



Jain College of Engineering and Research
Udyambag, Belagavi-590008



IEEE

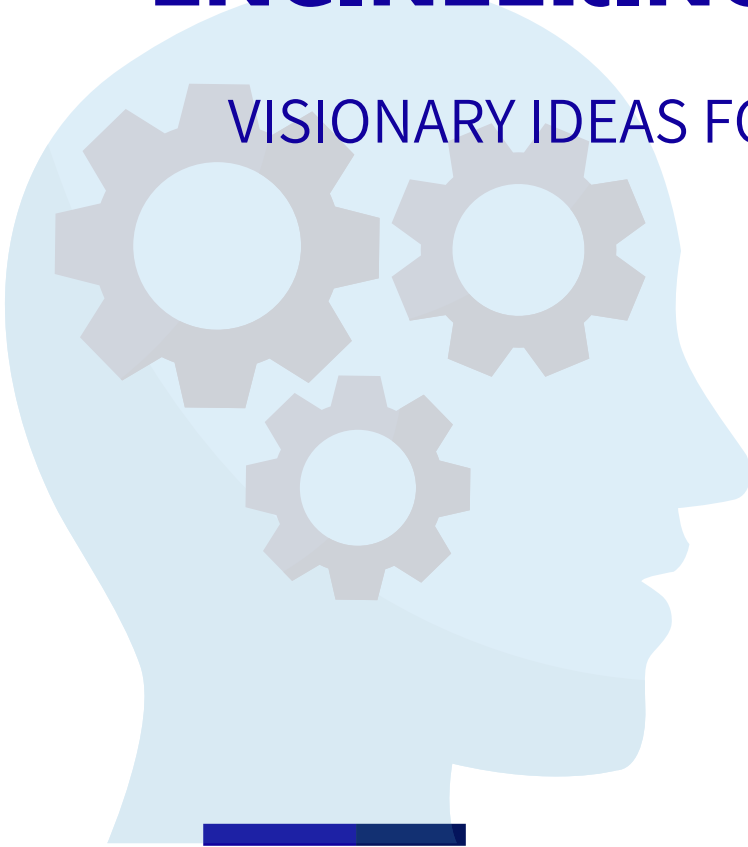


IEEE
BANGALORE SECTION

JCER IEEE Student Branch (STB60208149)

ENGINEERING TOMORROW

VISIONARY IDEAS FOR A BETTER WORLD.



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Advancing Global Technology, The Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional organization, dedicated to advancing technology for the benefit of humanity. With over 460,000 members in 190 countries, including 171,000 student members, IEEE fosters innovation, collaboration, and education worldwide. IEEE's global reach includes 344 sections, 2,700 chapters, and 3,635 student branches at universities across more than 100 countries.

Additionally, 639 affinity groups promote inclusivity through initiatives like Young Professionals (YP), Women in Engineering (WIE), and others. Leading in technological advancements, IEEE hosts 39 technical societies and eight technical councils covering fields like electrical engineering and telecommunications. Its Xplore® Digital Library contains over 6 million documents, making IEEE a leading publisher in technical literature, contributing nearly a third of global content in electrical engineering, computing, and electronics. IEEE invests significantly in education, donations, and scholarships to support students and promote sustainability in engineering and technology.

IEEE offers various scholarships, totaling over \$1 million annually, to support students pursuing degrees in engineering and related fields.

These scholarships are aimed at both undergraduate and graduate students, helping to alleviate financial burdens and encourage academic excellence.

IEEE invests in educational initiatives, including funding for workshops, conferences, and training programs. These programs often focus on enhancing teaching methods and providing resources for educators to improve the quality of engineering education.

IEEE Foundation supports various educational projects and initiatives through donations. They focus on funding programs that promote STEM education, particularly in underserved communities, and initiatives that foster innovation and research

IEEE is committed to sustainability in education and technology. Their initiatives include promoting sustainable engineering practices and encouraging research in renewable energy and environmental technologies.

They also have special interest groups focused on sustainability, which work on projects that address global challenges.

Global initiatives, like "IEEE Smart Village," aim to provide access to education and technology in remote areas, further emphasizing their commitment to sustainable development and education.

Overall, IEEE's investments in education, scholarships, and sustainability reflect their dedication to fostering innovation and supporting the next generation of engineers and technology.

IEEE is also pivotal in setting international standards, with 1,144 standards and 1,018 ongoing projects, including the renowned IEEE 802® standards for Ethernet and Wi-Fi®. Annually, IEEE sponsors 2,000+ conferences, adding over 200,000 papers to its collection, fostering knowledge exchange and innovation globally.

In short, IEEE plays a critical role in advancing global technology through its research, education, and standardization efforts, empowering professionals and students to shape the future.

IEEE invests significantly in education, donations, and scholarships to support students and promote sustainability in engineering and technology.





IEEE NKSS has been actively functional in rejuvenating dormant IEEE student branches as well as starting New IEEE student branches. In last 2 year period, NKSS has started new IEEE student branches in IIIT Dharwad, VNIT Shorapur, SLNCE Raichur, SharanaBasava University Kalburgi and KBN University Kalburgi. NKSS has also initiated start of student branch chapters – IEEE PES Student chapters in GIT Belagavi and KLEIT Hubballi, IEEE AESS student chapter in, IEEE ITS student chapter in GNDEC Kalburgi and , IEEE MTS Student Chapter in , IEEE Computer Society Student Chapter in GIT Belagavi. Apart from this, NKSS has encouraged organization of Seminars, Webinars, Technical workshops and Industry visits for IEEE student members of the region.

The first AGM of IEEE NKSS was held online in the month of Jan 2022. The new office bearers of NKSS took charge under the chairmanship of Dr. B. S. Anami in Jan 2022. The beginning has been highly encouraging with enthusiasm and vigor in the hearts of North Karnataka IEEE members organizing conferences, events, symposiums, workshops and seminars for teaching fraternity, students as well as industry personnel

North Karnataka Subsection of IEEE is a part of the larger IEEE organization that aims to promote the advancement of technology and engineering in the region.

1. Activities: The North Karnataka Subsection organizes various events, workshops, and seminars to foster knowledge sharing and networking among professionals, students, and academicians.

2. Membership: Individuals can become members of the IEEE North Karnataka Subsection to gain access to resources, publications, and opportunities for professional development.

3. Scholarships and Awards: They often provide scholarships and awards to support students in engineering and technology, encouraging them to participate in IEEE activities.

4. Networking Opportunities: The subsection provides a platform for members to connect with industry professionals, researchers, and fellow students, enhancing collaboration and innovation



Our goal is to facilitate the recruitment and retention of women in technical disciplines globally. We envision a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity.

IEEE WIE Strives To

- Provide assistance with the formation of new IEEE WIE Affinity Groups and support ongoing activities.
- Recognize the outstanding achievements of women in electrical and electronics engineering through IEEE Awards nominations.
- Organize workshops at major technical conferences to enhance networking and to promote membership in IEEE WIE.
- Advocate women in leadership roles in IEEE governance and career advancement for women in the profession.
- Promote member grade advancement for women to the IEEE membership grades of Senior Member and Fellow.
- Facilitate the development of programs and activities that promote the entry into, and retention of, women in engineering programs.
- Administer the IEEE Student-Teacher and ResearchEngineer/Scientist(STAR) Program to mentor young women in junior high and high schools.

The IEEE Women in Engineering International Scholarship was established thanks to the support of donations to the IEEE Foundation Women in Engineering (WIE) Fund from IEEE WIE members and others.

The scholarship is presented to up to one female IEEE WIE Student Member who has completed two years of undergraduate study in an engineering curriculum at an accredited university or college.

IEEE Women in Engineering (WIE) is a global network of IEEE members and volunteers dedicated to promoting women engineers and scientists and inspiring girls around the world to follow their academic interests in a career in engineering and science.

The WIE Mission

To connect, support, and inspire women and girls worldwide, and facilitate their recruitment and retention in STEM fields, fostering technological innovation and excellence for the benefit of humanity.

The WIE Vision

To be globally recognized for its contributions to improving diversity, equity, and inclusion in STEM fields

List of scholarship by the WIE :-

About The IEEE Frances B. Hugle Scholarship

The IEEE Frances B. Hugle Scholarship was established to honor the memory of Frances B. Hugle, her many significant engineering accomplishments, and to help provide the resources for female engineers to follow in her footsteps. The scholarship is presented to up to two female IEEE Student Members who have completed two years of undergraduate study in an ABET-accredited engineering program at a university or college within the United States.

This scholarship is made possible by the Frances B. Hugle Scholarship Fund of the IEEE Foundation.

Edith Hannigan McHale Scholarship

The Edith Hannigan McHale Scholarship may be awarded annually to a female student at John Adams High School, Long Island, New York, USA, who has enrolled in a major/program of study in a field of engineering, Physics, or math at an accredited four-year college or university.

This scholarship is made possible by the Edith Hannigan McHale Scholarship Fund of the IEEE Foundation



With a global network of leading power and electrical engineers, academia and industry professionals from all areas of power and energy, the IEEE Power & Energy Society (PES) sets the standard for engagement, education, and development as the premier provider of scientific and engineering information on electric power and energy.

Through PES events, programs, and publications, and by bringing together power and electrical engineers at every phase of their career for conversation and collaboration, IEEE PES empowers, develops, and guides the future of our members and the industry for the betterment of society

The Power & Energy Society (PES) provides the world's largest forum for sharing the latest in technological developments in the electric power industry, for developing standards that guide the development and construction of equipment and systems, and for educating members of the industry and the general public. Members of the Power & Energy Society are leaders in this field, and they — and their employers — derive substantial benefits from involvement with this unique and outstanding association. IEEE PES offers a leading portfolio of live and on-demand educational products led by a network of skilled industry professionals for the professional growth and development of power and engineering associates.

A recognized educational leader in the field of power engineering, IEEE PES University provides access to knowledge and learning platforms that offer members and nonmembers opportunities for professional growth and development through an extensive array of credit-earning programs.

Led by a network of skilled professionals with widespread knowledge of the power and energy industry who volunteer their time to our enterprise, the University works closely with IEEE to gather and publish industry-related education in the form of webinars, in-person and virtual tutorials, and other learning programs from power and energy professionals around the world



IEEE Information Theory Society

The IEEE Information Theory Society is the premier professional society dedicated to the advancement of the mathematical underpinnings of information technology for the benefit of humanity. Information theory encompasses the processing, transmission, storage, and use of information, and the foundations of the communication process.

Vision is to be the pre-eminent community developing the mathematical underpinnings of information technology for the benefit of humanity.

Mission is to support the open exchange of ideas in information theory, broadly construed, through publications, communications, meetings, outreach, education, mentoring, and recognition of excellence.

SCHOLARSHIP

Information Theory encompasses the processing, transmission, storage, and use of information, and the foundations of the communication process. It specifically encompasses theoretical and certain applied aspects of coding, communications and communications networks, complexity and cryptography, detection and estimation, learning, Shannon Theory, and stochastic processes.

The Information Theory Society, which is a part of the Institute of Electrical and Electronics Engineers (IEEE), offers various scholarships and awards aimed at promoting research and education in the field of information theory.

Here are some key points regarding scholarship information related to the society:

1. Scholarships and Grants: The Information Theory Society provides several scholarships and grants for students and researchers working in information theory. These may include travel grants for attending conferences or workshops, as well as research grants for specific projects.

2. Awards for Students: The society also presents awards to recognize outstanding contributions by students in the field. This can include best paper awards at conferences, which often come with a monetary prize or scholarship.

3. Membership Benefits: Becoming a member of the IEEE Information Theory Society can provide access to resources, networking opportunities, and information about scholarships and funding available for students and researchers.

4. Conferences and Workshops: Attending conferences organized by the Information Theory Society can also be a way to access scholarship opportunities, as many conferences offer travel grants or student registration discounts.

5. Research Opportunities: The society encourages research in information theory, and many universities and institutions may have funding or scholarships available for students who are involved in related research projects.



75 YEARS



The IEEE Circuits and Systems Society is the leading organization that promotes the advancement of the theory, analysis, design, tools, and implementation of circuits and systems.

The field spans their theoretical foundations, applications, and architectures, as well as circuits and systems implementation of algorithms for signal and information processing.

The Society brings engineers, researchers, scientists and others involved in circuits and systems applications access to the industry's most essential technical information, networking opportunities, career development tools and many other exclusive benefits.

Local members with similar technical interests engage in professional exchange through the Society's 10 regional chapters in the United States, Canada, Europe, the Middle East, Africa, Latin America, Asia, Australia.

To foster technological innovation and excellence in fundamentals, emerging directions and application of circuits and systems for the benefit of humanity through an interdisciplinary community

To advance and promote Circuits and Systems knowledge framed in interdisciplinarity to be essential to the global and diverse technical community and be universally recognized for providing and leading solutions to the United Nations' Sustainable Development Goals

SCHOLARSHIP:-

IEEE Circuits and Systems Society offers various scholarships and awards to support students and professionals in the field of circuits and systems. These scholarships aim to encourage research, innovation, and education in this area.

1. Student Paper Awards: Recognizing outstanding student papers presented at conferences.

2. Travel Grants: Assisting students in attending conferences or workshops.

3. Research Grants: Funding for specific research projects related to circuits and systems

Dr. Virupaxi B. Dalal

Branch Counselor, JCER IEEE SB



“In my 4 years of experience at Jain College of Engineering and Research, I have acknowledged that our prestigious institute is strengthened by our students. The students have fueled the journey of our institute to achieve incredible milestones. As guided by Respected Principal sir, it is in our best interest to establish a student centric organization, formed by the students, for the students of JCER. Through out these year we have witnessed several creative, ambitious and passionate students that had the potential to achieve much more. Establishment of JCER IEEE Student Branch will ensure that such talent is channeled and students are provided with a platform to explore and showcase themselves to the fullest. Through JCER IEEE Student Branch we aim to create an ecosystem of equal opportunities to learn and grow for all students.”

PROFESSIONAL MEMBERS



Prof. Chaitanya K. J.



Prof. Govind M. R.

Mr. Yash Mane

Chair, JCER IEEE SB



“It is my immense pleasure to be elected as the first chair of JCER IEEE Student Branch. As a student of JCER, I see great potential in all the students here that are hardworking, dedicated, and passionate about their technical career. I strongly believe that as aspiring engineers we all have responsibility towards each other. This is the fundamental reason to have a student centric organization, operated by the students, dedicated towards the students. Establishment of JCER IEEE SB has ensured that the interests and needs of the students are considered to fuel their professional careers. JCER IEEE SB creates opportunities for students to develop these relevant skills and nurture them. We have ensured that students of JCER are exposed to new challenges and experiences that are more prevalent and valued in the industry. We aim to create an environment that will motivate every student to be a better version of themselves. So far the JCER IEEE SB has successfully inculcated confidence, professionalism, technical skills and ethics through various initiatives. This platform is a bridge between students of various technical backgrounds to connect, collaborate and learn. . In the days ahead, IEEE SB will be a significant contributor towards the development of students and the institute. I’m grateful to our respected branch counselor for providing me this opportunity to lead the change and pave the way towards development.”

OFFICE BEARERS



Ms. Pratiksha Patil
Vice Chair



Ms. Kumuda R
Treasurer



Ms. Siddita Varma
WIE



Mr. Arihant Angolkar
Secretary

A New Era Begins: The Launch of IEEE JCER Student Branch.



In a world where technology is rapidly advancing, staying ahead requires more than just theoretical knowledge, it demands innovation and practical experience. The inauguration of the IEEE Student Branch at JCER signifies a major step forward in this regard. This inauguration represents more than just a formal event, it establishes a dynamic environment where students are encouraged to explore, experiment, and grow.

Bridging the Gap Between Knowledge and Practice:

In today's educational environment, students often gain extensive theoretical knowledge through their coursework but find it challenging to translate this knowledge into practical skills. By creating this platform, the IEEE Student Branch aimed to enrich the student's academic experience beyond the classroom. While understanding concepts is crucial, the ability to apply them in real-world scenarios is equally important for career success. The IEEE Student Branch inauguration was designed to address this critical gap by providing a dedicated platform where students can actively engage in hands-on learning and real-world applications.



The Cost of the Gap:

When students lack opportunities to apply their theoretical knowledge in practical settings, they often face several significant challenges. First, without hands-on experience, they may struggle to understand how academic concepts translate into real-world applications. This disconnect can lead to difficulties in solving practical problems, which is crucial in any professional field. For instance, a student who excels in theoretical coursework but lacks practical skills might find it hard to develop or implement innovative solutions in a work environment.

Transforming Vision into Reality: The Event and Its Justification

The inauguration of the JCER IEEE Student Branch was a significant and celebratory occasion, marking the official launch of a dedicated platform for students to immerse themselves in technology and engineering. The event was highlighted by the formal assignment of key roles within the branch, setting the stage for a structured and dynamic leadership team.

Yash Mane was appointed as the Chair, overseeing the branch's activities and strategic direction. Pratiksha Patil was designated as the Vice Chair, supporting the Chair and managing various initiatives. Arihant Angolkar took on the role of Secretary, responsible for keeping records and facilitating communication. Kumuda R was named Treasurer, managing the branch's finances, while Siddita Varma was appointed to lead the Women in Engineering (WiE) initiatives, focusing on promoting gender diversity within the field. Additionally, new members were welcomed to the JCER IEEE Student Branch, expanding the team and enhancing its collective strength.

Our dynamic Principal Dr. S.V. Gorbhal Sir made sure the branch could start by providing the needed support and resources. His help was crucial for the success of the event and the branch. The Branch Counselor being Dr. Virupaxi Sir also played an important role in the inauguration. His guidance and support helped shape the branch's goals and activities. His encouragement inspired students to actively participate in the IEEE community and make the most of the opportunities available. The combined support was crucial in making the IEEE Student Branch inauguration a success and ensuring it will benefit students for a long time. The combined support of Principal Dr. S.V. Gorbhal Sir and Branch Counselor Dr. Virupaxi Dalal Sir was crucial in making the IEEE Student Branch inauguration a success and ensuring it will benefit students for a long time.



Inside the Launch: An IEEE Member's View

As an IEEE member, I was thrilled to see the JCER IEEE Student Branch open. It was an exciting event that officially started a new group for students interested in technology and engineering. The ceremony included lively speeches that showed how special the branch will be. It marked the beginning of a new opportunity for students to dive deeper into their interests. As we will get to work on real projects, learn from experts, and gain valuable skills for our careers. Watching the branch open was inspiring because it means we now have a place to grow, learn, and connect with others who have similar passions. This event kicked off a journey full of new chances and challenges for everyone involved.

Opening Doors to Innovation:

The inauguration of the JCER IEEE Student Branch was a significant and inspiring event, marking the beginning of a valuable new opportunity for students. It officially set up a platform where students can actively engage with technology, work on practical projects, and build connections with industry professionals. This event not only celebrated the start of the branch but also highlighted the commitment to providing students with the resources and experiences they need to succeed. As we move forward, the branch promises to be a dynamic hub for learning and innovation, offering countless chances for personal and professional growth.

The inauguration was a significant step in establishing a strong foundation for the JCER IEEE Student Branch. By appointing specific individuals to these key positions, the event ensured that the branch would be led by a capable and dedicated team. The event marked the beginning of an organized effort to engage with the IEEE community, providing students with opportunities to grow professionally and personally. This structured approach will help the branch achieve its mission of fostering innovation and excellence within the engineering community at JCER.



ANNUAL GENERAL MEET

Welcome to the Future: IEEE NKSS Annual General Meet at Jain College of Engineering and Research

INTRODUCTION

In a world where technology drives our everyday lives and shapes the future, staying at the cutting edge of innovation is more crucial than ever. And what better proof than this past IEEE NKSS Annual General Meet, Imagine bringing together a dynamic mix of scholars, professional members, student branches, and professors at your very own Jain College of Engineering and Research (JCER). This AGM wasn't just an event especially for IEEE JCER Student Branch.

We wish all of you could have attended the IEEE NKSS Annual General Meet, but no worries because in this blog we will delve into every little detail about the event not only that but also the turn of events that made it such a magnificent occasion. The road was sure challenging, but we navigated it successfully, leaving absolutely no crumbs

SPECIAL THANKS TO DR. VIRUPAXI DALAL (BRANCH COUNSELOR)

We would like to extend our heartfelt gratitude to Dr. Virupaxi Dalal, our esteemed Branch Counselor, whose exceptional efforts have been instrumental in our journey. It is thanks to his dedication and unwavering support that we were not only able to establish our branch but also given the honor of hosting the Annual General Meeting (AGM)

His guidance and advocacy played a crucial role in our successful participation in this pivotal event. His belief in our potential and his commitment to fostering new talent in the field of technology have been truly inspiring. We are deeply appreciative of his efforts and the opportunity he has provided us to be part of such a significant gathering, despite our recent inception.

Thank you, Sir, for your invaluable support and for helping us make the most of this remarkable opportunity.



OUR AIM

To explore and elucidate the applications of Artificial Intelligence (AI) in the field of medical mechanics, AND how AI technologies can advance medical diagnostics, treatment, and patient care.

Understand AI Integration: Explain how AI technologies are integrated into medical mechanics and their impact on healthcare.

Explore Applications: Discuss specific applications of AI in medical diagnostics, treatment planning, and patient management

Highlight Innovations: Showcase recent advancements and innovations in AI-driven medical devices and systems.



Details of the event:

TECHNICAL TALK

- Date and Time: 25th May 2024
- Venue: Dr. A.P.J Abdul Kalam, seminar hall.
- Speaker: Dr. Mohammad Faizal Bin Ahmad Fauzi.
- Affiliation: Malaysia

Description from organizers point of view.

- **Increased Knowledge:** Attendees will gain a deeper understanding of how AI is applied in medical mechanics.
- **Showcased the latest advancements in AI and medical technology,** contributing to their professional growth.
- **Networking Opportunities:** Provides a platform for IEEE members to engage with a leading expert .



WHY THE NEED?



One of the primary issues is the thin breadth and depth of technological fields. Students often find themselves overwhelmed by the vast number of emerging technologies and specialized areas within tech. This can lead to confusion about where to focus their efforts and how to prioritize their learning. For instance, the rapid advancements in fields like artificial intelligence, blockchain, and quantum computing can create a sense of information overload, making it difficult for students to discern which areas will be most relevant or beneficial for their future careers.

Technology is advancing at a breakneck pace, and with it comes to need for constant learning, collaboration, and innovation what better example than the IEEE NKSS Annual General Meet itself , specially designed to address this need by creating a platform for tech enthusiasts to exchange cutting edge ideas and explore new horizons.

This event was more than just a meeting, it was a pivotal moment for fostering collaboration and sparking discussions that transcended boundaries. Additionally, students frequently find themselves fighting with the challenge of staying current with the latest developments.

. Technology evolves so quickly that by the time students learn about one innovation, new advancements may have already occurred. This dynamic landscape can contribute to a feeling of falling behind or not mastering the latest tools and techniques. Another significant challenge is the integration of theoretical knowledge with practical skills.

While academic programs provide a strong foundation, students often struggle with applying their learning in real-world scenarios. Bridging the gap between theory and practice can be daunting, especially when they face the rapidly shifting demands of the tech industry

AGM: Finding the Answers

As technology evolves, so do the challenges that accompany its advancements. Keeping pace with these rapid changes demands far more than just technical knowledge—it requires a robust collaborative spirit and a steadfast commitment to continuous learning. The IEEE NKSS Annual General Meet was meticulously designed to address these evolving challenges by creating a dynamic platform where members could come together to explore and discuss innovative solutions.

This event served as a catalyst for driving the tech community forward, fostering an environment where ideas could be exchanged freely and creative solutions could be developed. By bringing together a diverse group of tech enthusiasts, professionals, and students, the AGM facilitated meaningful conversations that transcended traditional boundaries. Attendees had the opportunity to engage in thought-provoking discussions, and collaborate on strategies to navigate the complexities of modern technology.

Moreover, the AGM highlighted the importance of staying in line of emerging trends and adapting to new technological paradigms. It emphasized that progress in technology is not merely about keeping up with the latest advancements but also about leveraging collective knowledge and expertise to address the multifaceted challenges that arise. The collaborative nature of the event underscored the value of partnerships and networking in driving innovation and finding effective solutions. In essence, the IEEE NKSS Annual General Meet exemplified how a collective approach to problem solving and continuous learning can propel the technology sector forward.





Event Description

The IEEE NKSS Annual General Meet was a multifaceted event featuring keynote addresses from industry leaders, technical workshops, panel discussions, and networking opportunities. The agenda was meticulously designed to offer both breadth and depth, covering a wide array of topics that appealed to scholars, professionals, and students alike.

Key highlights included sessions on emerging technologies such as AI, blockchain, and data science, hands-on workshops for skill-building, and thought-provoking panel discussions that challenged attendees to think critically about the future of technology. The event not only allowed participants to learn from experts but also facilitated networking and collaboration, helping students connect with mentors and professionals in their field of interest.

Through a balanced blend of technical sessions, discussions on real-world applications, and networking opportunities, the AGM exemplified how technology and education can come together to shape a better, more innovative future.



It reaffirmed the notion that by working together and remaining engaged with ongoing developments, the tech community can effectively tackle the challenges of today and tomorrow.

Welcome to JCER IEEE, where innovation meets education. Let's shape the future together

Hear from the Organizers: Vision and Event Description

The IEEE NKSS Annual General Meet at Jain College of Engineering and Research (JCER) was a proud moment for the organizing team. Their goal was to create an impactful experience that fostered collaboration, innovation, and inspiration. The organizers, comprising dedicated faculty and students, worked relentlessly to bring together a diverse mix of industry experts, scholars, professors, and student enthusiasts. Their collective vision was to establish the AGM as a platform where technological curiosity could thrive and participants could gain insight into emerging trends.

Speaking about the event, the organizers emphasized how it provided students and attendees a unique opportunity to engage with thought leaders, gain hands-on experience, and broaden their technological horizons. The success of the event was a reflection of the hard work, determination, and shared passion for advancing knowledge in the tech field.

Vision

The primary vision behind the IEEE NKSS Annual General Meet was to create a dynamic and inclusive platform where professionals, scholars, and students could gather to explore, discuss, and innovate at the intersection of modern technology. The event was driven by the belief that collaboration and continuous learning are essential for tackling the complexities of today's fast-evolving technological landscape.

With advancements in fields like artificial intelligence, blockchain, and quantum computing, the AGM aimed to equip attendees with both the knowledge and the network necessary to thrive in an ever-changing world. By fostering a space for open dialogue, exchange of ideas, and mentorship, the event sought to empower participants to become the next generation of leaders in technology.

Prakashan



In the rapidly evolving world of technology, innovation and adaptability are the cornerstones of success. For first-year engineering students, the transition from theoretical concepts to practical applications can often be daunting. PRAKASHAN, an in-house technical exhibition organized by the JCER IEEE Student Branch, addresses this challenge by providing a platform where students can transform classroom learning into real-world projects.

Prakashan, conducted on December 30, 2023, offered first-year students from various engineering disciplines the opportunity to collaborate and develop projects that showcased their talents. Teams consisted of 4-5 members. Each team was assigned a senior Student of the Student Branch, which helped the participants towards the implementation of their projects. These teams worked on projects ranging from robotics and renewable energy models to advanced communication systems and software solutions.

Why Prakashan?

The key aim of Prakashan was to empower students through a hands-on learning experience, allowing them to demonstrate their skills and creativity, which provided students a platform to present their innovative projects and technical solution, inspire students to think creatively and contribute to the world of technology through novel ideas, promote knowledge sharing among students, faculty, and industry professionals, give students practical experience and expose them to the challenges of applying theoretical concepts to real-world problems. It aims to familiarize students with the agile approach in industries, including the professional teamwork and project management practices



WINNERS OF PRAKASHAN



Prakashan was more than just an exhibition—it was a learning experience that empowered students to think critically, work collaboratively, and apply their knowledge in practical ways. The event successfully bridged the gap between academic learning and real-world applications, helping students develop the skills and confidence needed for future success. The projects and teamwork showcased at Prakashan have inspired participants and attendees alike, proving that hands-on learning is essential in shaping the engineers and innovators of tomorrow. This event will serve as a stepping stone for students, encouraging them to continue exploring and pushing the boundaries of technology.

AMBASSADORS' SUMMIT 2024

A CELEBRATION OF DIPLOMACY, STRATEGY, AND TEAMWORK



CHIEF GUEST AND JUDGE

In the academic calendar of our college, few events generate as much excitement and intellectual energy as the annual **Ambassadors' Summit**. As the debut edition of the event, held in the college auditorium over the day, exceeded all expectations, drawing participants from various departments and pushing the boundaries of diplomacy, negotiation, and global strategy.



JURY MEMBERS

Students need learn the art of compromise, persuasion, and consensus-building, skills that are crucial in both diplomatic and business careers. The summit challenges students to address and resolve international disputes through peaceful means, a lesson that cannot be taught solely through textbooks. Without the summit, these practical learning experiences would be severely diminished, leaving students less prepared for careers in international relations, politics, or even corporate leadership, where negotiation is a key competency.

The event, a simulation of global diplomacy, brings students together to represent countries, crafting policies and negotiating solutions on real-world issues. It is a platform where knowledge, critical thinking, and persuasive communication met in a high-stakes environment. Each team, representing a different country, was tasked with defending national interests while finding common ground with other nations. The goal was simple: to negotiate the best outcomes for their country, all while upholding the principles of diplomacy and international cooperation, depicted by the students to the best of their ability.

A Clash of Titans: The Competition Unfolds

This year's summit saw an impressive array of talent, with students passionately representing countries like the *North Korea, Russia, China, Iran, and many more*. From the moment the opening speeches began, it was clear that this would be no ordinary competition. Every team was prepared, each having researched their respective country's stance on global issues, such as climate change, nuclear disarmament, human rights, and economic sanctions.

The first few rounds were filled with intense back-and-forth negotiations. Teams engaged in heated debates over pressing global concerns, all while maintaining the diplomatic decorum required in international negotiations. The complexity of the challenges ensured that only the best-prepared teams would be up for the competition, where they would be compelled to give their best.

As the summit progressed, it became evident that some teams were emerging as clear contenders. Among these, **Team North Korea** stood out for their tactful navigation of global tensions and their creative solutions to diplomatic challenges. Along with them, the competition stood strong with **Team Russia** and **Team China**, pushing their arguments further

As the summit progressed, it became evident that some teams were emerging as clear contenders. Among these, Team North Korea stood out for their tactful navigation of global tensions and their creative solutions to diplomatic challenges. Along with them, the competition stood strong with Team Russia and Team China, pushing their arguments further.



Team North Korea:

A Diplomatic Masterclass

The summit culminated in a dramatic final session, where **Team North Korea** demonstrated an extraordinary mastery of diplomacy. They were confronted with a scenario involving the limitations of life appended its Citizen and the geopolitical tensions in Asia. Their approach was both pragmatic and nuanced, balancing national interests with the broader goal of global peace.

Team North Korea strategically positioned themselves as advocates of peace and stability in the region, while subtly defending it's right to national sovereignty and self-defense. Their ability to articulate North Korea's position on nuclear energy while defusing international concerns was a masterclass in diplomacy.

Not only did they manage to win the support of key allies, but they also succeeded in persuading former adversaries to come to the negotiation table. By the end of the summit, Team North Korea had built a robust coalition that ensured their victory. Their seamless coordination, persuasive speeches, and ability to anticipate the moves of other teams secured them the top spot in this year's Ambassadors Summit.



A Learning Experience for All

While *Team North Korea* took home the ultimate prize, every participant left the Ambassadors Summit with invaluable experience. The event was more than just a competition—it was a learning opportunity that allowed students to hone critical soft skills. Participants practiced public speaking, learned how to craft compelling arguments, and gained hands-on experience in conflict resolution and negotiation.

The summit also offered a chance for students to immerse themselves in real-world issues, from the intricacies of international trade to the challenges of climate diplomacy. By stepping into the shoes of global leaders, students gained a better understanding of the complexities of international relations and the importance of diplomacy in resolving conflicts.

The event ended with a closing ceremony where all teams were acknowledged for their efforts. The atmosphere was one of camaraderie and mutual respect, as participants exchanged congratulations and reflected on the lessons learned throughout the competition.

Student's Opinion

It is important to take into account, the participant feedback about their experience. The following words are expressed as opinion by **Sunaina Masaguppi**, who is a **member of Team Russia**, **Third place winners of the Event**.

"The event was basically based on international topic that is discussing about the global issues related to different countries, this mainly helped us to gain lot of information about the country, which was assigned to us. Firstly, here we collected lot of information about the country, then we choose the problem statements, we then assigned to the individuals of a group then started working on it. While considering the problem statements we interacted among ourselves so here we gain a skill of group discussion then we wrote the manifesto which had collective information about the country along with the current affairs. then lastly, the main thing we learned here is stage courage in which were lagging but we overcame the fear of facing the crowd and triumphed over our hesitant selves".

She also added ,

"IEEE is one of the best platforms for showcasing your talent and helps to accommodate knowledge of the global issues, group discussion and stage courage and, so on."



Arduino Odyssey - Arduino and IoT Workshop

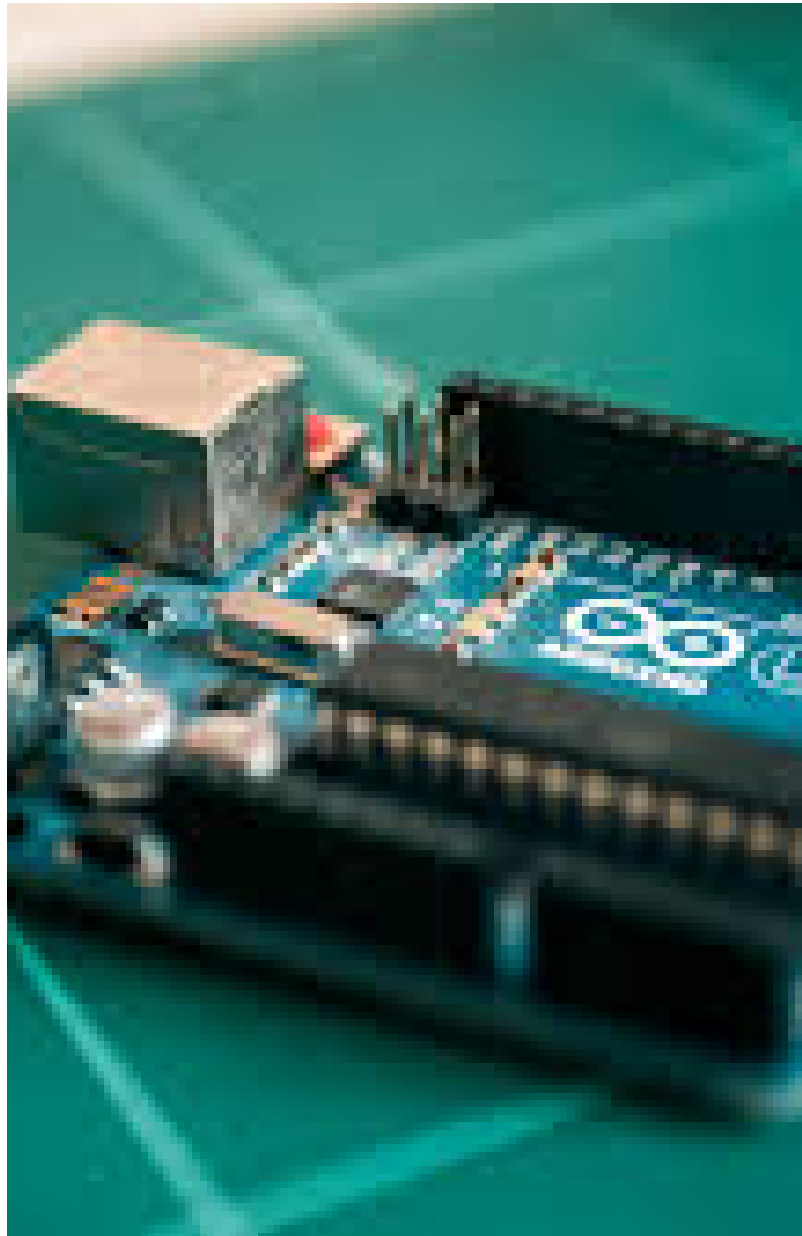
Odyssey Arduino, was to introduce participants to the fundamentals of Arduino and the Internet of Things (IoT), providing hands-on experience in developing real-time applications. The workshop aimed to equip attendees with essential skills to build IoT projects by integrating sensors, actuators, and communication modules with the Arduino platform.

Narrative:

The Odyssey Arduino workshop was a technical event focused on teaching participants how to use Arduino in IoT applications. It covered the basic concepts of embedded systems, Arduino programming, and the connectivity of smart devices through the Internet. Participants were introduced to a range of Arduino components, such as sensors, actuators, and communication modules, and guided through the process of creating functional IoT projects. The workshop provided practical demonstrations, including real-time monitoring of sensor data and controlling devices over the internet.

Objectives:

- To provide a comprehensive introduction to the Arduino platform and its applications in IoT.
- 2. To enable participants to understand how to integrate various sensors and modules with Arduino.
- 3. To teach participants how to connect Arduino projects to the internet for real-time data acquisition and control.
- 4. To inspire creativity and problem-solving by encouraging participants to design and build their own IoT projects.
- 5. To foster collaboration and teamwork through group-based project activities.

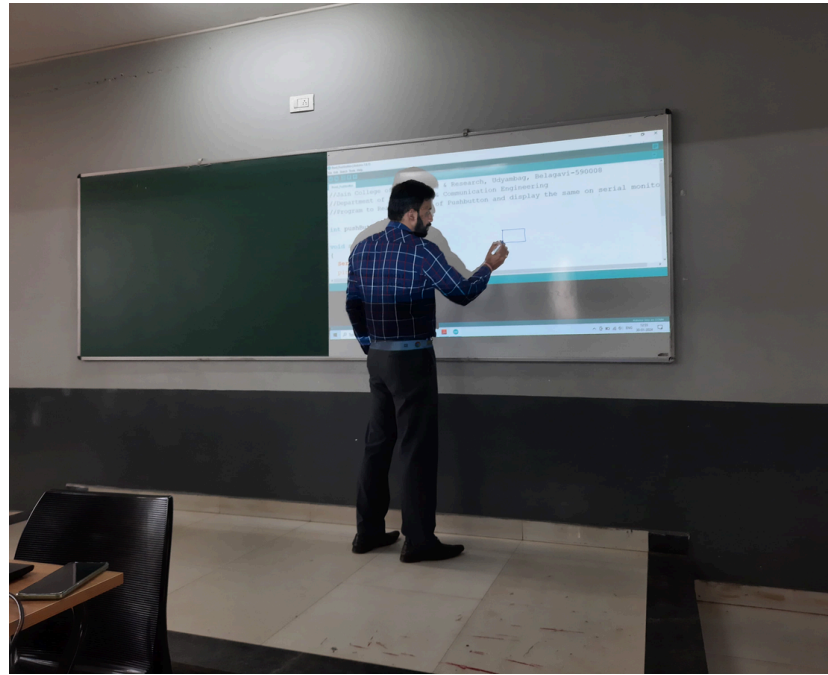


Aspects and Highlights:

The workshop was structured over two days, consisting of lectures, hands-on sessions, and collaborative project work. Key topics covered included:

- Introduction to Arduino and IoT concepts
- Overview of sensors, actuators, and Arduino-compatible modules
- Programming Arduino using the Arduino IDE
- Connecting Arduino to the internet via Wi-Fi and Ethernet modules
- Building IoT projects like smart home systems, environmental monitoring, and automation

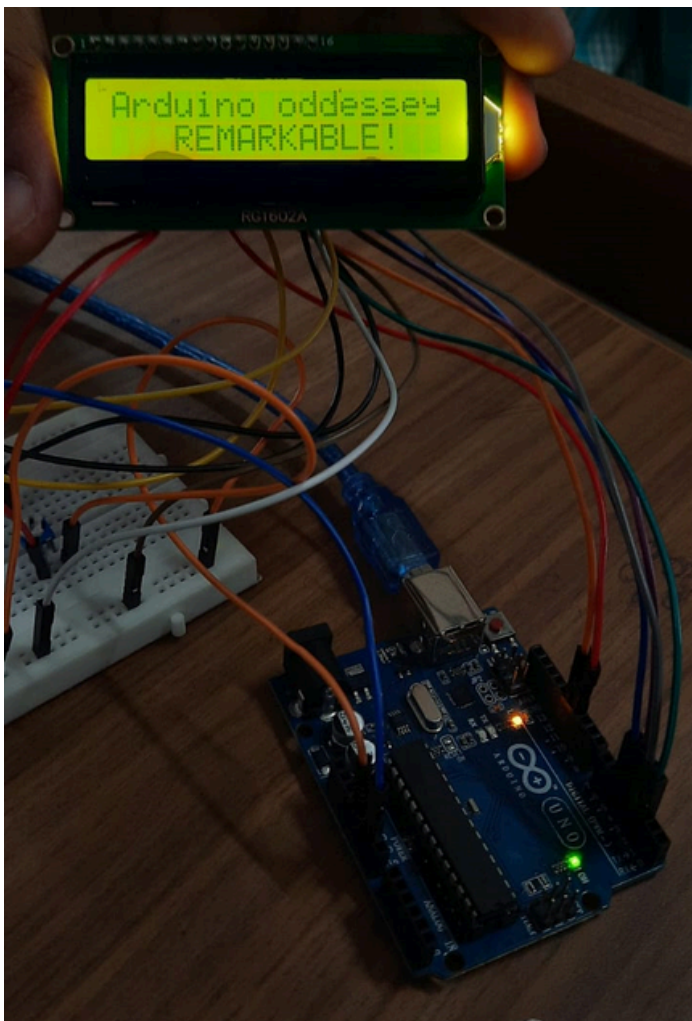
Participants worked in groups to develop projects using Arduino boards, sensors, and actuators. Instructors provided real-time guidance, ensuring that each group successfully completed their IoT projects.



Impact:

The Odyssey Arduino workshop had a significant impact on participants, enhancing their understanding of IoT technologies and Arduino programming. By the end of the event, attendees had acquired the skills to independently develop IoT projects, bridging the gap between theoretical knowledge and practical application. The collaborative environment fostered teamwork and innovation, encouraging participants to explore creative solutions to real-world problems. Many participants expressed interest in further developing their IoT skills, indicating the workshop's success in sparking a long-term passion for technology and innovation.

The event also contributed to building a strong foundation for future IoT-based projects within the community, promoting interdisciplinary collaboration and technological advancement.



MEMBERSHIP DRIVE

"UNLOCK LIMITLESS OPPORTUNITIES WITH THE JCER IEEE SB MEMBERSHIP DRIVE—YOUR GATEWAY TO INNOVATION, MENTORSHIP, AND PROFESSIONAL GROWTH!"



Why there was need to conduct that particular event.

The IEEE Membership Drive was necessary to raise awareness about the incredible benefits of IEEE membership, which many students and professionals were unaware of. Despite access to valuable resources like research papers, career development programs, and global networking, potential members weren't fully tapping into these opportunities. The drive aimed to not only attract new members but also re-engage existing ones, helping them realize the full value of being part of a supportive, innovative community. By doing so, we aimed to empower members to grow, connect, and make the most of their IEEE experience, the drive aimed to ensure that all members—new and existing—were equipped to thrive in their academic and professional journeys.



Event description

The IEEE Membership Drive spanned three days, accommodating different time zones and availability. Day 1 featured information sessions introducing IEEE, its mission, membership benefits. Day 2 included workshops on career development, technical talks on advancements, and interactive Q&A sessions. Day 3 focused on networking and social activities, with member testimonials, virtual meet-and-greet sessions, and engaging community-building activities.

The event showcased IEEE's potential for students looking to broaden their professional and knowledge horizons. The drive was promoted through social media, emails, university partnerships, and industry collaborations, offering incentives like discounted membership fees and free access to select IEEE resources for new members. Through these interactions, students learnt a lot about the opportunities for development, learning, and invention that come with joining the IEEE community.



Consequences of problem

Students may lose out on important chances that could have a big impact on their personal and professional development if programs like the JCER IEEE SB Membership Drive don't exist. Keeping up with the most recent networks, resources, and trends is essential in a world where technology is advancing quickly. Without the involvement and assistance provided by IEEE, students risk missing out on important business advancements and opportunities to network with industry leaders and peers who can help shape their future careers.

The lack of involvement could also limit students' exposure to new ideas, making it harder to innovate and adapt in a competitive landscape. By not participating, they may be passing up the opportunity to develop skills, gain mentorship, and be part of a community that encourages growth and learning. The JCER IEEE SB aims to provide every student with the tools, resources, and connections they need to stay ahead, ensuring they're ready to take on the challenges of tomorrow's tech-driven world.

Aim

The aim of this report is to document the IEEE Membership Drive, highlighting its purpose, execution, objectives, and impact on the IEEE community. The summit seeks to empower ambassadors with the knowledge and tools needed to effectively represent their respective countries and the pressing issues faced by them. It aims to enhance their professional and personal growth and build a strong network of like-minded individuals committed to making a positive impact in the world.



Description from organizers point of view

The JCER IEEE SB Membership Drive was an overwhelming success. As organizers, we set out to create an event that would not only inform but also inspire students to take advantage of the incredible opportunities offered by IEEE. The event was carefully designed to address students' questions and concerns, offering them a clear understanding of how IEEE membership could enhance both their academic journey and future career prospects.

Our efforts were met with an enthusiastic response, as we successfully onboarded 96 members in just one year—a remarkable achievement for the branch. This significant growth demonstrates the increasing interest among students to engage with the IEEE community and take part in a platform that fosters learning, innovation, and collaboration.



EXPERIENCE OF THE EVENT FROM STUDENTS PERSPECTIVE

"ATTENDING THE JCER IEEE SB MEMBERSHIP DRIVE WAS A GREAT EXPERIENCE. I REALIZED HOW MUCH MORE IEEE OFFERS BEYOND TECHNICAL KNOWLEDGE—NETWORKING, MENTORSHIP, AND REAL-WORLD INSIGHTS. THE SPEAKERS' STORIES WERE INSPIRING, AND I LEFT FEELING CONFIDENT THAT JOINING IEEE IS A HUGE STEP TOWARD MY FUTURE GROWTH. I'M EXCITED TO BE PART OF THIS COMMUNITY!"

IEEE VISION 24

INNOVATION, COLLABORATION, ENGINEERING SOLUTIONS

What is IEEE VISION 24 ?

IEEE Vision showcased a world where the future of technology unfolded in real-time. The event brought together visionaries, thought leaders, and innovators who not only imagined the future but actively shaped it. Across the days, we explored cutting-edge trends, breakthroughs, and disruptive technologies that redefined how we live, work, and connect in an ever-evolving digital landscape.



Why there was a need to conduct this event:

The IEEE Vision event was designed to teach students, professionals, and other interested parties on the importance of IEEE in making sure that technology is better for humankind. It introduced attendees to IEEE's mission, basic beliefs and vast networking showing how it supports innovation and growth in different fields of engineering and technology. Beyond raising awareness, it has also described an elaborate plan for the year 2024 focusing on opportunities such as conferences, workshops, competitions and partnerships meant to equip those who attend with advanced knowledge, skills and resources. By providing a roadmap of IEEE for the year 2024, this event endeavoured to give participants a clear understanding of their role in contributing to or deriving benefit from activities initiated by them thus creating future leaders in technology and engineering.



Objectives of IEEE VISION:

timestamp for significant the IEEE's priority initiatives for 2024, outlining their long-term effects on the development of technology.

Foster optimal Growth Collaboration and Innovation: Create an operational framework where members of academia, industry, as well as IEEE can collaborate fostering breakthroughs in technology.

Professional Development and Skill Building: This should provide the insights into various resources, certifications and professional development opportunities through which participants will be able to empower themselves with enhanced skills.

Promotion **Student Involvement:** Drawing them nearer to the organization by providing students and young professionals with opportunities to take part in technical competitions, student branches and hold leadership posts at the organization.



Increase membership and participation for IEEE: To inspire a new generation of students and professionals into joining IEEE, taking part actively in various programs and having an input in advancing the world.

Establish Clear Milestones for 2024: To determine these goals based on their expected outcomes.



IEEE VISION from an audience perspective:

IEEE VISION, hosted by the JCER IEEE Student Branch, was a dynamic event that showcased the creativity and collaborative spirit of young minds in the field of engineering and technology.

Picture this – a college filled with future faces, buzzing with anticipation and excitement. The event kicked off with an Inauguration ceremony, marking the official beginning of the JCER IEEE Student Branch 2024 journey by welcoming our very own new members and setting this year for what we promised to be an electrifying experience for our community.

With Welcome speeches that resonated with our institution's core values that is hospitality and inclusivity to incredible speakers like our very own Branch Counsellor Dr. Virupaxi Dalal sharing his expertise and insights, underscoring the significance of IEEE in shaping the future of technology. Our IEEE Student Branch Chair Yash Mane's inspiring words motivated attendees to aim high and pursue their passions with dedication.

We also had the reading of Impact Report that reminded us how far along we came and that too so fast for a newly formed Student Branch. From hosting impactful events like 'Prakashan' to fostering global collaboration through the 'Ambassadors Summit', the branch's initiatives had made a tangible impact on this community and we focus on doing the same in the future too. As IEEE VISION 2024 drew to a close, participants left inspired and energized, with a renewed sense of purpose and determination. This event catalyzed future innovation and collaboration, laying the groundwork for even greater achievements in the years to come. With the support of mentors, professionals, and fellow enthusiasts,

Conclusion :

IEEE VISION 2024 was a celebration of innovation, collaboration, and excellence. From inspiring speeches to impactful projects, the event showcased the transformative power of technology and the boundless potential of the human spirit. As we reflect on the day's highlights, we are reminded of the importance of community, mentorship, and inclusivity in shaping the future of engineering and technology.

IEEE VISION EMPOWERS ENGINEERS TO INNOVATE AND COLLABORATE GLOBALLY

CODIFY.C

In the realm of software development, C programming serves as the cornerstone, providing a robust foundation for understanding computer systems and programming paradigms. While academic institutions offer comprehensive theoretical knowledge, there often exists a disconnect between classroom learning and the practical application of these concepts. To address this gap and equip our students with the essential skills for real-world success, we organized the Codify.C hackathon.

Limited application-level knowledge can have several detrimental consequences. Students struggle to apply theoretical concepts to real-world situations, leading to a lack of confidence and ineffective problem-solving skills. This can also hinder their ability to think critically, generate creative solutions, and build professional connections. Furthermore, a limited understanding of applications can reduce student engagement and motivation, making it difficult to see the value of their education. In essence, a lack of practical experience can significantly impact students' academic success and future career prospects.

The Codify.C hackathon was a dynamic event designed to bridge the gap between theoretical knowledge and practical application in C programming. By providing a platform for students to engage in hands-on problem-solving and coding, the hackathon aimed to equip participants with the essential skills for real-world success.

The primary objectives of this event were to encourage students to apply their theoretical knowledge to real-world challenges, foster the development of practical programming skills, enhance problem-solving abilities, and create opportunities for students to connect with peers and mentors. By achieving these objectives, we aim to equip participants with the necessary skills and experience to excel in the field of programming.



Round 1: The Written Test

The first round of the hackathon was a pen-and-paper test designed to assess participants' theoretical understanding of C programming and their general knowledge. The 30-minute test consisted of a diverse range of questions covering topics such as C syntax, data structures, algorithms, technical aspects, general knowledge, and aptitude. This round served as a preliminary screening process to identify candidates with a strong foundation in C programming.



Round 2: The Coding Challenge

The second round of the hackathon was a coding challenge where teams competed against each other to solve a series of programming problems. Participants were given one hour to demonstrate their problem-solving skills, algorithmic thinking, and coding abilities. Using their keyboards as their tools, teams had to craft efficient and elegant code solutions to the given problems. The coding challenge was designed to simulate real-world programming scenarios and assess participants' ability to apply their theoretical knowledge to practical problems.



The Tiebreaker

In the event of a tie between two or more teams, a tiebreaker round was introduced to determine the winner. The tiebreaker was a lightning round that required participants to solve a coding problem within a strict time limit. The team that was able to provide the correct solution the fastest was declared the winner.

THE TECHNICAL TALK

What if diagnosing a disease could be as precise as predicting the weather? With AI's advancements, we're getting closer to making that a reality. Let's explore the applications of AI in the medical field At Jain College Of Engineering And Research

WHY THE NEED?

The IEEE technical talk on applications of AI in Medical Science was essential for students as it opens up a world of possibilities at the intersection of technology and healthcare. With AI rapidly transforming the medical landscape, students have the opportunity to explore cutting-edge innovations that can enhance patient care and improve health outcomes. By attending such discussions, students are not only exposed to the latest advancements

but are also inspired to think critically about how they can leverage AI to address existing challenges in healthcare. Moreover, understanding the ethical implications of AI in medicine, such as patient data privacy and algorithmic biases, equips them with the necessary knowledge to create responsible and impactful solutions.

CONSEQUENCES OF PROBLEM

From the perspective of IEEE students, the consequences of not participating in a technical talk on the applications of AI in medical sciences can be significant. Without this engagement, students may find themselves lacking crucial insights into how emerging technologies are reshaping healthcare, which can limit their ability to innovate and contribute meaningfully to the field.

. IEEE technical talk provides the knowledge for their competitiveness in the job market, as employers increasingly seek candidates familiar with AI applications. Furthermore, missing out on such discussions means losing valuable networking opportunities with industry experts, which are vital for career development and mentorship.

Additionally, without an understanding of the ethical considerations surrounding AI in healthcare, students might not be adequately prepared to navigate the complex landscape of medical technology responsibly. Overall, this lack of engagement could diminish their enthusiasm for pursuing careers in a sector that is both dynamic and impactful, ultimately affecting the future workforce in engineering and healthcare.



Hear from our Expert Guest

Dr. Mohammad Faizal Bin Ahmad Fauzi earned his B.Eng. in Electrical and Electronic Engineering from Imperial College London in 1999 and completed his Ph.D. in Electronics and Computer Science at the University of Southampton in 2004.

He is currently a professor at Multimedia University's Faculty of Engineering. From May 2013 to June 2017, he led the Artificial Intelligence for Digital Pathology Research Excellence Consortium. As a visiting scholar at Ohio State University Wexner Medical Center, he focused on machine intelligence for cancer diagnosis and prognosis.

Dr. Mohammad Faizal has authored over 100 journal and conference articles and secured numerous research grants globally. His accolades include the 2017 MMU Excellent Researcher Award, the 2020 IEEE SPS Meritorious Regional/Chapter Service Award, and the 2021 IEEE Region 10 Outstanding Volunteer Award.

He is affiliated with several professional organizations, including the Institution of Engineers Malaysia, Institute of Engineering and Technology, and IEEE, where he actively contributes as an executive committee member for IEEE Region 10 since 2019, previously serving in various leadership roles including Chair for IEEE Signal Processing Society Malaysia Chapter and IEEE Malaysia Section.



Highlights of the Event

Codify.C saw enthusiastic participation from students, professionals, and tech enthusiasts from various backgrounds. Whether you're an experienced coder or someone new to the field, the event offers a great opportunity to test your skills and learn. While Codify.C is a competition, it also emphasizes collaboration. Teams needed to work cohesively to solve problems. The event fosters a sense of community, as participants often exchange ideas, share knowledge, and cheer each other on.

The winning teams don't just walk away with prizes but also recognition within the tech community. Many participants have used this platform as a stepping stone for their future careers, showcasing their problem-solving and coding skills to potential employers. Throughout the event, experienced developers and industry experts were available for guidance, offering valuable insights into coding best practices and problem-solving strategies. This mentorship, coupled with networking opportunities, added immense value to the participants.



Hear about it from the Winners

Nikhil K. (1st Place)- *"I was thrilled to have the opportunity to apply my theoretical knowledge of C programming to real-world problems. The Codify.C hackathon was a truly rewarding experience. I learned a lot about C programming and problem-solving, and I also had the opportunity to meet and collaborate with other talented students."*

Krishna G. (2nd place)- *"I am grateful for the experience I gained at Codify.C. The hackathon has not only strengthened my technical skills but has also boosted my confidence and motivated me to pursue a career in software development. I would highly recommend this event to anyone who is passionate about C programming and wants to take their skills to the next level."*

Praveen P. (3rd place)- *"The hackathon has not only solidified my passion for software development but has also equipped me with the skills and confidence to pursue a successful career in the field. I would highly recommend this event to any aspiring developer who is looking to challenge themselves, learn from others, and take their skills to the next level."*



Summary

Codify.C is more than just a hackathon; it's a celebration of technology, creativity, and the human spirit's relentless pursuit of knowledge. The two-round format—combining a challenging quiz with a hands-on coding competition—ensures that participants are tested holistically, both on theoretical knowledge and practical problem-solving. With its growing popularity, Codify.C is set to become a staple in the hackathon calendar, drawing in some of the best minds in the tech world. Whether you win or lose, the experience, learning, and camaraderie make every second of participation worth it. The questions and challenges were highly appreciated by the participants and helped them to enhance their knowledge and ability to think through certain perspectives.



STUDENT OUTREACH PROGRAM



In the vibrant world of technology and innovation, creating pathways for future leaders to engage with cutting-edge advancements is crucial. Aimed at engaging young minds, this program serves as a stepping stone into the fascinating world of STEM, providing students with the skills, experiences, and confidence they need to excel in these fields. This was the driving force behind the highly successful Student Outreach Program hosted by the JCER IEEE Student Branch at **Champabai Bhogale Girls High School, Tikalwadi, Belgavi.**



The need for this event stemmed from the growing concern that many students, especially in underserved communities, lack exposure to **STEM** (Science, Technology, Engineering, and Mathematics) fields. In today's rapidly advancing technological landscape, these fields are not just important—they are essential for addressing the complex challenges of tomorrow. By introducing students to the exciting world of engineering and technology, this program aimed to bridge the gap between theoretical knowledge and practical, real-world applications.

From an organizer's perspective, the event was a huge success. The enthusiasm and engagement displayed by the students exceeded expectations. Planning such an event required collaboration, creativity, and a deep understanding of how to present complex subjects in an approachable and engaging manner. The IEEE members ensured that every student had the opportunity to participate, ask questions, and explore new concepts. The reward was seeing the students' faces light up with excitement as they engaged with the technology and learned new skills.

From the participants' perspective, the event was a memorable experience. Students were thrilled to interact with new technologies and work on practical projects. The hands-on sessions provided them with a break from traditional learning methods and allowed them to approach problems with creativity and innovation. Many expressed how the event opened their eyes to new possibilities in the world of technology, with several students sharing their desire to pursue careers in engineering and STEM fields.

STEM program held for the students of Champabati Bhogale Girls High School served to raise awareness among them. The students were amazed by the projects presented to them and were very curious to understand their inner workings. The students were also very cooperative with the members of JCER IEEE student branch and held up great interest into the relevant technologies presented to them.



The program concluded with a gesture of gratitude, where a memento was presented to the principal of Champabati Bhogale Girls High School. This was given as a token of appreciation for allowing the IEEE Student Branch to organize the event at the school. Additionally, the day ended on a sweet note, with the distribution of sweets and books to all the students, further enriching their experience and leaving them with fond memories of the day.





RURAL OUTREACH PROGRAM

Imagine a world where rural children are empowered to shape the future with technology. The Rural Outreach Program is here to ignite that spark, bringing cutting-edge innovations and hands-on experiences right to their doorstep, inspiring the next generation of thinkers, creators, and engineers



Why there was a need to conduct this event..?

The rural outreach program was created to address the significant technology gap between urban and rural areas, especially in education. Rural students often lack access to modern technology and STEM (Science, Technology, Engineering, and Mathematics) education, limiting their potential for exploration and future careers in these fields. Key issues include limited exposure to technology in rural schools, inadequate STEM programs that restrict students' ability to develop relevant skills, and overall educational inequity compared to urban areas. Additionally, rural students often lack awareness

of career opportunities in technology due to this gap. The program aims to inspire and motivate rural students by providing interactive sessions and exposure to role models in STEM, ultimately fostering a long-term interest in these fields and reducing educational disparities.



Consequences of the Problem :

The technology gap between urban and rural areas limits rural students' access to advanced technologies and STEM education, reducing their awareness and interest in technology-related fields. Rural children often lack exposure to modern technological concepts, which hinders their ability to explore career opportunities in STEM. This educational inequity is further worsened by the absence of interactive learning resources in rural schools, deepening disparities in technology and innovation education.

About the Outreach Program :

The rural outreach program, organized by IEEE members, is designed to bridge the technology gap by introducing rural students to technological innovations in an engaging and accessible way. Targeting children from rural schools, specifically at Kannada Hiriy Prathamik Shale in Bastwad (Halaga), Belagavi, the program aims to foster early interest in STEM (Science, Technology, Engineering, and Mathematics) fields. Through a variety of fun and interactive activities, such as hands-on projects and technology demonstrations, the event seeks to inspire curiosity and encourage students to explore further education and careers in technology and engineering. By providing this exposure, the program not only aims to ignite immediate interest but also to have a lasting impact on students' educational growth, potentially leading to greater future involvement in technology-related careers. In the long term, this initiative helps balance the educational divide between rural and urban areas, ensuring that rural students are not left behind in the fast-evolving world of technology and innovation.



Aims and Objectives :

The aim of the Rural Outreach Program is to inspire and educate rural children about technology and its applications while fostering an interest in STEM (Science, Technology, Engineering, and Mathematics) fields through interactive projects and engaging activities. The program seeks to provide students with a clear understanding of modern technology and its real-world applications, sparking their curiosity and interest in STEM. Through fun and interactive activities, students are encouraged to enjoy learning about technology, making the experience both educational and memorable. By showcasing IEEE members' technological projects, the program demonstrates practical uses of technology and motivates students to pursue further education and potential careers in technology and engineering.

The Organizer's Perspective :

From an organizer's perspective, the rural outreach program is structured around a series of interactive activities designed to engage rural students with technology. The event includes live demonstrations of technology projects such as robotics and electronics, and presentations that explain the role of technology in everyday life. The primary goal is to make STEM subjects approachable and exciting, demonstrating their real-world applications. Organizers will carefully plan each session to ensure a balance between educational content and fun activities, maximizing student participation and understanding. Held at Kannada Hiriya Pratamik Shale, a rural school, the event will feature tech demonstrations, interactive games, and Q&A sessions. IEEE members will act as facilitators, guiding students through each session, answering questions, and supporting hands-on projects.

A Participant's Perspective :

As a student attending this event, it will be an exciting opportunity to explore technology in ways you've likely never experienced before. The illustration of activities and demonstrations will make learning about things like robotics and electronics fun and memorable. The tech-themed games and competitions won't just be entertaining, but they'll also help you understand and remember what you've learned. Seeing real-world projects and talking to IEEE members could inspire you to think about pursuing further education in science and technology, opening up new possibilities for your future. Plus, you'll get the chance to ask questions, engage with professionals, and learn from their stories, making the whole experience even more inspiring.



Conclusion :

In conclusion, the Rural Outreach Program, organized by IEEE members, aims to bridge the technology gap between urban and rural areas by inspiring and educating rural children about technology and STEM fields. Through interactive demonstrations, educational talks, and fun activities, the program seeks to spark curiosity, enhance knowledge, and motivate students to pursue further learning and careers in technology. By providing exposure to real-world applications of STEM, the program promotes long-term interest and helps to reduce educational disparities between rural and urban areas.