

GYAN GANGA



Institute of Technology and Sciences

Department Of Computer Science and Engineering

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Societies

Hackathons

Clubs

Cyber Security

Artificial Intelligence

Oracle Cloud Technology

Data Science

Technology Advancements

Innovations

CSE Magazine Insight

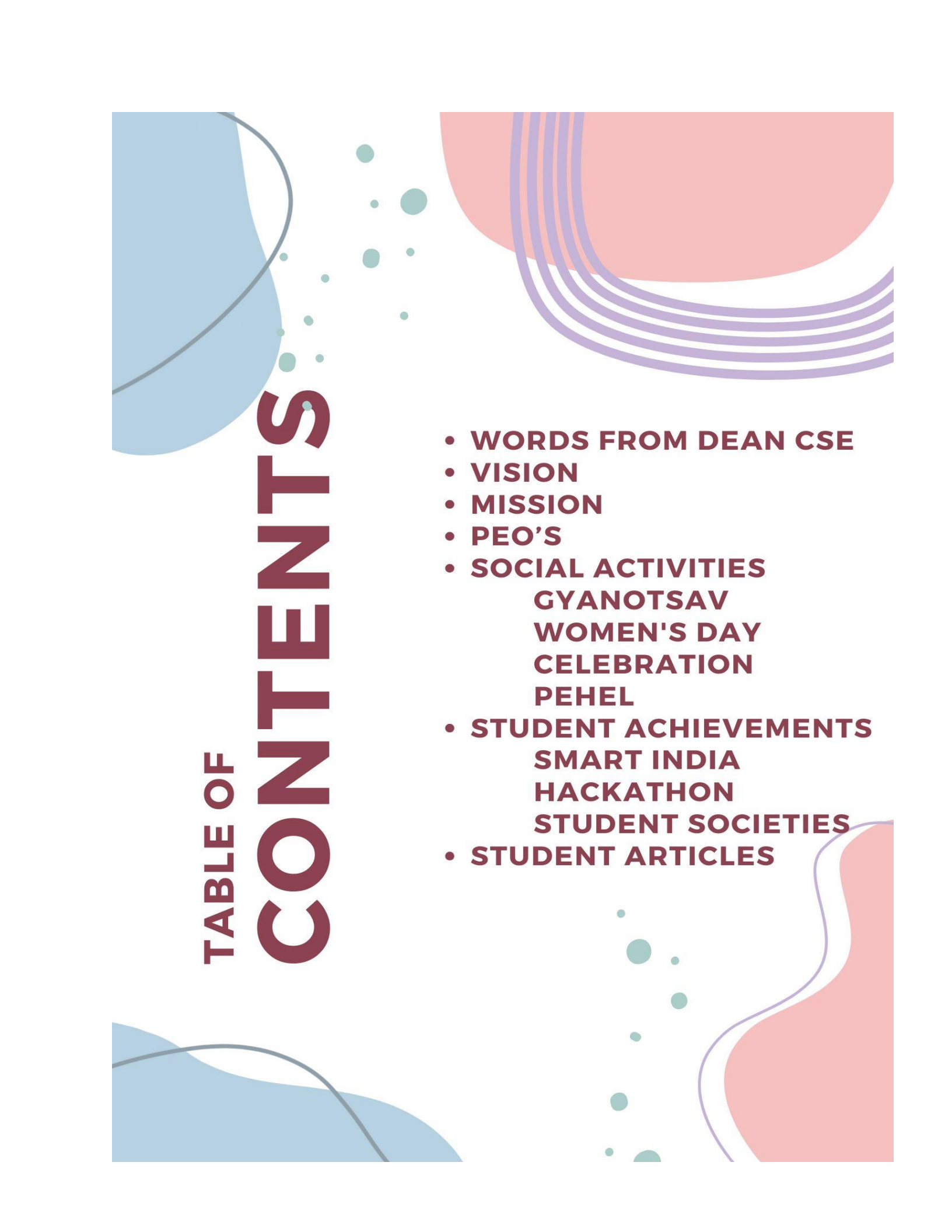


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WORDS FROM HEAD CSE

As the world continues to evolve through technology, the role of Computer Science Engineering becomes more vital in shaping the future. At our department, we strive to foster an environment that nurtures innovation, creativity, and critical thinking. Our mission is to equip students with the skills necessary to tackle the challenges of an ever-changing digital world.

Our students are not only gaining theoretical knowledge but are also actively applying their skills to solve real-world problems. This year, we proudly witnessed our students' remarkable achievements, including securing top positions in Smart India Hackathon (SIH) 2024, where they showcased their problem-solving capabilities and creative solutions.

The Institute qualifies under the Premium Tier of the Digital Campus on Google Cloud Program with the accessibility of the 1000 Google Cloud Skills Boost (300 seats of ACE and 200 seats of CDL Programs). The Google Developer Club has been a hub of innovation, where students have come together to collaborate on projects, participate in hackathons, and stay ahead of emerging technologies. These achievements reflect the hard work, dedication, and talent of our students, and we are immensely proud of their accomplishments.

Our department continues to focus on creating an environment that encourages innovation, collaboration, and excellence. With the guidance of our experienced faculty and the unwavering commitment of our students, we are confident that they will continue to shine and contribute significantly to the technological landscape in the years to come.



DR. ASHOK KUMAR VERMA
PROFESSOR & HEAD CSE

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Vision

- To be a innovative and research oriented leading education center in computer science and engineering.
- To produce skillful and employable computer science graduates to meet upcoming social challenges with moral and ethics.

Mission

- To impart intensive, innovative teaching and training through state of art technology for achieving excellence.
- To associate with industries for identification of social needs and seize opportunities for software development in live training and sustainable projects of social challenges.
- Continuous knowledge up-gradation of students, staff, faculty through research, trainings, seminars, workshops, conferences, webinars and higher studies.
- To impart knowledge of project management, commercial viability and code of conducts for Engineers.

Program Educational Objectives

- PEO 1. Graduates will pursue their career in global domain for software development with proficiency in analysis, design, coding, testing, deployment, maintenance of system and application software.
- PEO 2. Graduates will demonstrate professionalism with effective communication skills, leadership qualities, teamwork, ethical, economic, cultural, environmental issues related to multidisciplinary projects for resolving social issues.
- PEO 3. Graduates will enhance knowledge and skills through higher studies and lifelong learning new computing technologies for attaining professional excellence and research.
- PEO 4. Graduates will drive scientific and societal advancement through technological innovation and entrepreneurship.



Social Activities

विद्याऽमृतं मश्नुते
JABALPUR

*Fun
& Party*

GITS





GYANOTSAV 2025

An annual winter event of Gyan Ganga Group of Institutions GYANOTSAV 2025. A two-week long event comprising of various sports competitions and tournaments along with many technical and non-technical events, tech-expos, pitching competitions followed by the felicitation ceremony to award the winners. With live performances and cultural performances Talent hunts and Fun Fair and concluded with a cultural night and a popular DJ night. Gyanotsav 2025 also contains the grand Cultural Event on December 27, 2024, this is a day that promises to be filled with creativity, talent, and vibrant energy.

This event will bring together students from various departments, offering a platform to showcase their artistic skills in music, dance, drama, and much more. To celebrate this festival of talent in Gyan Ganga Group of institutions was very proud to welcome Gajendra Verma, an Indian singer, songwriter, music composer on Gyanotsav 2025.

All the members of Gyan Ganga family enjoyed the breadth taking performances.

INTERNATIONAL WOMEN'S DAY EVENT



महिलाओं का विजय जश्न मनाय

जबलपुर, आंतर्राष्ट्रीय महिला दिवस पर सभागार को महिलाओं की विजय का जश्न मनाकर उन्हें सशर्मा दी। लड़कियों को सशक्त के सभी क्षेत्रों में सह-सहकार प्रोत्साहित करने और अपनी योग्यताओं को व्यक्त करने के लिये प्रेरित किया गया। यह कार्यक्रम संस्कृत राट्ट पर्यटन द्वारा सुरू किया

#HeForShe
#EqualityforAll

girlUp
JABALPUR
ADVOCATING FOR WOMEN'S RIGHTS

Function held at Gyan Ganga

ON THE occasion of International Women's Day, Gyan Ganga commemorated the day by celebrating the victories of women and for all that they are. Girl-Up Jabalpur, a club under the Girl-Up Campaign launched by UN Foundation, took to stage and shared their motto, i.e. empowering girls everywhere. The founding co-presidents of the club, Arni Khare and Nandini Tandon also held the discussion about gender equality and shared their dreams for a better world. The event was a success with the ardent help of Arun Bhatt and Abhishek Shrivastav.



On the occasion of International Women's Day, Gyan Ganga Institute hosted a special event to honor the achievements and contributions of women across the world. The day was filled with inspiring talks, thought-provoking discussions, and engaging activities celebrating women's empowerment, equality, and strength.



Students and faculty came together to celebrate the achievements of women in various fields, while also reflecting on the ongoing journey toward gender equality. The event featured performances, guest speakers, and presentations that highlighted the importance of supporting and uplifting women in all spheres of life.



Pehel

Pehel-ek nayi subah is a flagship event of Gyan Ganga where we honor and felicitate the 4th class staff (auxiliary staff) of our institutes and conduct some fun and refreshment activities for them. A beautiful and blissful initiative was taken by the TCS Campcorp club members on "--DATE--", to honor those helping hands without whom our life would be much harder. Their resilience is so necessary that we need them in every walk of our life to live it safe, secure and sapient.

The whole GGITS family is lad to thank and appreciate all the members who are responsible for maintaining clean surroundings, maintaining discipline and security. Through Pehel our respective dignitaries show respect and reward them for their work.



c





Internal Smart India Hackathon 2024 is a nationwide initiative to provide students a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mindset of problem solving. In internal SIH 2024 total 50 Hardware and 100 software problem statements with different organizations/ministry like State Government, Central Ministry, Industry Personnel and Student innovation. Out of given Problem statement 50 problem statement were nominated from Gyan Ganga Institute of technology and Sciences Jabalpur (GGITS), in which 12 hardware and 38 software category was selected in Internal Hackathon which was held on 02-Sept-2024.





ALIBABA CLOUD DEVELOPER CAMPAIGN

CONGRATULATIONS
WINNERS OF THE CAMPAIGN FROM
GGITS...!!

2ND PRIZE WINNER:

- MIHIR BHASIN - 6TH SEM CSE : RS. 75,000 INR CASH PRIZE + \$1,000 ALIBABA CLOUD CREDITS

3RD PRIZE WINNERS:

- ABHISHEK SHRIVASTAVA - 4TH SEM IT : RS. 37,500 CASH PRIZE + \$500 ALIBABA CLOUD CREDITS
- PRACHI GURJAR - 6TH SEM CSE: RS. 37,500 CASH PRIZE + \$500 ALIBABA CLOUD CREDITS
- ANAND PATEL - 8TH SEM CSE : RS. 37,500 CASH PRIZE + \$500 ALIBABA CLOUD CREDITS
- AISHWARYA YADAV - 6TH SEM IT : RS. 37,500 CASH PRIZE + \$500 ALIBABA CLOUD CREDITS

INNOVATION AWARD WINNERS:

- NITESH VISHWAKARMA - 6TH SEM CSE : \$200 ACC
- SHAH PREKSHA - 6TH SEM CSE : \$200 ACC

The Alibaba Cloud Developer Campaign is an initiative by Alibaba Cloud aimed at fostering innovation and empowering developers. It typically includes various programs, challenges, and resources designed to help developers learn, build, and grow their skills using Alibaba Cloud's suite of cloud computing services and solutions. The campaign often targets global and regional developer communities, providing them with access to tools, educational content, and competitions to encourage the creation of cloud-based applications, solutions, and services.

Students of Gyan Ganga participated in the Alibaba Cloud Developer Campaign in 2024. Also many students have secured position & innovation award.



Welfare
Society



Gyan Ganga

C.A.R.E.S.

Where Caring and Hope Meet...

COLLEGE ACTIVITIES TO REJUVENATE ENVIRONMENT & SOCIETY

SPORTS
SOCIETY

ARTS

SOCIETY

**Student
Societies**

**CURRICULAR
ACTIVITY**

LITERATURE

Student Articles

विद्याऽमृतं मश्नुते
JABALPUR

GIS

GENERATIVE AI

PRIVAL PATEL (B.TECH CSE-2ND YEAR)

Generative AI, sometimes called gen AI, is artificial intelligence (AI) that can create original content—such as text, images, video, and audio or software code— in response to a user’s prompt or request.

Generative AI relies on sophisticated machine learning models called deep learning models—algorithms that simulate the learning and decision-making processes of the human brain. These models work by identifying and encoding the patterns and relationships in huge amounts of data, and then using that information to understand users’ natural language requests or questions and respond with relevant new content.

AI has been a hot technology topic for the past decade, but generative AI, and specifically the arrival of ChatGPT in 2022, has thrust AI into worldwide headlines and launched an unprecedented surge of AI innovation and adoption. Generative AI offers enormous productivity benefits for individuals and organizations, and while it also presents very real challenges and risks, businesses are forging ahead, exploring how the technology can improve their internal workflows and enrich their products and services. According to research by the management consulting firm McKinsey, one third of organizations are already using generative AI regularly in at least one business function.

Industry analyst Gartner projects more than 80% of organizations will have deployed generative AI applications or used generative AI application programming interfaces (APIs) by 2026.



QUANTUM COMPUTING

ANJALI KUMARI (B.TECH CSE-3RD YEAR)

Quantum computing is an emergent field of cutting-edge computer science harnessing the unique qualities of quantum mechanics to solve problems beyond the ability of even the most powerful classical computers.

The field of quantum computing contains a range of disciplines, including quantum hardware and quantum algorithms. While still in development, quantum technology will soon be able to solve complex problems that supercomputers can't solve, or can't solve fast enough.

By taking advantage of quantum physics, fully realized quantum computers would be able to process massively complicated problems at orders of magnitude faster than modern machines. For a quantum computer, challenges that might take a classical computer thousands of years to complete might be reduced to a matter of minutes.

The study of subatomic particles, also known as quantum mechanics, reveals unique and fundamental natural principles. Quantum computers harness these fundamental phenomena to compute probabilistically and quantum mechanically.



EDGE COMPUTING

KRISHNA JAISWAL (B.TECH CSE-2ND YEAR)

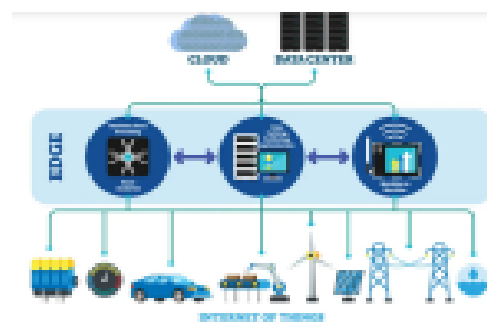
Edge computing is an emerging computing paradigm which refers to a range of networks and devices at or near the user. Edge is about processing data closer to where it's being generated, enabling processing at greater speeds and volumes, leading to greater action-led results in real time. It offers some unique advantages over traditional models, where computing power is centralized at an on-premise data center.

Possible components of edge include:

Edge devices: We already use devices that do edge computing every day—like smart speakers, watches and phones – devices which are locally collecting and processing data while touching the physical world. Internet of Things (IoT) devices, point of sales (POS) systems, robots, vehicles and sensors can all be edge devices—if they compute locally and talk to the cloud.

Network edge: Edge computing doesn't require a separate "edge network" to exist (it could be located on individual edge devices or a router, for example). When a separate network is involved, this is just another location in the continuum between users and the cloud and this is where 5G can come into play. 5G brings extremely powerful wireless connectivity to edge computing with low latency and high cellular speed, which brings exciting opportunities like autonomous drones, remote telesurgery, smart city projects and much more.

On-premises infrastructure: These are for managing local systems and connecting to the network and could be servers, routers, containers, hubs or bridges.



AUGMENTED REALITY (AR) AND VIRTUAL REALITY (VR)

SATYAM PANDEY(B.TECH CSE-4TH YEAR)

Augmented Reality (AR) augments your surroundings by adding digital elements to the real world, often by using the camera on a smartphone.

The primary value of AR is the manner in which components of the digital world blend into a person's perception of the real world, not as a simple display of data, but through the integration of sensations, which are perceived as natural parts of an environment. One of the greatest examples of AR technology is the popular mobile app Pokémon Go, which allows players to locate and capture Pokémon characters that appear in the real world. The most common areas where AR is used in the industry are training, education, audits, and inspections. But also, healthcare has taken advantage of the technology- through the right applications, surgeons and skilled specialists can practice complex procedures without risking expensive resources or patient comfort.

Virtual Reality (VR) is a simulated experience when the world you're standing in is replaced with a virtual one. This can be done with something as simple as a plastic holder you put your phone into, but most people prefer head-mounted displays these days. Virtual Reality has revolutionized the gaming and entertainment sectors by allowing users to immerse themselves in a highly simulated environment. Virtual reality is also a big player in the education sector- such as medical or military training- and business- such as virtual meetings. The VR headset has historically needed to be tethered to a device, but more recent versions can be used as stand-alone or wireless. The most famous VR headset for commercial use is the Oculus Quest 2; the targeted PRO version for business is the Vive Focus 3.

