. Many experts claim that blockchain technology has the power to change our lives in significant and multi-dimensional ways. It has potential for much more than just crypto and it is an innovative and miraculous way of storing data. It ensures then authenticity and protection of data and one of the most impactful uses we could attain out of it is as simple as storing sensitive yet personal data.

There are hardly a couple of things which attracted as much attention as the coronavirus and Cryptocurrency was surely one of them. With the first Cryptocurrency being introduced in 2009, the very famous Bitcoin, very few people knew or as much as cared about them. Then one day suddenly, the world was after these decentralized digital currencies and we could literally look at 800% surge in even satiric and 'joke' coins (read DOGE).

Your paragraph A person who had invested in these as a part of some truth or dare game was now a millionaire and every newspaper had the same headline. A new trend was here and it was not some dance or meme, but a Laxmi chit fund-sure shot in a whip way of becoming rich, only difference being, this was actually legit. raph text



Does this not seem too good to be true? Why don't people buy 20\$ worth of these coins, get rich and end poverty? Because these supposedly new age replacement for real, normal, everyday money were not really so. In Jan 2021, all these crypto currencies crashed leading to \$134B losses. How did this happen? The distrust of governments and unstable market were the main culprits to blame. However, this opened investor's eyes and the bitter truth of investment was realized yet again, that loss and gain are the two sides of the same coin.



Harshit Tiwari  
2nd Year CSE

## Technology In Cinema

Technology and Cinema go hand in hand, as technology advances, so is the ability of filmmaking. We have advanced from Black and White to Color, from shooting on matte paintings or curtains to green screens, and the set design is setting new heights now and then. I have found myself obsessing over filmmaking or behind-the-scenes videos recently, the sheer creativity of making a movie amazes me, how every scene included has some story behind how it was shot, why those particular colors are used and how have they been achieved.

How many of you have come out of the theatre and said," the storyline was bland but the songs were amazing or the lightning or the colors", well, we all have said it, haven't we? Filmmaking is not just about the storyline but it is a collective effort of the screenplay, background score, sound quality, lighting and colors, makeup, and much more. We have found ourselves leaning toward K-dramas more and more recently, why? the reason is the same as explained above, we love the aesthetics. Why we can't stop listening to some songs even if their lyrics make no sense, the reason is their amazing sound quality. Even the academy has accolades for the best background score, best makeup, and best soundtrack, they are not just value addition but an important part of the movie itself.



Well, who doesn't like Sanjay Leela Bhansali's gran, extravagant films, it will not be wrong to say that he makes all the actors look like walking portraits in his films, well some of you might think it is due to the exquisite costumes and eminent direction but you will be surprised to know that the cinematography has an upper hand here. For filming Bhansali collaborated with NY VFXWAALA, a leading Indian VFX corporation that delivered this film over eight months in terms of CGI creation and visual effects with a team of 50 to 60 artists working on it. Talking about it Prasad Sutar, Founder and Managing Director says that he and his team were involved with the film from the scripting stage. Throughout the shooting process, they would discuss and analyze whether a particular shot was possible to shoot live or with CGI or VFX, and arrangements were made accordingly. He further adds that he likes to shoot live and further adds effect to make it as realistic as possible. Talking about scenes he says," The opening war wherein the entire army was created using CGI, was shot in broad daylight and then converted into the night. The close-ups were shot indoor therefore we had to match and blend all the shots. This sequence itself had around 300 VFX shots with minute detailing as this was the introductory sequence. The climax sequence had live water shot on a camera with CGI horses, arrows, and fireballs. Bhansali sir had visualized the climax but our team enhanced the scene with our thoughts and ideas. The climax took around 15 to 20 days to be completed with perfection. Bajirao Mastani went on to win several awards for the CGI and VFX used in it including Asian Film Award (AFA) for Bajirao Mastani, becoming the only Indian VFX house to have won the AFA award to date. Bajirao Mastani, a grand Period Drama was brought to life by the enhanced VFX work.

Let's talk about something recent, Gehraiyaan although not a very appealing movie due to its storyline but had been criticized positively regarding its Cinematography. Kaushal Shah, the Cinematographer of Gehraiyaan revealed that the shots have been taken in a way to make the viewer read between the lines, to feel things being unsaid, the music and background score has been set in such a way that it gives us a sense of therapy but with a tint of hopelessness in it too. If one observes the lighting and the filters keep on changing following each phase of the film.

Talking about everyone's favorite Harry Potter, Framestore a British animation, and visual effects company worked side by side with directors of all 8 films of the Harry Potter series crafting key characters, otherworldly environments, and of course magical effects. Dobby, Buckbeak, and the watery underworld created during Triwizard Tournament, etc. are all visual effects creations.

Technology had, has, and will continue to influence filmmaking. Thanks to it we all have experienced fantastical worlds that could never exist on our earthly plane, recently successful Marvel films and Squid Games are proof that people indeed are ready to witness technology on their screens which also is an incentive for making such films. This also has opened wide doors for new career opportunities and creativity. Just brace yourself to witness a technological revolution in Filmmaking.



Pratyaksh Gupta  
CSE 2nd year

## **Technology : Boon Or Bane**

Technology is said to be one of the greatest inventions of mankind. It has made our lives easier by leaps and bounds. You need to pay money to someone, use online transactions; you want to learn from educators miles away from you, use distance learning programs: you want ice cream but don't want to visit a store, use online shopping applications and much more. Technology advances every second, take a simple example of Whatsapp, you can delete messages for both sender and viewer, can use on multiple devices at a time and the group limit exceeds every now and then. Technology undergoes evolution continuously to equip it with new features and for making it more user friendly. In short, everything has increased: speed, accuracy, endurance to work with technology. Technology has opened wide doors for new career opportunities. It is been used in fields like Medical, Education, Transportation, Defence, Filmmaking etc.



Well, it will not be wrong to say that technology has made an important spot in everybody's lives. It has several advantages but it does have certain disadvantages which should be talked about, one such case is the recent Bulli Bai Case which has exposed a different side of technology which most people are still unaware about.

The amount of hazardous content being served on Internet has influenced youngsters to take malevolence steps, today we can access thousands of videos, audiobooks and images on internet according to our need but some of these elements are being used to share hateful content. An engineering student from Jorhat, Assam named Niraj Bishnoi was arrested in the Bulli Bai Case. The case is related to hundreds of Muslims women being listed for auction on the Bulli Bai app on Github Platform. What does this tell us? technology could be harmful in some ways too. What about the dark web? It contains harmful content like videos for promoting terrorism, violence, etc. Cyber-attacks are threats for individuals as well as nations' security. The recent incidents like use of spyware Pegasus have caused distrust on usage of technology. Frauds are actively working online, how can we keep a check on all these liberties on online platforms, the sheer ease of accessing internet has resulted in all these crimes.

Technology has taken a toll on our health as well, the excessive screen time we devote streaming videos has made our eyes vulnerable of straining. A 5- year study in the journal Applied Ergonomics found an association between texting on a mobile phone and neck or upper back pain in adults. Using technology too close to bedtime may cause issue with sleep. It has reduced physical activity in our lives and increased chances of diseases like Diabetes and Obesity in adults. One less talked reason but an important one is that technology has resulted in Isolation of individuals. A 2017 study, in young adults aged 19-32 years found that people with higher social media use were more than three times as likely to feel socially isolated than those who did not use social media as often. Social media often causes insecurities among people.



Ankita Mall  
CSE 2nd year



# Laws and Rules for Software Field Students

As a software field student, there are certain laws and rules that you should be familiar with. These laws and rules exist to protect both the software industry and its users, and understanding them is crucial for your success as a software professional. Here are some of the most important laws and rules that all software field students should know:

- **Intellectual Property Law:** This law protects the ownership of software code, patents, trademarks, and copyrights. As a software field student, you should be aware of the various forms of intellectual property and the laws that govern them.
- **Copyright Law:** Copyright law gives the author of a work, including software, the exclusive right to reproduce, distribute, and display that work. As a software field student, you should understand what constitutes copyright infringement and how to avoid it.
- **Software Licensing:** Software licensing is the legal agreement between the software creator and the user. You should be aware of the different types of software licenses, such as proprietary, open-source, and freeware, and the terms and conditions associated with them.
- **Data Privacy:** Data privacy laws govern the collection, storage, and use of personal information by software applications. As a software field student, you should be familiar with the various data privacy laws, such as GDPR and CCPA, and how they affect software development.
- **Cybersecurity:** Cybersecurity is the practice of protecting computer systems and networks from unauthorized access, theft, and damage. As a software field student, you should understand the importance of cybersecurity and how to develop secure software applications.

- **Accessibility:** Accessibility laws require software applications to be designed and developed in a way that allows everyone, including those with disabilities, to use them. You should be familiar with accessibility laws and guidelines, such as WCAG, and how to implement them in software development.
- **Ethical Considerations:** Software development has ethical implications, and you should be aware of the ethical considerations involved in developing software applications. These may include issues such as bias, privacy, and the impact of technology on society.
- **Quality Assurance:** Quality assurance is the process of ensuring that software applications meet the required standards of quality. As a software field student, you should understand the importance of quality assurance and how to implement it in software development.
- **Project Management:** Project management is the practice of planning, organizing, and managing resources to complete a software development project. As a software field student, you should be familiar with project management methodologies, such as Agile, and how to apply them in software development.
- **Continuous Learning:** Software development is a constantly evolving field, and as a software field student, you should be committed to continuous learning. This may involve keeping up with the latest trends and technologies, attending industry events, and participating in online communities and forums.

In conclusion, as a software field student, there are many laws and rules that you should be aware of. These laws and rules are designed to protect both the software industry and its users, and understanding them is crucial for your success as a software professional. By familiarizing yourself with these laws and rules, you will be well-prepared to enter the world of software development and make a meaningful contribution to the industry.



Harshit Tiwari  
CSE 2nd Year

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# THANK YOU