



10th Issue of

NEWSLETTER

July - December
E D I T I O N

2024

COMPUTER ENGINEERING DEPARTMENT



Presenting 10th issue of half yearly departmental **NEWSLETTER** that consists of events, achievements, moments and much more...

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10th Issue of
NEWSLETTER
J u l y - D e c e m b e r 2 0 2 4
E D I T I O N

The Government Engineering College, Gandhinagar (GECG) was established in 2004 to give higher education in engineering and technology. The institute is recognized by the All-India Council of Technical Education (AICTE), New Delhi, and the Institute of Engineers (India). The college is administered by the Directorate of Technical Education, Gujarat State, Gandhinagar, and is affiliated with Gujarat Technological University (GTU).

All the courses of this college were taught according to the GTU (Gujarat Technological University) syllabus and exams.

In November 2007, the college moved to its new campus at Sec-28, near GEB, inaugurated by Smt. Aanandiben Patel, Minister for Higher and Technical Education. It is spread over 33 acres (130,000 m²) of land.

Principal's Message



Dr. Sweta Dave

Principal GECG

Dear faculty, staff & students,

*" To those who see with loving eyes, life is beautiful.
To those who speak with tender voices, life is peaceful. To those who help with gentle hands, life is full. And to those who care with compassionate hearts, life is good beyond all measure! "*

I Dr. Sweta P. Dave as the Principal of the prestigious educational organization, Government Engineering college of Gandhinagar, with a compassionate heart Invites you to have an Initial peak of our organization's vision & values. Government Engineering college Gandhinagar primarily stands to nurture the shelved potential hidden in the young talent. We intend to provide a platform to the students to let out their creativity and channelize their knowledge and young inspirational energy.

At GEC Gandhinagar, the joyful experience of academics and the energetic bursts of co-curricular activities Integrate to create an all-round experience for fellow students and attendees. Our highly qualified faculties and management makes sure our fellow students become capable to stand out of the competition in the outside world.

GEC Gandhinagar brings a holistic academic as well as a practical approach for the students to become compatible and knowledgeable to the market needs. And we believe In this statement a lot, our faculties are well qualified and trained to deliver the knowledge in a playful form and not letting students just to mug up.

At last, I want to convey that we focus on the overall development of our students. We also look after the staff members and the college resources to provide students with the highest quality of academics value. I will heartily invite you to join our prestigious organization and become part of our family.

H.O.D.'s Message



Dr. Dhaval Parikh
HOD, CE Department

Dear Faculty and students,

The Department of Computer Engineering, established in 2004, has recorded a consistent improvement in its academic, research, and placement performance till now. I am elated to tell you that the department stands on the strength of experienced and well-qualified faculty who are very dedicated to teaching and also involved in the up-gradation of knowledge. Their research experience will help to cultivate the future of our students.

The B.E. Computer engineering program includes computer operations on different languages, data generation, collection and utilization of information. The course imparts all the basics as well as the latest knowledge pertaining to the rapidly developing field of computers. The course is designed to keep students at pace with the practical field. The mission of the department is to produce and impart theory, principles, practice, and know-importance of computing in the information age. This is required for the critical analysis, design, evolution, and improvement of the computing system in the context of computers and industry services. To provide students with a strong foundation in the mathematical, scientific, and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for graduate studies.

About GEC, Gandhinagar



Established in 2004, Government Engineering College, Gandhinagar (GEC-Gn) takes pride in its highly motivated students. Our students are life-long assets that help this institute to continuously evolve and work towards its Vision. Our College is Approved by AICTE.

The College is administrated by Directorate of Technical Education, Gujarat State, Gandhinagar. GECGN is affiliated to **Gujarat Technological University**.

About Computer Department



Department of Computer Engineering is well posed to cater the needs of the course. It is equipped with well-developed laboratories to satisfy the course curriculum of various subjects related especially to the Computer field. The main backbone of the course is educating knowledge of computer and its engineering . Almost all fields are computerized to have ease of handling the problems of designing, manufacturing, servicing, researching, marketing and accounting.

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The course imparts all the basics as well as latest knowledge pertaining to the rapidly developing field of computers. The course is designed to keep students in pace with the practical field.

The mission of the department is to produce and impart theory, principles, practice and know-importance of computing in the information age. This is required for the critical analysis, design, evolution and improvement of computing system in context of computers and industry services. It is our objective that students should be able to pursue advanced studies in computer engineering and information technology on a competitive universal basis. The college has well established computer labs which are facilitated with IBM, X series Xeon & dual processor Pentium servers, Compaq server and several hundred work stations connected in LAN & WAN.

Vision & Mission

Vision

- To achieve excellence for providing value based education in Computer Engineering through innovation, team work and ethical practices.

Mission

- To produce computer science and engineering graduates according to the needs of industry, government, society and scientific community.
- To develop partnership with industries, government agencies and R & D Organizations
- To motivate students/graduates to be entrepreneurs.
- To motivate students to participate in reputed conferences, workshops, symposiums, seminars and related technical activities.

PEOs & PSOs

Program Educational Outcomes (PEOs)

- To provide students with a strong foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for graduate studies, R&D, consultancy and higher learning.
- To develop an ability to analyze the requirements of the software, understand the technical specifications, design and provide novel engineering solutions and efficient product designs.
- To provide exposure to emerging cutting edge technologies, adequate training & opportunities to work as teams on multidisciplinary projects with effective communication skills and leadership qualities.
- To prepare the students for a successful career and work with values & social concern bridging the digital divide and meeting the requirements of Indian and multinational companies.
- To promote student awareness on the life-long learning and to introduce them to professional ethics and codes of professional practice

PEOs & PSOs

Program Specific Outcomes (PSOs)

- By the completion of Computer Engineering program the student will have following Program specific outcomes.
- Design ,develop, test and evaluate computer based systems by applying standard software engineering practices and strategies in the area of algorithms, web design, data structure, and computer network
- Apply knowledge of ethical principles required to work in a team as well as to lead a team

Faculty, CE Department

Dr. Dhaval Parikh
HOD, CE Department



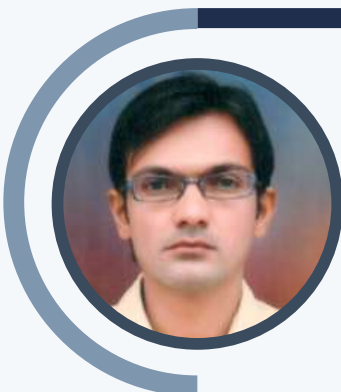
Prof. J.S.Dhobi
Associate Professor



Dr. Pinal J. Patel
Assistant Professor



Dr. Pratik Barot
Assistant Professor



Faculty, CE Department



Dr. Sanjay Patel
Assistant Professor



Dr. N.S.Shroff
Assistant Professor



Prof. N.K.Prajapati
Assistant Professor



Prof. D.P.Khem
Assistant Professor



Prof. B.U.Gadhia
Assistant Professor

Faculty, CE Department



Prof. N.D. Shah
Assistant Professor



Prof. Nitin Raval
Assistant Professor



Dr. Hemani Shah
Assistant Professor



Prof. Nikhil Singh
Assistant Professor

Faculty, CE Department



Prof. Ashwin Prajapati

Assistant professor



Prof. Viral R. Patel

Assistant Professor



Dr. Mihir Mehta

Assistant Professor



Prof. Manisha Valera

Assistant Professor

Infrastructure Details

The building no. 5 is allocated to CE-IT department. It is a three storey building with around 25 rooms for lectures, different Labs particularly for hands-on practice on machines and cabin for the respected faculties and HOD sir. The entire building is under the surveillance of CCTV camera to maintain the safety and integrity of the Department.



Entire building is facilitated with high-speed Wi-Fi network for easy networking. The labs are provided with well-maintained WLAN network, efficiently maintained by our networking genius Prof. Prashant Chaudhari.

Programming Lab

The laboratories are equipped with a number of desktop computers. The current software resources include open-source programming SDKs. The lab is used for the course subjects like C, C++ programming etc.



Database Lab



A database management system is computer software that provides a way to manage data. DBMS lab aims at practicing and achieving this aim by using various software's such as SQL, ORACLE, and MS - Access etc.

Application Development Lab

Website Development includes both front end and back end including database management and dynamic functionality of website as per the user actions. Although we work with various tools/languages to achieve this functionality such as - ASP.NET, PHP, JSP but we primarily focus on .NET



Network Lab

Networking is a key area in the field of computers that deals with the physical connectivity of computers which is monitored by a combination of special hardware and software. The course curriculum provides from the coverage of basics to advanced applications and services, while providing a platform for hands-on practical experience and soft-skills enhancement.



PG Research Lab



The ability of a computer or other machine to perform those activities that are normally thought to require intelligence. The branch of computer science concerned with the development of machines having this ability. Early AI projects, such as playing chess and solving mathematical problems, are now seen as trivial compared to visual pattern recognition, complex decision making, and the use of natural language



OOP Lab



The laboratory is equipped with a number of desktop computers. The current software resources include a number of Object Oriented Programming SDKs, Integrated Development Environment like Eclipse, EditPlus etc. and Object Oriented Software Engineering tools.



Clubs at GECG

Club IDE

A Community, By the Students, For the Students

It is an initiative by CE/IT Dept of GEC-Gn. This is community for the student and by the student. Here the students grow their knowledge in a peer-to-peer learning environment and build solutions for local businesses and their community.



<https://clubs.gecg28.ac.in/>



<https://instagram.com/theideclub?igshid=1x6stwsrt04q>



<https://www.linkedin.com/company/the-ide-club>



<https://discord.gg/vXNCpKXzET>

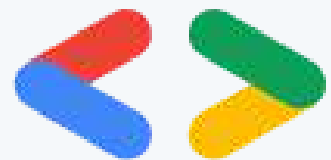


https://twitter.com/club_ide

GDSC GEC - Gandhinagar

Google Developers Student Club

Google Developer Student Clubs (GDSC) are community groups for college and university students interested in Google developer technologies. Students from all undergraduate or graduate programs with an interest in growing as a developer are welcome. By joining a GDSC, students grow their knowledge in a peer-to-peer learning environment and build solutions for local businesses and their communities.



<https://gdsc.community.dev/government-engineering-college-gandhinagar/>



https://instagram.com/gdsc_gecg



<https://www.linkedin.com/company/gdsc-gecg-gandhinagar>



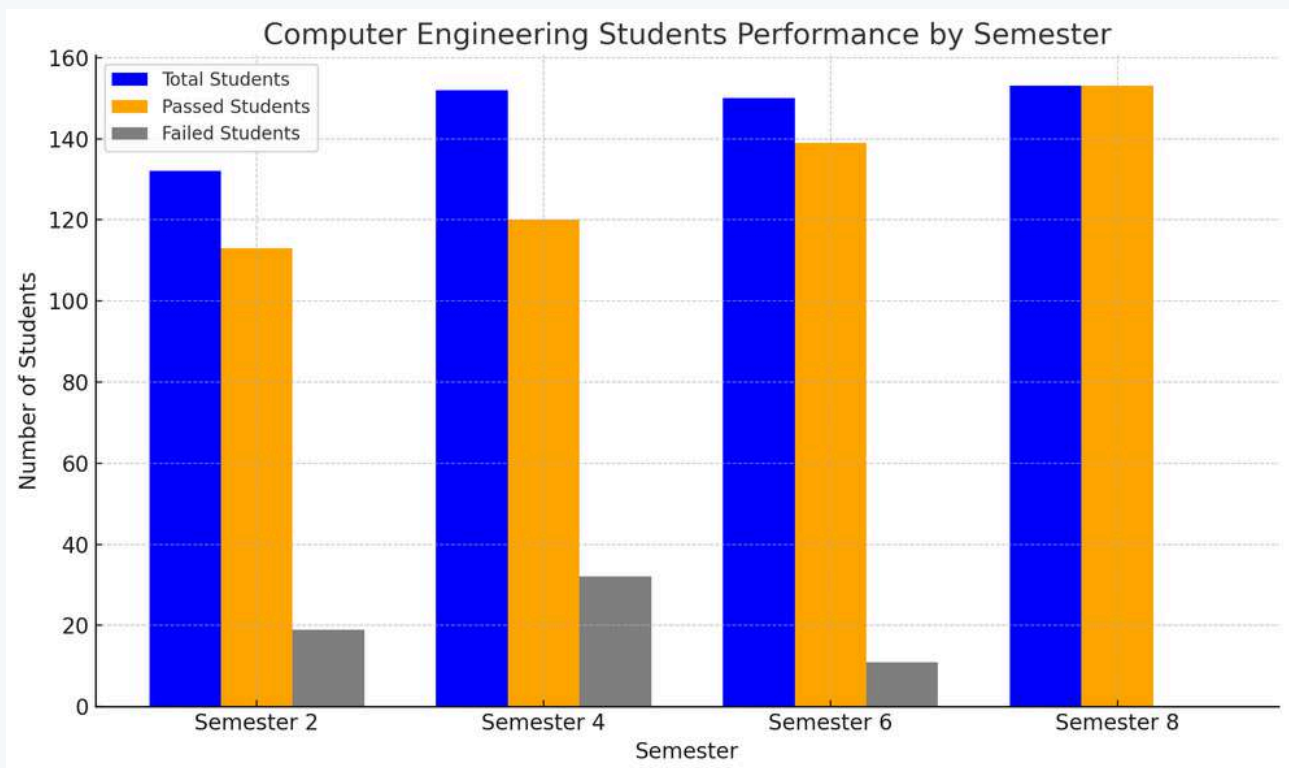
<https://youtu.be/snyOV3lqiM8>



https://twitter.com/gdsc_gecg

Result Analysis

✓ B.E. Result for Summer-2024



Placement

✓ In 2024, Students from CE Department are placed in various MNCs likewise Zeus learning, Argusoft, Meditab, Silver touch technologies, Tatvasoft etc.

Highest Package 8 LPA
Average Package 4.3 LPA

Companies visited campus this year...



Faculty's Achievements



- **Ashvin Prajapati**

- Ashvin R. Prajapati successfully completed the NPTEL Certification Course on "Practical Cyber Security for Cyber Security Practitioners" during the July to October 2024 session, reflecting his dedication to enhancing his skills in safeguarding digital environments.



- **Prof. Viral R. Patel**

- V. R. Patel demonstrated exceptional commitment by completing the NPTEL Certification Course on "Practical Cyber Security for Cyber Security Practitioners," thereby strengthening their expertise in the ever-evolving field of cyber security during the July to October 2024 session.

Faculty's Achievements



- **Dr. Pratik Barot**

- Dr. Pratik Barot achieved a significant academic milestone by being recognized as a Ph.D. supervisor by GTU in July 2024, reflecting his expertise and commitment to fostering advanced research and mentoring future scholars.



- **Prof. Nitin Raval**

- Nitin Raval showcased his dedication to professional development by completing multiple NPTEL Certification Courses, including "Practical Cyber Security for Cyber Security Practitioners" and "Ethical Hacking," during the July to October 2024 session, equipping himself with essential skills to address modern cybersecurity challenges.

Faculty's Achievements



- **Prof. Manish Valera**

- Manisha Valera successfully completed the prestigious NPTEL Certification Course on "Theory of Computation" during the July to September 2024 session, showcasing her dedication to advancing her knowledge in computational theories and formal languages.



- **Dr. Hemani Shah**

- Dr. Hemani Shah earned the esteemed NPTEL Certification for the course "Problem Solving through Programming in C" during the July to October 2024 session, demonstrating her proficiency and enthusiasm for foundational programming concepts and their applications.

Faculty's Achievements



- **Dr. Pinal J. Patel**

- Pinal Patel played a significant role as a Mentor in the "Smart India Hackathon (SIH) 2024," guiding and supporting young innovators to develop impactful solutions for real-world challenges, thereby contributing to the success of the national event in November and December 2024.



Faculty's Research & Publication



- **Dr. Pinal J. Patel**

- Dr. Pinal J. Patel published two significant research papers in the African Journal of Biomedical Sciences in June 2024, both indexed by Scopus.
- The first paper, "Handwritten Gujarati Vowel Recognition Using Deep Learning Models" (ISSN: 2663-2187, Volume 6, Issue Si4, pp. 3184–3195), explores innovative deep learning techniques for recognizing handwritten Gujarati vowels.
- The second paper, "An Assessment of Machine Learning and Ensemble Models for Diabetes Prediction" (ISSN: 2663-2187, Volume 6, Issue Si4, pp. 3212–3221), evaluates various machine learning models for predicting diabetes.
- Both studies highlight Dr. Patel's impactful contributions to computational linguistics and medical diagnostics, published on 21 July 2024

Faculty's Research & Publication



- **Dr. Dhaval Parikh**

- Dr. Dhaval A. Parikh authored a groundbreaking research paper titled "Automated Anomaly Detection and Multi-Label Anomaly Classification in Crowd Scenes Based on Optimal Thresholding and Deep Learning Strategy" in the International Journal of Autonomous and Adaptive Communications Systems (IJAACS) (Vol. 17, No. 2, 2024). This study introduces advanced deep learning strategies for anomaly detection and classification, providing robust solutions for crowd analysis in real-time systems.

Faculty's Participation



- **Dr. Pinal J. Patel**

- Pinal Patel participated in two significant training programs:
- A 5-day Faculty Development Programme (FDP) on the Effective Implementation of NEP 2020: Train the Trainer Programme from 14 October to 18 October 2024 at Vidya Samiksha Kendra, Gandhinagar. The programme enhanced her understanding of the National Education Policy 2020 and its practical application.
- A 15-day Industrial Training at Silver Touch Technologies providing exposure to industry practices in software development.
- A 15-day Industrial Training at BISAG from 16 July to 29 July 2024, where she focused on educational technology and content development.

Faculty's Participation



- **Prof. Manish Valera**

- Manisha Valera participated in a 15-day Industrial Training Programme under the Career Advancement Scheme (CAS) from 2 July to 15 July 2024 at BISAG. The programme focused on professional skill development for educators in technical fields.



- **Dr. Hemani Shah**

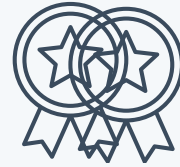
- Dr. Hemani Shah participated in a 15-day Industrial Training Programme under the Career Advancement Scheme (CAS) from 16 July to 29 July 2024 at BISAG. The programme focused on professional skill development for educators in technical fields.



- **Prof. Viral R. Patel**

- V. R. Patel completed a 15-day Industrial Training at BISAG from 2 July to 15 July 2024, gaining hands-on experience in educational technology.

Faculty's Participation



- **Ashvin Prajapati**

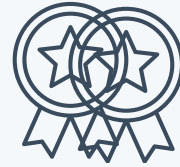
- Ashvin R. Prajapati attended a 15-day Industrial Training at BISAG from 2 July to 15 July 2024, where he gained insights into educational technology and content creation.



- **Prof. N.K.Prajapati**

- Niranjan K. Prajapati successfully completed his industrial training at Tatva Soft from 1st July 2024 to 12th July 2024, demonstrating his commitment to enhancing his professional skills in the software development industry. Additionally, he completed his industrial training at BISAG from 16th July 2024 to 29th July 2024, further expanding his expertise in the field of Information Technology and software solutions.

Faculty's Participation



- **Dr. Dhaval A. Parikh**

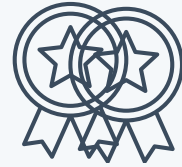
- Dr. Dhaval A. Parikh attended a 5-day Faculty Development Programme (FDP) on "Nurturing Future Leadership" from 21 October to 25 October 2024 at IIM Raipur. This programme focused on developing leadership skills necessary for guiding future leaders in various academic and professional sectors.



- **Dr. Pratik Barot**

- Dr. Pratik Barot participated in the following programs:
- A 5-day workshop on New Education Policy 2020 from 14 October to 18 October 2024 at CTE, aimed at understanding and implementing NEP 2020 in academic settings.
- A 15-day Industrial Training at Tatva Soft from 1 July to 12 July 2024, where he enhanced his skills in software development and IT solutions.
- A 15-day Industrial Training at Kalpataru from 22 July to 3 August 2024, gaining practical knowledge in the infrastructure sector.

Faculty's Participation



- **Prof. Nitin Raval**

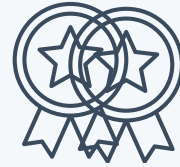
- Nitin Raval participated in a 15-day Industrial Training at BISAG from 16 July to 29 July 2024, contributing to the development of educational content.



- **Prof. D.P.Khem**

- Dhawal P. Khem completed two 15-day Industrial Training programs:
 - At Tatva Soft from 1 July to 12 July 2024, where he focused on software development.
 - At BISAG from 16 July to 29 July 2024, where he enhanced his skills in educational content creation.

Faculty's Participation



- **Prof. N.D. Shah**

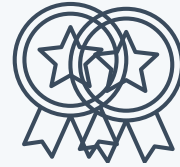
- N. D. Shah participated in two Industrial Training programs:
- A 15-day training at BISAG from 16 July to 29 July 2024, focusing on educational technology.
- A 15-day training at Kalpataru from 12 November to 25 November 2024, gaining insights into the construction and infrastructure sectors.



- **Dr. N.S. Shroff**

- Namrata Shroff completed two 15-day Industrial Training programs:
- At Kalpataru from 22 July to 3 August 2024.
- At Tatva Soft from 1 July to 12 July 2024, focusing on software development and IT solutions.

Faculty's Participation



- **Prof. B.U.Gadhia**

- Bijal Gadhia attended two 15-day Industrial Training programs:
- At Tatva Soft from 1 July to 12 July 2024, gaining experience in software development.
- At Kalpataru from 22 July to 3 August 2024.

Student's Achievement



Sanghvi Manan A. (240133107022)

Awarded the Certificate of Appreciation by Paytm Security Team for responsible security vulnerability disclosure, demonstrating exceptional commitment to cybersecurity and ethical practices in safeguarding digital platforms.

Certificate of Completion



Generative AI for Educators Certificate

Completed by Niyati Kapadiya on December 2, 2024

This certificate verifies that the learner listed has successfully completed the two-hour Generative AI for Educators course

Score: 83 Completion ID: 352900776

Kapadiya Niyati(210130107048)

Certifying for completing the Generative AI for Educators and scored:83 for approx. 2 hours.

Student's Achievement



Kashyap J. Harsora (210130107121)

Successfully completed the HP LIFE Agile Project Management course, gaining expertise in defining minimum viable products, understanding iterative and incremental development, and mastering Agile tools like Scrum and Kanban. Demonstrated capability to enhance project management and team collaboration in product development.



Jainish Prajapati((240133107018)

I earned this certificate and a badge as part of student internship by GKS - IBM SkillsBuild in Artificial Intelligence. So far, I have learned about the fundamentals of AI, its types, chatbot development using IBM platforms and tools, and different types of machine learning.

Student's Achievement



Jainish Prajapati (240133107018)

Participating in the NASA Space Apps Challenge at Nirma University, Ahmedabad, was a transformative experience for me as a Computer Engineering student. Collaborating with a diverse team, I developed machine learning models to analyze and predict solar flare energy levels and their effects, using insights extracted from the RHESSI dataset. The challenge honed my skills in data analysis, problem-solving, and teamwork, as we addressed real-world space science problems within a tight deadline. This opportunity allowed me to apply my technical knowledge in a practical setting, sparking a deeper interest in machine learning and its applications in space research.

Student's Creativity



Dhandhlya Bhavadip (210140107112)



Kapadiya Niyati (210130107048)



Pathar Hiral valjibhai(230130107105)



Abhigyan Gautam(240130107001)



(PATIL TUSHAL KISHORBHAI 240130107106)

Student's Creativity



Jahanvi Rana(230133107001)

Student's Creativity



The Whispering Tree

In a quiet village surrounded by hills, there was a giant tree known as the Whispering Tree. Legend had it that the tree could speak to those who were truly lost. Its thick branches stretched out like welcoming arms, and its leaves rustled in a way that sounded almost like words.

One day, a young girl named Mira, feeling overwhelmed with doubts about her future, wandered into the forest and sat beneath the tree. She whispered, "What should I do with my life? I feel so lost."

To her surprise, the leaves began to sway gently, though there was no wind. A soft voice seemed to emerge from the tree: "Do what makes your heart race, not what makes others applaud."

Mira was startled but felt a warmth in her chest. She realized she had always loved painting but had ignored it, thinking it wasn't practical. Inspired, she returned to the village and started painting every day. Her art soon brought joy to many, and she never felt lost again.

Years later, Mira became known as the village artist, and whenever someone felt unsure, she would tell them about the wisdom of the Whispering Tree.

Story

Patel Sujal Nileshkumar (240130107105)

The Magic Paintbrush

Once in a small village, there lived a boy named Arin who loved to paint. His family was poor, so he used sticks and mud to draw on the ground. One day, while wandering in the forest, he helped an old man carry a heavy basket. Grateful, the man gave Arin a beautiful paintbrush, saying, "This is no ordinary brush. Paint with kindness, and it will make your creations come alive."

Curious, Arin painted a bird on a tree. To his amazement, the bird flew away, chirping happily. Word spread through the village, and soon people lined up, asking him to paint food, tools, and even boats. Arin always painted for those in need.

But the village landlord heard about the brush and demanded Arin paint him a chest full of gold. Arin refused, saying the brush was meant to help, not to serve greed. Furious, the landlord locked Arin in a tower and stole the brush.

The landlord painted a golden palace, but instead of appearing, it collapsed into rubble. No matter what he painted, the brush would not work for him. Finally, defeated, he returned it to Arin.

Arin continued using the brush to help his village, but he never painted for the greedy again. His kindness spread far and wide, teaching people that generosity was the true magic.

Story

Patel Deval Jileshkumar (240130107091)

Student's Creativity

वो राते काली थी, मैं डर से मारी थी ।
बड़ी बेचैन सी थी मैं पता नहीं कौनसी बात खा रही थी ।

आखों में तूफान, हृदय में बुरी यादों का दर्द फिर भी न
जाने क्यों होठों पर चुप्पी लफ्जों से ज्यादा भारी थी ।

न मन शांत था, न तन से अच्छी थी, पता नहीं कोनसा
ज़हर मेरे भीतर प्रसर रहा था
अरे.... फिर याद आया मुझे तो हर बात पर ज्यादा सोचने
की बीमारी थी ।

लोगों ने आजमाया था, अपनो ने तोड़ा था मुझे, फिर एक
दिन आईने खुदको यू बिखरा देख ख्याल आया कि मैं कहा
कभी किसीको प्यारी थी ।

चिल्लाती रही मैं उन रातों में पर मेरी चीखें किसीने सुनी ना
थी, अकेलेपन से जुड़ा रही थी फिर भीतर से आवाज
निकली हे प्रभु, क्या तुझे भी मेरी ये दशा दिखी न थी ।

फिर खुद ही अपने सिर पर हाथ सहलाया और समझाया
खुदको की " कान " शायद तू तन्हाइयों को प्यारी थी।।

~Meravada Kanvi

Poetry

Meravada Kanvi (230130107065)

Tech Updates

July:

- CrowdStrike-related IT Outages:

On July 19, 2024, a flaw in a CrowdStrike software update caused global IT disruptions, impacting airlines, banks, businesses, schools, and governments.

- Meta Platforms Innovation:

Meta showcased a prototype of its new AR glasses, called Orion, marking a significant advancement in wearable augmented reality technology.

- US Copyright Office Report on Deepfakes:

On July 31, 2024, the US Copyright Office published a report on deepfakes, highlighting how current copyright laws are inadequate to address unauthorized digital replicas and recommending new federal legislation.

- Advancements in AI, Energy, and Medicine:

Significant progress was made in AI applications for drug development, materials science, and weather forecasting. Breakthroughs included liver cancer treatments and new materials for batteries.

Tech Updates

August:

- **Google's August 2024 Core Update:** On August 15, 2024, Google launched a significant algorithm update aimed at enhancing search result quality by prioritizing genuinely useful content and diminishing the impact of content designed solely to manipulate search rankings.
- **Waymo's Robotaxi Milestone:** In August 2024, Waymo reported providing 4 million driverless rides across Phoenix, San Francisco, and Los Angeles during the year, highlighting substantial progress in autonomous vehicle services.
- **Kroger's Facial Recognition Expansion:** American supermarket giant Kroger's plan to expand the use of facial recognition technology and dynamic pricing sparked concerns among politicians. Kroger's electronic shelving labels can adjust prices based on real-time factors like demand and inventory, raising fears of potential "price gouging."
- **Iran's Cyber Activities:** In August 2024, Microsoft reported that Iran intensified its interference in U.S. elections by launching fake news sites and conducting hacking attempts, aiming to polarize American voters by promoting extreme viewpoints.

Tech Updates

September:

- updates from September 2024:

Apple's iPhone 16 Launch: Apple unveiled the iPhone 16 series, featuring a new Camera Control button for instant access, customizable Action Button, improved battery life, and the AI-powered Genmoji for creating custom emojis.

- Meta's Orion AR Glasses Prototype: Meta showcased its first pair of augmented reality glasses, codenamed Orion, marking a significant step toward consumer AR wearables.
- Microsoft and BlackRock's AI Infrastructure Fund: Microsoft and BlackRock announced a \$30 billion fund to invest in AI infrastructure, including data centers and energy projects, with potential to reach \$100 billion with debt financing.
- Iran's Cyber Activities: U.S. authorities revealed that Iranian hackers accessed and distributed stolen information from political campaigns, aiming to disrupt the U.S. election process.

Tech Updates

October:

- updates from October 2024:

Tesla Unveils 'Cybercab' Robotaxi: In October 2024, Tesla introduced the 'Cybercab,' its first fully autonomous robotaxi, marking a significant advancement in self-driving vehicle technology.

- Google's Investment in Nuclear Power: Google joined other major tech companies in investing in nuclear power, aiming to support the growing energy demands of AI and data centers.
- Microsoft Copilot Enhancements: On October 1, 2024, Microsoft announced major updates to its AI assistant, Copilot, including new features like Copilot Voice and the launch of Copilot Labs, enhancing user interaction and productivity.
- AI's Role in Modern Warfare: Reports in October 2024 highlighted Israel's use of AI in military operations in Gaza, raising discussions about the ethical implications and future role of AI in warfare

Tech Updates

November:

- updates from November 2024: Huawei Launches Mate 70 Series: On November 26, 2024, Huawei introduced the Mate 70 series in China, aiming to challenge Apple's iPhone with advanced technology and competitive pricing.
- Tech Industry Layoffs Continue: Throughout November 2024, the tech industry experienced significant layoffs, with approximately 5,925 employees affected. Major companies, including Meta, ExxonMobil, and Boeing, implemented staff reductions due to various factors such as AI adoption and cost-cutting measures.
- Big Tech's Investment in AI Surges: In November 2024, reports indicated that major technology companies, including Microsoft, Amazon, and Alphabet, significantly increased their investments in artificial intelligence, with spending projected to surpass \$240 billion for the year. This surge underscores AI's growing importance in their strategic initiatives.

Tech Updates

December:

- updates from December 2024: Instagram Announces AI-Powered 'Movie Gen' Feature: Instagram revealed plans to introduce 'Movie Gen,' a generative AI tool that enables users to create deepfake videos by altering settings, outfits, and more within their content. This announcement has sparked concerns about the potential for increased misinformation and the ethical implications of such technology.
- American Airlines Faces Technical Glitch Leading to Delays: On December 24, 2024, American Airlines experienced significant flight delays due to a technical issue related to a network hardware problem with a vendor, DXC Technology. The issue was resolved within an hour, but it caused a ripple effect throughout the day, delaying over 40% of its flights.
- OpenAI Releases Text-to-Video Model 'Sora': OpenAI launched 'Sora,' a text-to-video model available for ChatGPT Plus and Pro users. This advancement allows users to generate videos from textual descriptions, marking a significant step forward in AI-generated content capabilities.

Events

Alumni meet



Events

Alumni meet

- The Department of Computer Engineering and Information Technology organized an alumni meeting on October 5, 2024, in Room 5001. The event began with a prayer by Prof. Anamika Mittal, followed by two minutes of silence in memory of late Shri Dainik M. Hirani, a final-year IT student. Dr. D. A. Parikh, HOD of CE/IT, welcomed the gathering and shared the Vision and Mission statements of the institute and department.
- The program, hosted by Abhay Chauhan (5th IT) and his team, saw participation from over 107 alumni, students, and faculty. Attendees reminisced about their time at the institute, with many alumni volunteering to support current students. The event was both enjoyable and insightful, fostering connections between generations of students.
- Prof. Dhawal Khem expressed heartfelt thanks to the Principal, Activity Head, HOD, faculty, staff, and alumni for making the event a success. The meeting provided an invaluable opportunity for freshers to interact with experienced alumni, gaining guidance for their future endeavors. It was a memorable and inspiring event, with anticipation for the next alumni meet.

Events

Industrial Visit To Madhur Dairy



- Industrial Visit of 20 Students of Computer Engineering with 2 Faculties from Government Engineering College, Gandhinagar have visited Madhur dairy Plant and they have been briefed about different product and work done there by in charge MD - Dr. Avani Rao and Safety manager Abhishek Zala. They describe how collecting of raw milk is done and how they are making different products and things they have to manage for cleanness of the plant without stopping the work. This visit is coordinated by Dr. Pinal Patel, and Prof. Viral Patel

Events

Industrial Visit to Kalptaru



- Industrial Visit of 28 students of Computer Engineering with 3 faculties from Government Engineering College, Gandhinagar have visited Kalptaru, Gandhinagar. They have been briefed about recent IT technologies that are being used in IT industries with their applications by Mr. Titus Pappachan along with Mr. Abhinav Patel. They also have visited manufacturing plant at Sector 28, Gandhinagar. We extend our thanks to Mr. Pareshbhai Mistry for his cooperation and support. This visit is coordinated by Dr. Pinal Patel, Dr. Hemani Shah and Prof. Nrupesh Shah.

Activities

Quiz Competition on Veer Baal Diwas

We are delighted to share the success of a special quiz competition on Veer Baal Diwas, held on Tuesday, December 26, at GEC Gandhinagar under the guidance of Prof. Manisha Valera. This event was dedicated to honoring the extraordinary bravery and sacrifice of Guru Gobind Singh Ji's Sahibzadas, highlighting their unwavering courage and righteousness.

The quiz provided an opportunity to inspire participants by showcasing the values exemplified by the Sahibzadas while deepening their understanding of their remarkable contributions to history. The event fostered a spirit of learning and reflection on these heroic figures' unparalleled legacy.

The competition received an enthusiastic response, with 180 entries from students across various departments at GEC Gandhinagar:

Civil Engineering: 19

Computer Engineering: 42

Electrical Engineering: 79

Instrumentation & Control: 3

Metallurgy: 7

Robotics : 30

This educational and engaging activity brought the GEC Gandhinagar community together to pay tribute to the Sahibzadas and their extraordinary sacrifices. It was a fitting way to honor their legacy while inspiring students with their values of courage, resilience, and righteousness.

We extend our heartfelt gratitude to all participants and contributors who made this event a memorable success.

Head of the Department



Dr. Dhaval Parikh
Head of C.E. Department

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*Thank
You*