

IMPACT OF AI IN THE PHARMACEUTICAL INDUSTRY FOR FATTY LIVER DISEASE

Saroglitazar - India's Research to the World, is a groundbreaking pharmaceutical compound approved for the treatment of Non-Alcoholic Fatty Liver Disease (NAFLD), exemplifies the convergence of cutting edge computer technology and innovative medical research, with India at the forefront of this revolution. In the development of Saroglitazar, computer technology played a pivotal role in expediting drug discovery and design. Advanced computational algorithms, machine learning, and virtual screening techniques allowed researchers to identify and optimize potential drug candidates with precision and efficiency. This synergy between computer-aided drug design and bio informatics significantly accelerated the research process, enabling the creation of a medication that addresses NAFLD's complex biochemical pathways. India's contribution to this global milestone underscores the nation's growing prowess in both pharmaceutical research and computer technology. The collaboration between scientific disciplines and the application of computational tools have not only propelled Saroglitazar's success but also paved the way for future breakthroughs in drug development, demonstrating the transformative power of multidisciplinary innovation.

AI expedites drug discovery by sifting through extensive molecular and genetic datasets. Machine learning algorithms identify potential drug candidates that target specific pathways linked to NAFLD, streamlining drug development. AI also aids in identifying novel drug targets by analyzing genetic and protein data, pinpointing key molecules and disease progression pathways. Predictive models powered by AI estimate drug efficacy and safety, allowing for informed decisions during development. Additionally, AI delves into diverse data sources, including imaging, genetics, and clinical data, to identify reliable biomarkers crucial for early diagnosis, treatment monitoring, and assessing responses.

Clinical trial design and execution benefit from AI, as predictive analytics help identify suitable patient populations, optimal dosages, and real-time progress monitoring, reducing costs and timelines. AI's analysis of drug databases and molecular interactions suggests repurposing opportunities, potentially accelerating new treatments. AI-driven precision medicine tailors treatment approaches based on individual patient characteristics like genetics and lifestyle, potentially offering more effective and personalized strategies for NAFLD patients. Moreover, AI can integrate various data sources, such as electronic health records, medical imaging, genomics, proteomics, and patient-reported data, providing a comprehensive disease understanding. AI's predictive capabilities extend to identifying potential safety issues related to new drug candidates by analyzing historical data and adverse event reports. It also supports pharmaceutical companies in maintaining regulatory compliance by streamlining data collection and reporting for drug approval.



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PRINCIPAL'S MESSAGE



Fr. Dr. Augustine George

*Principal
Kristu Jayanti College*

In the world where technology is constantly evolving and the digital landscape continues to shape our lives, staying informed and connected has never been more important. As we embark on this journey through the ever expanding realm of computer science, I'm reminded of the incredible advancements that have defined our field in recent years. From the rise of artificial intelligence and robotics to the development of innovative cyber security solutions, we find ourselves at the intersection of possibility and innovation. In the spirit of inclusivity, we remain committed to promoting diversity and equity in the tech world. We believe that the future of computer science is brighter when it reflects the rich tapestry of perspectives and talents from all walks of life.

This newsletter serves as a testament to the extraordinary work being carried out within our department. From ground breaking research to impressive achievements and each article showcases the exceptional talents and expertise that define us.

I am happy to address you all through this edition of our Computer Science Department Newsletter - Technobytes. It is with immense pride that I witness the strides we are making in the realm of technology and computer science. In an era characterized by rapid advancements, our department stands as a beacon of innovation, driving progress in areas ranging from artificial intelligence to cyber security. The dedication and ingenuity of our students and faculty continue to elevate our reputation, not only within our institution but also on a broader, global scale.



I extend my heartfelt congratulations to all those contributions have made this possible. Furthermore, let us not forget the importance of collaboration and knowledge sharing. Together, we can leverage our collective expertise to address some of the most pressing challenges in the field of computer science. I look forward to witness the continued growth and achievements of our Computer Science Department. Together, we are shaping a future defined by ingenuity, collaboration, and a deep passion for technology. Your dedication to excellence is the cornerstone of our success.

DEAN'S MESSAGE



Dr. Calistus Jude A L

*Dean, Faculty of Science
Kristu Jayanti College*

I am delighted that the annual newsletter of the Post Graduate Department of Computer Science is being published. This is an evidence to the remarkable achievements, dedication and commitment of the students and faculty members. **Technobytes** is a reflection of the ongoing pursuit of excellence of the Department. It showcases the remarkable efforts the Department has taken in the world of information technology, computer applications and related research. I am sure that this edition is a treasure trove of knowledge, insights, and updates on the latest trends and breakthroughs in computer science. The faculty members have contributed thought provoking articles that delve into cutting edge research. It is a testament to their dedication to advancing

the frontiers of knowledge in this field. Our very talented students have made significant contributions through their articles, reflecting their enthusiasm and passion for computer science.

The newsletter also provides a glimpse into the various activities and events organized by the department throughout the past year. From conferences and workshops and seminars to co-curricular fests and hackathons and guest lectures, these activities have enriched the educational experiences of our students and fostered a culture of innovation and collaboration.

Congratulations to the editorial team, contributors and everyone involved in producing this newsletter. As we continue to strive for excellence and work together to shape the future of computer science, I look forward to the exciting developments and discoveries that lie ahead.

COMPUTER SCIENCE PG AT A GLANCE

The Department of Computer Science's postgraduate program was established in 2004, marking the inception of its first MCA programme. This initiative aimed to offer technical education to aspiring IT professionals. The MCA programme is a two year full time programme spanning into four semesters. It is affiliated with Bangalore North University and holds approval from the All India Council for Technical Education (AICTE). As an autonomous institution, the curriculum is meticulously designed to impart both conceptual and technical knowledge in the field of computer applications. Additionally, it focuses on nurturing analytical, logical, design, and implementation skills essential for careers in industry, academia, research, and entrepreneurship. The department has expanded and currently provides programmes in M.Sc. Computer Science and M.Sc. Data Science along with MCA.



Dr. Kumar R

*Head, Department of
Computer Science [PG]*

In addition to the prescribed curriculum, the department emphasizes the development of critical thinking, problem solving abilities, and strong software competencies crucial for success in the software profession. Regular updates to course content and teaching methods ensure alignment with the latest industry requirements. The most recent innovations in the industry are presented to the faculty and students as International Conference and National Faculty Development Programme / Workshop. Our students won six overalls and many prizes in different competitions organised during National Level Intercollegiate Fests organised by prominent institutions across the states. The department has a very active software development cell that empowers the community by creating projects on demand. Industrial visits and experiential learning programmes organised to enrich the multifaceted educational experience that combines practical learning, networking, and exposure to various aspects of an industry or business. The IEEE Student Branch of our college conducted technical sessions and interactions. On the whole, this learning experience inspires the students creativity and drives interest in pursuing innovative solutions.

AUGMENTED REALITY: THE NEW REALITY FOR GEN Z CONSUMERS

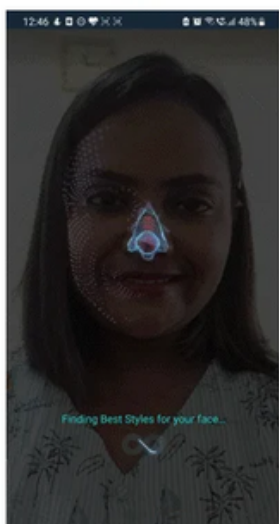


by **Prof. Tomin Joseph**

Assistant Professor

Department of Computer Science(PG)

Generation Z as they are often referred to, represents a cohort that was born between the mid-1990s and the early 2000s. They are in a sense the true digital natives as they are accustomed to the usage of the internet and smartphones, which makes them comfortable with online platforms and the use of technology. They are a generation that exemplifies the true meaning of inclusivity and diversity. They are heavily engaged in social media platforms and also have shown an inclination towards a more budget friendly and frugal lifestyle. Among the various studies conducted, their attention span in particular has shown to be much shorter, which implies that the marketing content and strategies employed to grab their attention must be sharper.



Augmented Reality (AR) seamlessly blends the physical and digital realms, enhancing users' perception of their surroundings and holding the attention of Gen Z users, who often grapple with short attention spans. AR offers interactive and visually captivating experiences, revolutionizing marketing strategies. Gen Z's preference for e-commerce is well-documented, characterized by extensive product research, reviews, and unboxing videos. AR plays a pivotal role in enhancing this consumer journey. It elevates product visualization, enabling consumers to assess furniture and home décor virtually, boosting confidence. Virtual try-ons revolutionize fashion and beauty shopping, offering physical previews of clothing, makeup, and accessories. Personalized recommendations based on user preferences and purchase history enhance the shopping experience, driving sales and satisfaction.

In physical stores, navigation features alleviate shopping-related stress by guiding shoppers to their desired products. Major retailers are already leveraging AR to elevate customer experiences. IKEA Kreativ employs LiDAR technology to create 3D room replicas, eliminating the need for manual measurements.

Customization and personalization, prized by Gen Z, are exemplified by Toyota's AR app, which seamlessly adds computer-generated vehicle accessories without markers. Amazon's virtual shoe try-on simplifies the selection process by using smartphone cameras. Vanity Planet aids beauty product selection by analyzing skin characteristics and offering personalized recommendations.

To conclude, AR technology will encompass every aspect of the shopping experience in the future. However, it is Gen Z that will surely benefit to a large extent from this technology. We can expect better customer relations and services with AR technology in the coming years to provide a magical shopping experiences for users.



Avin Saji

22MCAA10

PLAY, PAUSE, RESET: HARNESSING THE MENTAL HEALTH BENEFITS OF GAMING

Video games have become an increasingly vital form of entertainment for many people over the course of the last year. They're immersive in a way that television and books aren't, and often engage that part of your brain that ends up aimlessly scrolling social media instead of actually relaxing.

The intersection of gaming and mental health has gained increasing attention in recent years, and research has unveiled numerous positive aspects of gaming on mental well-being. Contrary to misconceptions, video games can have a profound and beneficial impact on mental health, promoting cognitive development, emotional resilience, social connections, and overall happiness.

Gaming stimulates cognitive functions and enhances critical thinking, problem-solving, pattern recognition, and strategic planning. Many games require players to analyse complex situations, make quick decisions, and adapt to ever-changing circumstances, honing their cognitive skills in the process. This mental engagement can contribute to better concentration, improved memory, and increased cognitive flexibility.

Video games often present vast and imaginative worlds, encouraging players to think creatively and outside the box. Gamers can unleash their creativity by customising characters, designing structures, and exploring new narratives within the game. This creative expression can boost self-confidence and provide an avenue for personal growth.

Online gaming platforms foster a sense of community and social interaction among players worldwide. Multiplayer games allow individuals to connect, collaborate, and form friendships with like-minded individuals. These social interactions can alleviate feelings of loneliness and enhance overall well-being by providing a sense of belonging and support.

Gaming often incorporates reward systems and achievements, giving players a sense of accomplishment and motivation to continue progressing in the game. This positive reinforcement can translate to increased motivation and a sense of achievement in real-life endeavours, boosting self-esteem and confidence. Contrary to popular misconceptions, gaming has emerged as a powerful tool with a multitude of positive impacts on mental health. From enhancing cognitive functions and promoting relaxation to fostering creativity and facilitating social connections, video games offer a holistic approach to improving mental well-being. Embracing gaming responsibly and mindfully can contribute to a happier, more balanced, and fulfilling life.

Neuralink set to begin HUMAN TRIALS

Elon Musk's controversial biotech company, Neuralink, has announced that it's recruiting participants for its first human clinical trial. This trial, called the PRIME Study (Precise Robotically Implanted Brain Computer Interface), will involve placing brain implants in people with paralysis, like those with spinal cord injuries or ALS. The goal is to test the safety and functionality of these brain implants.

In this study, a chip will be surgically implanted in the part of the brain responsible for movement intentions, and a robot will handle the procedure. This chip will record and transmit brain signals to an app, initially allowing participants to control a computer cursor or keyboard using their thoughts alone..

The study will last six years, involving 18 months of at-home and clinic visits followed by five years of follow-up visits. People who qualify for this trial can sign up on Neuralink's website. It's worth noting that Neuralink, founded by Elon Musk, has been working on this technology for five years, but until now, they've only tested it on animals. They faced criticism after a monkey died during a project in which they were trying to teach it to play Pong using the brain implant.

In May, Neuralink received FDA clearance for human clinical trials, and this announcement comes after they raised \$280 million in funding. Elon Musk has talked about human trials since 2019 but only applied for FDA approval in 2022.

However, there have been concerns about safety, with the FDA initially rejecting their application due to worries about the implant migrating in the brain and potential damage when removed. There have also been reports of rushed development leading to animal deaths and a federal investigation. Before these brain implants become widely available, they need regulatory approval. The FDA has been exploring brain-computer interface devices, but the field is evolving quickly



Anirudh U

23MDTS11

THE SURGING GROWTH OF THE GLOBAL : COMPUTER VISION MARKET

In recent years, the global computer vision market has experienced an extraordinary surge, with projections indicating a significant leap from USD 14.65 billion in 2023 to an impressive USD 33.13 billion by 2028. This remarkable expansion reflects a substantial compound annual growth rate (CAGR) of 17.72% during this period, making computer vision one of the fastest-growing markets worldwide.

This surge can be attributed to a convergence of influential factors. Foremost among them is the escalating demand for automation solutions across industries, driven by the promise of heightened efficiency and substantial cost savings. Businesses are increasingly adopting computer vision technologies to remain competitive. Simultaneously, the abundant availability of visual data and substantial advancements in deep learning techniques are pushing the boundaries of what computer vision can achieve.

However, this growth is not uniform across sectors but

is particularly pronounced in specific application areas poised for transformative changes. For example, computer vision plays a pivotal role in the realm of self-driving cars, enabling safer and more efficient autonomous transportation. In the field of augmented and virtual reality, computer vision is a key enabler of immersive experiences that seamlessly blend the physical and digital realms. In healthcare, computer vision is poised to revolutionize diagnostics, from disease detection in medical images to enhancing surgical procedures.

Akshay V
22MSCS02



Quantum Computing: A New Era of Computing

Quantum computing is a new type of computing that harnesses the power of quantum mechanics to solve problems that are too complex for classical computers. Quantum mechanics is the study of the behavior of matter at the atomic and subatomic level, where the laws of physics are very different from the laws of physics that govern the macroscopic world. Quantum computers use superposition and entanglement to perform calculations that are impossible for classical computers. For example, a quantum computer could be used to factor a large number into its prime factors much faster than a classical computer. This would have implications for cryptography, as many encryption algorithms rely on the difficulty of factoring large numbers.

Quantum computing is still in its early stages of development, but there has been significant progress in recent years. A number of companies and research institutions are developing quantum computers, and some of these computers are now available to the public through cloud computing platforms. However, current quantum computers are still very limited in their capabilities. They can only solve a small number of problems, and they are prone to errors. It is likely to be several years before quantum computers are powerful enough to solve real-world problems on a large scale. Quantum computing has the potential to revolutionize many fields, including:

- Drug discovery:** Quantum computers could be used to simulate the behavior of molecules, which could help scientists to design new drugs and materials.
- Materials science:** Quantum computers could be used to design new materials with improved properties, such as strength, lightness, and conductivity.
- Artificial intelligence:** Quantum computers could be used to develop new machine learning algorithms that are more powerful and efficient than current algorithms.
- Financial modeling:** Quantum computers could be used to develop more accurate and sophisticated financial models.
- Cryptography:** Quantum computers could be used to develop new encryption algorithms that are more secure than current algorithms.



Vinay B C
22MCAB28

Abhimanyu R
23MCAA01



NAVIGATING THE TECH REVOLUTION: A CLOSER LOOK AT TODAY'S GAME-CHANGING INNOVATIONS

We're living in an era where technology evolves faster than we can keep up with. It's like riding a never-ending wave of innovation, and it's crucial to stay on board. In this article, we're going to explore the incredible technologies that are shaping our world right now. From super-smart computers to lightning-fast 5G internet, and even digital currencies, let's dive into what's happening in the world of tech.

Artificial Intelligence and Machine Learning: How Computers are Getting Smarter

You've probably heard about AI and ML - they're like the brainpower behind some of the coolest tech today. Imagine computers that can learn and think a bit like we do. In healthcare, they're helping doctors spot diseases early and even giving health advice through chatbots. In finance, they're catching bad guys by spotting unusual transactions. And in our daily lives, they're in our phones, helping us out with tasks and even predicting what we might like to watch or buy online. Businesses are also getting in on the action. They're using AI and ML to make sense of tons of data. From how to run a store more efficiently to what ads you might see online, these technologies are changing the game.

If you've heard about self-driving cars, AI is behind those too. They use sensors and cameras to "see" the road and make quick decisions to keep us safe. And the best part? We're just scratching the surface. Scientists and tech wizards are always coming up with new ways to use AI and ML, so there's a lot more exciting stuff to come.

In the coming year or maybe soon enough, we're going to explore other amazing technologies, like Li-fi, blockchain, and the Internet of Things (IoT). These are changing the way we connect and share information, and they're worth getting to know better. So, stick around to learn more about how 5G is turbocharging our internet, what blockchain has to offer beyond just digital money, and how the IoT is making our world smarter and more connected.

Securing the Digital Frontier: The AI Revolution in Cybersecurity

The current landscape of cybersecurity is complex to say the least. Cyber criminals continue to improve their criminal strategies and cyber defense technologies. As artificial intelligence and machine learning become more widespread, they have the potential to innovate to protect businesses from cyber attacks and improve response to cyber incidents.

The use of artificial intelligence and machine learning in cybersecurity allows organizations to accurately detect and prevent crimes and do better. Thanks to artificial intelligence, computers can analyze large amounts of data to discover new threats and speed up the attack detection process. Machine learning can also help computers learn to recognize patterns in suspicious activity and adjust their responses accordingly. These systems can also be used to analyse user behaviour, looking for anomalies and deviations from normal behaviour that could signify a breach or attack.

Artificial Intelligence and Machine Learning tools enable cyber security specialists to identify and analyze patterns in the vast volumes of data produced by the networks and systems they manage. This provides a deeper understanding of cybersecurity trends and a better understanding of the threat.

You can combine this knowledge with external cybersecurity experts, such as network consultants, to strengthen your cybersecurity efforts. They can help you understand this information and show you how to use it to improve your cybersecurity. The best part is that the service is remote only, making it accessible and efficient for businesses of all sizes



Katherine Lillian
Bhasme
23MDS11

SILICON SAPIENS

In the intricate world of robotics, where precision meets innovation, microprocessors play a role nothing short of revolutionary. These tiny yet powerful chips serve as the backbone of robotic intelligence, enabling machines to perceive, think, and act with unparalleled accuracy and speed.

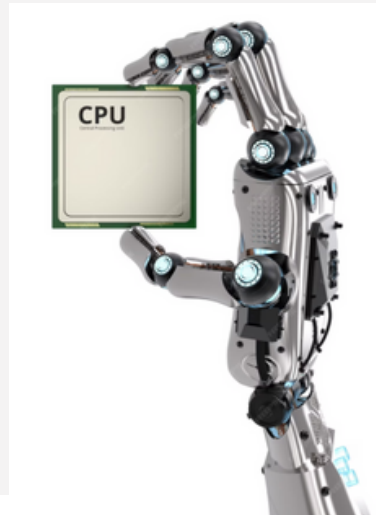
Understanding the Microprocessor: A Marvel in Miniature

At its core, a microprocessor is a marvel of engineering, a compact electronic circuit that houses the central processing unit (CPU). Within its microscopic dimensions lie the ability to process instructions, handle data, and make split-second decisions.

The Symbiotic Relationship: Microprocessors and Robotics

In the realm of robotics, microprocessors serve as the brain, giving life to mechanical bodies. These chips process vast amounts of sensory data, allowing robots to interpret the world around them.

While microprocessors have unlocked immense potential in robotics, challenges persist. Engineers continually push the boundaries of miniaturization and efficiency, striving to create even more powerful chips.



Nasreen Anjum

23MCAB21



ChatGPT

CHATGPT, WHICH STANDS FOR CHATGENERATIVE PRE-TRAINED TRANSFORMER

Launched on November 30, 2022, it is a language-based chatbot developed by OpenAI that allows users to customize and guide conversations in terms of length, type, style, experience granularity, and language. ChatGPT is based on GPT-3.5 or GPT-4, a member of OpenAI's proprietary pre-trained Transformer (GPT) model family, based on the Transformer architecture developed by Google and is designed to discuss implementation using fine-tuning. It is a combination between educational supervision and educational support.



Kinjal H Mer

23MCAB12

As of now ChatGPT is free for all users no matter what you use it for, but sometimes it will show heavy traffic and therefore not work properly. That's why users are now offered a \$20 monthly subscription option.

Use ChatGPT:

Step 1: Open the official website and click on "TryCHATGPT"; Your ChatGPT registration process will begin.

Step 2: A new window will appear on your screen and you will be asked to log in or register to get started.

Step 3: Then you will return to the home page where you can get a small guide.

You will see a small box at the bottom and a screen with many options you can make using ChatGPT.

Step 4: We have shared screenshots on how to use ChatGPT for GPT chat.

It took ChatGPT 4 days to reach 1 million users in prime time, a high number for many popular applications we use today.

The real question at the end of this topic is: Can AI blogging replace Google or human intervention? So far the answer is clearly no because so many things rely on human intelligence and modern technology.

INDIA'S SPACE ODYSSEY: CHALLENGES, GROWTH, AND THE STELLAR FUTURE



India's space odyssey commenced in the early 1960s, post-independence, with the establishment of the Indian National Committee for Space Research (INCOSPAR) in 1962. INCOSPAR later evolved into the Indian Space Research Organisation (ISRO) in 1969. This formative period posed challenges such as budgetary constraints and a dearth of skilled personnel. Nevertheless, ISRO made substantial strides, contributing significantly to both national and global space endeavors.

Navigating geopolitical complexities presented additional hurdles. During the 1960s and 1970s, India faced international pressure to curtail its space program, with the United States and the Soviet Union exerting influence. The 1980s brought allegations of concealing ballistic missile development within space research activities, while the 1990s saw criticism over India's nuclear weapon ambitions. Despite these obstacles, India emerged as a formidable player on the global space stage



Sabi Joseph

22MSCS21

Recent years have witnessed unprecedented growth and achievement for ISRO. Landmark missions such as Chandrayaan-2, the Mars orbiter Mangalyaan, and the Gaganyaan human spaceflight program have propelled India into the international space limelight. In 2023, ISRO executed 17 missions, including launching 36 satellites in a single mission and deploying its heaviest satellite, GSAT-24. The Indian space industry, currently valued at over \$10 billion, is projected to maintain a growth rate exceeding 10% annually, positioning India as a significant contributor to the global space market.

ISRO's vision for the future includes ambitious endeavors like the Aditya L1 solar mission, Chandrayaan-3 lunar lander, and the GSLV Mark IV heavy-lift launch vehicle. These projects underscore India's commitment to exploring new horizons. ISRO's impact extends beyond its borders, with over 100 spacecraft launched for numerous nations, a diverse range of satellite types developed, and the creation of launch vehicles capable of deploying satellites into various orbits. Operating with a budget significantly smaller than other major space agencies, ISRO's resourcefulness and achievements exemplify India's ascendancy in space exploration. This journey cements India's position in the global space arena, enhancing its technological prowess, contributing to economic growth, and elevating its global standing. India's stellar future in space exploration isn't just a national aspiration; it's a beacon of inspiration for the world.

THE FUTURE OF GAMING

The world of gaming has come a long way since its inception. From pixelated characters on arcade screens to immersive virtual worlds, the gaming industry has witnessed a remarkable evolution. As we step into the third decade of the 21st century, the future of gaming appears more promising and transformative than ever before.

Artificial Intelligence (AI) also known as the future of the tech-world also plays a major role in the field of gaming where the game developers put AI in the Non Playable Character (NPCs) to make them look realistic with the actions and decision to be taken with the help of AI implemented in the game so it makes the game more realistic and appealing to the users.

Blockchain technology and Non-Fungible Tokens (NFTs) are making their way into the gaming world. The future of gaming is an exciting frontier filled with innovation and possibilities. From immersive VR experiences to blockchain-based economies, the gaming industry continues to evolve rapidly.

Artificial Intelligence (AI) also known as the future of the tech-world also plays a major role in the field of gaming where the game developers put AI in the Non Playable Character (NPCs) to make them look realistic with the actions and decision to be taken with the help of AI implemented in the game so it makes the game more realistic and appealing to the users.

Cloud gaming, also known as game streaming, is poised to revolutionize how we play games. Services like Google Stadia, Microsoft's Project xCloud, and NVIDIA GeForce Now allow gamers to stream high-quality games directly to their devices, eliminating the need for powerful gaming rigs.

AARON SAMUEL
MATHEW
23MSCS01



LK-99 The New Superconductor

Superconductors, materials capable of conducting electricity without any resistance, have revolutionized various fields of science and technology. Over the years, scientists have relentlessly pursued the discovery of new superconducting materials with higher critical temperatures and enhanced properties. In this regard, LK-99, a recent addition to the family of superconductors, has garnered significant attention.

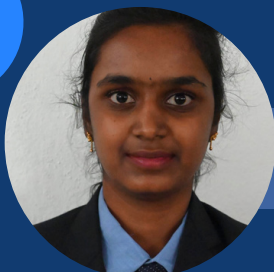
LK-99 possesses a unique set of properties that make it a promising candidate in the realm of superconductivity. Researchers have found that LK-99 exhibits an exceptionally high critical temperature, surpassing most traditional superconductors.

The discovery of LK-99 opens up a multitude of possibilities for its practical implementation across various industries. One of the key areas where LK-99 can be effectively utilized is power transmission. With its high electrical current carrying capacity, LK-99 can be instrumental in the development of efficient and cost-effective energy grids.

Moreover, LK-99 can find applications in the medical field, particularly in the development of cutting-edge magnetic resonance imaging (MRI) systems. The superior critical temperature of LK-99 allows for enhanced image resolution, shorter scanning times, and increased patient comfort during MRI procedures. Additionally, LK-99's mechanical robustness ensures the longevity and reliability of MRI systems, making it a preferred choice for healthcare providers.

While LK-99 exhibits remarkable characteristics, its widespread commercialization and implementation face certain challenges. One primary obstacle is the synthesis of LK-99 on a large scale.

In light of these challenges, ongoing research efforts are being directed towards overcoming these limitations. Scientists are exploring ways to improve the production process of LK-99, making it more cost-effective and scalable.



Swetha R
22MCAB46

INTERNET OF BEHAVIOR (IOB) – IN THE FIELD OF HEALTHCARE

In September 2021, the Internet of Behavior (IoB) started to emerge. It focused on the collection and analysis of data from various sources, including devices, sensors, and digital platforms, to gain insights into human behavior. Since then, there may have been several new innovations and developments in the field of IoB.

The technology is helps to bridge the gap between the patients and the doctors in the following ways

•**Remote Patient Monitoring:** IoB devices, such as wearables and IoT-enabled medical equipment, can continuously collect patient data like vital signs, activity levels, and medication adherence.

•**Personalized Treatment Plans:** IoB can help create highly personalized treatment plans by analyzing patient behavior and health data.

•**Mental Health Monitoring:** IoB can play a critical role in monitoring mental health conditions. By analyzing data from smartphones, wearables, and other devices.

•**Patient Engagement and Adherence:** IoB can improve patient engagement and adherence to treatment plans. It can send reminders, track medication consumption, and provide incentives or rewards for healthy behaviors, all of which can motivate patients to stay on track with their healthcare regimens.

•**Predictive Analytics:** IoB can use predictive analytics to forecast disease outbreaks, identify high-risk patients, and allocate healthcare resources more efficiently

Annapurani A

23MCAA09



Google DeepMind's AlphaMissense

Researchers at Google DeepMind, the artificial intelligence subsidiary of Google, have unveiled a groundbreaking tool designed to predict the potential harm associated with genetic mutations. This

development holds significant promise for advancing the study of rare diseases, marking another notable application of artificial intelligence in the realm of natural sciences.

The tool primarily targets "missense" mutations, which involve

alterations in single nucleotides within the genetic code. Amongst the human genome, the average individual harbors approximately 9,000 such mutations.

Historically, only two percent of the roughly four million observed missense mutations in humans have been definitively classified as either disease-causing or benign. This leaves an extensive pool of approximately 71 million mutations with uncertain significance.

Google DeepMind's innovation, aptly named AlphaMissense, undertakes the critical task of assessing these mutations.

It is noteworthy to mention that AlphaMissense, while delivering superior performance in comparison to existing tools, was not exclusively designed for clinical diagnoses. The mechanism behind AlphaMissense's functionality is both fascinating and robust.

The mechanism behind AlphaMissense's functionality is both fascinating and robust. It was trained on the DNA sequences of humans and closely-related primates, enabling it to discern prevalent genetic mutations. By processing millions of protein sequences, AlphaMissense acquired the ability to discern regular protein sequences from those bearing mutations and their potential deleterious effects.



Shravani

23MDTS45

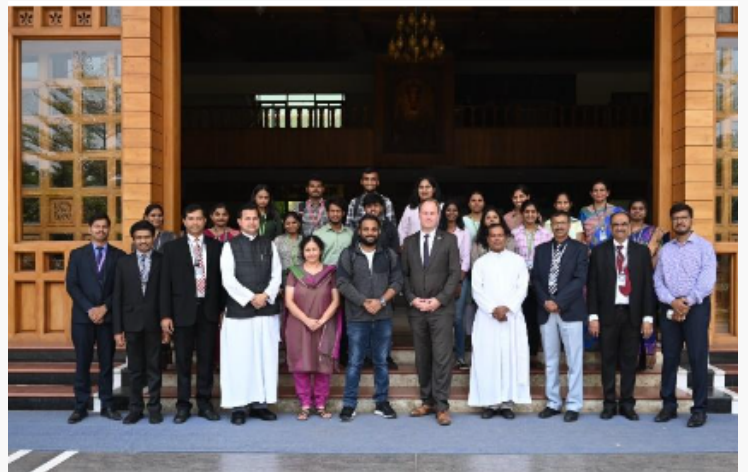
INTERNATIONAL CONFERENCE ON CURRENT TRENDS IN ADVANCED COMPUTING



The Department of Computer Science [PG] frequently arranges programs to enhance the knowledge of its faculty members and discover novel methods for research and development. The conference conducted on April 19, 2023 spanned a period of two days, with the first day devoted to offline programs and comprised informative technical sessions, as well as presentations from students representing various colleges about their research papers. The second day of the conference was conducted online, with speakers from different parts of the world sharing valuable insights on advanced computing.

DAY 1 - The inaugural event featured Hon'ble Dr. Soren Tranberg Hansen, Consul-Deputy Head of Mission from the Danish Consulate in Bengaluru, who discussed Denmark's advancements in advanced computing. Guest of Honor, Mr. Rahul Sasi, Co-founder & CEO CloudSEK, Bengaluru, emphasized perseverance and goal pursuit, posing questions on advanced computing topics for prize winners. In Technical Session I, Dr. Uma Shama from Bridgewater State University discussed drone-based analytical methods for transit infrastructure inspection and asset management. Technical Session II, led by Dr. Venkatesh Kanyakumari, Professor and Dean, School of Mathematics and Natural Sciences from Chanakya University, focused on submodular optimization, providing an engaging and informative session with student interaction and appreciation for his expertise.

DAY 2 - Mr. Imran Wadkar, a Faculty Lecturer from International Skill Development Corporation, Bengaluru, led an engaging workshop on deep learning models with explainable AI. His polite teaching style and comprehensive coverage of topics, including supervised, unsupervised, and semi-supervised learning, left students with valuable knowledge and a deeper understanding. Followed by Dr. Reshmy Krishnan, Associate Professor Computing Department and Head of Research, Muscat College, Oman. session on "AI and Metaverse" explored the Metaverse's future as the next internet iteration, AI's role, and its implementation. Discussions covered Metaverse basics, current functionality, and future enhancements through AI, presenting exciting possibilities. Dr. Krishnan also addressed AI's potential for individualized experiences, components enabling AI in the Metaverse, and challenges in its development.



INDUSTRIAL VISIT

Comorion Consultancy

The Department of Computer Science [PG] organized an industrial visit for second-semester MSC CS students to Comorin Consultancy Services in Bengaluru on April 13, 2023. Comorin Consulting Services is a non-government company specializing in transforming ideas into enterprise-grade products and providing various consulting services, including Blockchain, AgileDevops, Cloud Automation, and Microservices. During the visit, CEO Mr. Jeeva S. Chelladhurai shared insights into the company's journey, challenges faced during the pandemic, and the significance of data science in the IT industry. He also discussed startup experiences and the skills required for IT roles, making the session highly enriching for the students. The company's hospitality and ambiance were commendable.



eMudhra

The objective of this Industrial Visit aims to bridge the gap between classroom learning and real-world applications. Industrial Visit on the topic "Workshop on Digital Security" was organized by Kristu Jayanti College on September 12, 2023 to give students industry exposure and also provide information about the importance of digital security, their significance, and the benefits they offer. The session was taken by resource person Mr. Naveen Kumar, Senior Manager-GRC and Mr. Sharath S Internal IS Auditor, eMudhra Bangalore. A brief introduction about eMudhra was given by Mr. Shiva Kumar followed by him Mr. Naveen Kumar and Mr. Sharath S Continued with the session. The industrial visit to Emudhra Company proved to be a valuable and insightful experience for students. It successfully achieved its objectives of providing a first-hand understanding of industry operations, bridging the gap between theory and practice.



BREAK THE ICE : NOT THROUGH RAGGING

An anti-ragging session on the topic "Break the Ice: Not Through Ragging" was organized at Kristu Jayanti College on August 14, 2023 to educate students about the importance of maintaining a safe and respectful environment on campus. The session was taken by resource person Mr. Mahesh S. Betasur, Assistant Professor, Kristu Jayanti College of Law. The session was highly engaging, fostering active participation from attendees. The resource person initiated a thought-provoking question about personal experiences with ragging, setting the stage for an insightful discussion. To illustrate the seriousness of the issue, several film examples depicting ragging were screened, followed by a comprehensive explanation of the various forms it can take



Furthermore, the session delved into the UGC Regulations designed to combat ragging in higher educational institutions, offering clarity on the proposed state-specific rules and regulations. Attendees gained valuable insights into the severe consequences of ragging, including potential penalties like examination disbarment and college suspension. This informative session provided a holistic understanding of the subject, promoting awareness and accountability in our academic community.

CAPACITY BUILDING TRAINING ON LIFE SKILLS



The session conducted on August 18 to August 21, 2023 was to introduce and to create an awareness on the importance of life skill in an individual's personal and professional roles. All the faculty members of the department trained students of first year Mca, M.sc CS and M.sc DS students on various life skills

The session on self-awareness guided students in recognizing their strengths, weaknesses, triggers, and motivators to regulate reactions, promoting better interpersonal relations. The empathy session emphasized understanding and distinguishing empathy from sympathy, acknowledging the challenges of truly feeling another's emotions. Creative and critical thinking sessions demonstrated their importance in problem-solving and fresh perspective taking. Decision-making skills were discussed, highlighting the power model of decision-making and problem-solving. Effective communication and role-playing activities underscored its significance in business success. Interpersonal relationship maintenance, including attitudes, relationship types, and Ten Commandments of IPR, was introduced. Stress management strategies, including coping with emotions and prioritizing quality sleep, were also discussed for achieving a healthier life.

VINIMAY - LEADERSHIP SERIES



General Ravi Murugan's expert talk left an indelible impression on the audience, shedding light on the intricate dynamics of leadership, motivation, and organizational change. By illustrating the interconnectedness of the military and corporate worlds and offering invaluable insights on leadership principles, he provided a roadmap for future leaders to excel in their roles. General Murugan's emphasis on creating a supportive habitat, embracing resistance as a catalyst for change, and nurturing openness to feedback and suggestions serves as a guiding beacon for all aspiring leaders. This enlightening discourse underscores the timeless relevance of effective leadership in driving organizational success. The program ended with a Question and Answer.

A riveting expert talk on Leadership, Motivation, and the Science of making Organizational Change was organized and hosted by the School of Management and the Department of the Computer Science PG, on 27th September, 2023 at the SKE Auditorium. The resource person for the Vinimay Leadership Series was Major General Ravi Murugan, ASVM General Officer Commanding Karnataka and Kerala sub area.

The event provided invaluable insights into the dynamic interplay between the military and corporate sectors, highlighting the profound impact of military experiences on corporate policy frameworks. Major General Murugan emphasized the pivotal role of leaders in cultivating an environment conducive to optimal performance among subordinates, while also shedding light on the significance of embracing resistance to change and fostering a culture of openness to feedback and suggestions.



CLEANLINESS DRIVE



The Department of Computer Science (PG) organized a successful Cleanliness drive on the 1st of October 2023 to promote the Government of India's initiative of "Swachhata hi Seva". The event aimed to promote cleanliness and a sense of responsibility among students and staff of the department.

The student volunteers along with some faculty members arrived at the campus at 9.30 am and were in high spirits for the occasion. The drive began at 10 am and covered the area in and around the college and the K Narayanapura Road. Active participation by the students of the first and final years of the Computer Science department was visible throughout the drive. All the volunteers were equipped with gloves and garbage disposal bags along with some brooms. The faculty were also actively involved during the entire drive. The concern and consciousness of the waste in the locality was clearly visible on their face. This drive also created a sense of responsibility amongst the students to keep themselves and their surrounding clean.

NATIONAL LEVEL FACULTY DEVELOPMENT PROGRAMME

The Department of Computer Science [PG] had a 6 day National FDP from June 12 to June 17, 2023. The program was specially designed to appraise the participates with the changes in technology and give insight into current scenario and research problems

Technical session I started by Mr. Rahimov Faridun, Fellow Researcher, National Academy of Sciences of Tajikistan Institute for the Study of European and Asian Problems Republic of Tajikistan. Sir discussed on topic like Drone and its ML/AI integration, Voice Cloning, Deep Fake and Auto GPT. On day 2 Cyber Security concept were discussed in detail by Mr. C Jayashekar, Cyber Security Expert, Bengaluru, Karnataka. Next day Biomedical NLP its types, challenges and how it works were discussed by Dr. Anoop V. S, Research officer, School of Digital Sciences Kerala University of Digital Sciences, Kerala. The fourth day had Adv Swarada. Vinod. Kabnurkar Director, White Band Associates Cyler Law Consultant & Ethical Hacker (Whitehat hacker) Bengaluru, Karnataka about Cyber Crime Investigation & Digital Forensics. Ma'am went through Classification of cybercrime, Crime scene search patterns and types of evidences.



The day five included Supervised Machine Learning Approach And Its Research Trends were Steps of machine learning process, Types of Machine learning techniques, Classification algorithms all there advantage and disadvantages and there application were discussed.

On the final day of FDP, Mr. Ajinkya Lohakare, Certified Ethical Hacker, CTO & Founder of Ditto Security, Mumbai, Maharashtra discussed on ethical hacking and all different websites to learn them.

The session benefitted Faculty members, Industry professionals, Research Scholars and Postgraduate students of Computer Science Department

What Is Cyber Security?

- Since the 1970s, computer usage started to grow commercially and personally.
- As the computer and digital media developed, the threats also get developed.

CYBERSECURITY

Refers to everything digital
Requires the understanding of
how information technology
systems work

Refers to the art of
protecting the information
created, stored & processed by
the information technology
systems

ORIENTATION ON INDUSTRY CERTIFICATION

The orientation session proved to be an engaging and interactive experience for all participants. Led by Mr. Nidhin Manjaly, Senior Implementation Engineer Amagi, Bangalore., it encompassed a comprehensive overview of the significance of industry certifications and their relevance in the modern professional landscape. Various certification programs, ranging from the migration to cloud computing and DevOps to Cybersecurity Certifications and Open Source Technologies, were explored in-depth.

During the presentation, Mr. Nidhin emphasized the multitude of advantages that industry certifications offer, such as boosting career prospects, expanding marketability, and unlocking higher income potential. Furthermore, he shed light on specific certifications like Red Hat, CCNP, and Microsoft certified, among others.

To cap off this informative session, a dynamic Q&A session was held, allowing attendees to seek clarification on their queries and express any concerns they might have. This orientation served as a valuable stepping stone for individuals looking to harness the power of industry certifications in their professional journey.

PLACEMENT 2021 - 2023 batch

The Math Company

Dinesh B
Mycal A

Meltwater

Prem Pramod Dhananjayan
Dilip D

Sysfore

Sushmitha V
Shilpa R
Jaya Suriya A
Yeshodha S
Sandeep R
Jai Prashanth M

Data Semantics

Juthy Shaji
Melzo Geno I
Sarin Mendez
Bhavyashree DC
Bilbeena Benny
Lakshmi M
M Narmatha

Sirius

Beryl Sandrina
Prarthana Ponnath
Akash Sabu
Vasanth P

PEOL Technologies

Monika G
Babita Sharma

PLACEMENT 2022 - 2024 batch

CDW

Shriyaa Sridhar
Vaishnavi K
Solomon Wilson R

Syncron

Harikarthik

SOFTWARE DEVELOPMENT CELL PROJECTS DEVELOPED

1 EVENT REGISTRATION PORTAL

2 MARKS CARD PRINTING PORTAL

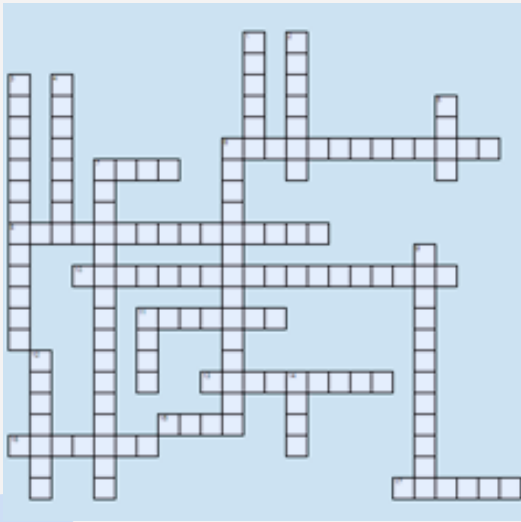
3 CBCS COURSE ALLOCATION PORTAL

4 E-NEWS LETTER (GLIMPSES)

5 RESULT PORTAL



PUZZLE



Down

- 1 Named because of the top letter of the keyboard.
- 2 Type of malware specifically used to do harm or mischief to programs, data, and/or hardware and include Logic Bombs, Worms and Trojans Horses.
- 3 A discrepancy in access to technology resources among socioeconomic groups. (2 words)
- 4 Emails that falsely claim to be legitimate business in order to gain private information to be used for identity theft.
- 5 Electronic monitoring system that can track the location of the chip's wearer.
- 6 A software that allows students to produce an outline as a visual map. (2 words)
- 7 Instruction in which K-12 students and teachers are separated by time and/or location tele-communications technologies.)2 words)
- 9 A system of connecting internet sites through hypertext links. (3 words)
- 11 An unsolicited email message or website posting, usually sent for the purpose of advertising products or services or soliciting funds.
- 12 Any software specifically designed to damage , destroy, disrupt operation, or spy on the operation of computers.
- 14 A collection of web pages located in an online community that encourages collaboration and communication of ideas by having users contribute or modify content.

Across

- 6 Online harassment in social network.
- 7 A video version of blog where posts are video clips instead of text entries.
- 8 Skills in using the information that technological devices carry. (two words)
- 10 A computer to translate from one language to another. (two words)
- 11 A malware that secretly gathers information stored on a person's computer.
- 13 Software used to block unauthorized access to computer.
- 15 A public web page used for discussing a topic or issue.
- 16 When people use online systems to access the personal data of students in order to accomplish identity theft.
- 17 Texts in digital form.

17-ERBOOKS
16-HACKING
15-BLOG
14-WIKI
13-FIREWALLS
12-MALWARE
11-SPAM,SPYWARE
10-MACHINETRANSLATION
9-WORLDEWEB
8-DIGITALLITERACY
7-VIRTUALSCHOOLING
6-CYBERBULLYING
5-RFID
4-PHISHING
3-DIGITALDIVIDE
2-VIRUSES
1-OWERTY
ANSWERS



Akshata

22MCAB26

Alumni Speaks

"Studying can be done from anywhere. But only certain things can be learned through exposure, presence, and experience. Which, for me, was KJC. Had some of the most amazing years, and I am very thankful to KJC and its teachers!"

Ms.Mutum Satyajit Singh
MCA 2014 - 2017

"Kristu Jayanti College was a great place to learn many things and it added many memories and .I got a chance to study well, shape my career with the great decision making skills. All the faculty members were really very supportive & engaged with the students in every stage by providing opportunities to realize self development."

Ms.Kavya H A
MCA 2017 - 2020

"My 5 years at kjc was a memorable and beautiful learning journey. Thank you for opening doors to so many opportunities and setting up the right base for our future endeavours."

Ms. Banu Shree M
MCA 2015 - 2018

"Kristu Jayanti gave me 3 beautiful years filled with lots of learning both academic and personal. In addition to studies, we had many great events to take part in. Being a Jayantian, I was able to be part of the intercollegiate and intracollegiate fests both taking part as a contestant as well as an event coordinator. These experiences were a great learning opportunity to step out of my comfort zone and take responsibilities. A big thanks to my lecturers who guided and supported me throughout my Masters degree and even after my studies."

Ms. Aleena Ann Sebi
MCA 2016 - 2019

SOFTSKILL TRAINING SESSION

A Soft Skills Training Session on the topic “Personal Wellness” was organized at Kristu Jayanti College by Centre for Soft Skills and Aptitude Training (CSSAT) on 19th September 2023 to promote holistic well-being among students, focusing on physical, mental, and emotional health. The session was taken by the resource person Dr. Sheeja Krishnakumar, Faculty-School of Management, Kristu Jayanti College. Ma’am addressed the various facets of well-being, including physical, emotional, mental, and spiritual health. By demonstrating the importance of regular exercise, balanced nutrition, and staying hydrated, Ma’am gave students valuable insight into healthy living. The Personal Wellness Session was a well-rounded program that provided students with a comprehensive understanding of personal wellness encompassing physical, emotional, mental and spiritual health. The expert knowledge of the resource person provided valuable insights and practical strategies. The session promoted a culture of self-care and emphasized the importance of overall well-being.



CERTIFICATE COURSE

A certificate course on “Aptitude Skills” was organized by Department of Computer Science (PG) in collaboration with Centre for Employability and Corporate Relations (CECR) on September 20 to September 22 for fostering a deeper understanding of aptitude concepts and for offering practical trainings. The session was taken by the resource person Mr. Dennis Jose, UGC NET trainer. The classes served as a crucial platform to enhance the skills and knowledge of students in various areas of aptitude. In addition to quantitative aptitude, logical reasoning, verbal ability, and data interpretation, he covered topics such as Time and Work, Pipes and Tanks, Profit and Loss, Time and Distance, Blood Relations, Probability and Permutation Combinations. It was an invaluable resource for students preparing for placements. The interactive classes and diverse activities made students equipped with the essential skills and knowledge needed to thrive in a competitive job market. The aptitude session has empowered the students to face placement challenges with confidence and competence, setting them on a path to success in their professional careers.



ALUMNI MENTORING SERIES

The alumni interaction event held on August 22, 2023 was a resounding success. Mr. Ravikiran, Support Consultant, Synchron Software India Pvt. Ltd, Bengaluru, Ms. Shilpa R, Intern, Sysfore Technologies Pvt. Ltd., Bengaluru and Ms. Yeshodha S, Intern, Sysfore Technologies Pvt. Ltd., Bengaluru were addressing the students. During the event, alumni delivered inspiring talks, offered career advice, and discussed industry trends. They emphasized the importance of networking and building a strong professional network. Students had the opportunity to ask questions and seek guidance on their career paths. The event fostered meaningful connections between current students and alumni, providing a platform for mentorship and knowledge sharing.



COURSE COMPLETION

Students

- 156 students from II year MCA and M.Sc CS completed **Online Course on Block chain Fundamentals** by Kerala Blockchain Academy and **DART Programming**
- 86 students from II year MCA and M.Sc CS completed Online Course on **Big Data 101** and **Data Science 101** by **Cognitive Class.ai**

Faculty Members

- **Dr. K. Prakash, Dr. K. Nirmala Devi, Dr. Bharathi.V and Mr. Tomin joseph** completed Refresher Course organized by the Human Resource Department of the College
- **Dr. Aruna Devi K** completed Online Course on Ethics in the Age of Generative AI, LinkedIn Learning
- **Dr. Aruna Devi K** completed Online Course on AWS Certified Machine Learning: Data Engineering, Machine Learning & AWS, Skillsoft
- **Dr. Aruna Devi K** completed Online Course on Block chain Fundamentals by Kerala Blockchain Academy

TEACHERS ACHIVEMENTS

Awarded **Ph.D** by Vels Institute of Science,
Technology and Advanced Studies
(VISTAS), Chennai on 22/09/2023

Dr. K. Prakash



Outstanding Teacher Award
Saint Mother Teresa University for
Digital Education Excellence,
September 2023

Ms. Reeja Jose Pavanathil



Certificate of Appreciation
Journal of the Institution of Engineers
(India), August 2023

Dr. Ranjitha M



Top 2% and Secured Silver Badge
NPTEL Online Certification
Python for Data Science

Dr. Aruna Devi K



Book Publications

- **Dr. Kumar R** published a book on Data Communications and Computer Networks, CiiT Publications
- **Dr. Prakash K** published a book on Introduction to Data Science, VM Publications, ISBN 978-81-956720-1-1
- **Dr. Aruna Devi K** was the editor for Proceedings of the 15th National IQAC Conference (I-Con) Revisiting Quality in Higher Education, ISBN 978-81-956813-5-8

Reviewers

- **Dr. Vinothina V** served as Reviewer for International Conference on Applied Intelligence and Sustainable Computing
- **Dr. V. Bharathi** served as Reviewer for Measurement Sensors, ISSN: 2665-9174
- **Dr. Aruna Devi K** served as the Advisory Board Member and Reviewer for International Conference on Advances in Emerging Computing Technologies 2023 (ICAET 2023), August 2023

Faculty Members as Resource Persons

Resource Person for technical session on "Class Timetable and its Adherence" in Three Week Refresher Course, organized by Human Resource Department, Kristu Jayanti College, Bengaluru, 17/07/2023

Dr. Kumar R

Head, Department of Computer Science [PG]



1. Resource Person for technical session on "Deep Learning and its Applications" in International Online FDP on "Advanced Technologies and Trends in Computing", organised by Department of Computer Science & BCA, Mangayarkarasi College of Arts and Science for Women, Madurai, 26/07/2023

Dr. Aruna Devi K



2. Resource Person for technical session on "Role of Teachers in Effective Documentation and Crafting e-Content" in Three Week Refresher Course, organized by Human Resource Department, Kristu Jayanti College, Bengaluru, 17/07/2023

3. Resource Person for technical session on "Deep Learning with CNN" in National Level Faculty Development Programme on "Future Prospects of Innovations in Computational Intelligence", Hindusthan College of Arts & Science, Coimbatore, Tamilnadu, 26/09/2023

4. Resource Person for technical session on "AI/ML: The Next Frontier", Google Developer Student Clubs, Kristu Jayanti College, Bengaluru, 08/09/2023

5. Resource Person for technical session on "Data Analytics using R Tool", St. Joseph's College of Arts & Science for Women, Hosur, Tamilnadu, 04/10/2023

1. Resource Person for International Conference on Image Processing based Classifier using Deep Learning organised by Vivekananda

2. College of Arts and Science for Women, Thiruchencode, Tamilnadu

Chair Person for National Conference IGNITE, New Horizon College, Bangalore, 24/06/2023

Dr. Vinothina V



Paper Presentations

▪ **Dr. Vintohina V** presented a Research Paper on "Contemporary Perspective on Neural Network-based Crowd Counting Systems - A Review" at International Conference on Advances in Engineering and Technology for Intelligent Systems, organised by Dayananda Sagar College of Engineering, Bengaluru, 16/0/2023 - 18/05/2023

▪ **Dr. Aruna Devi K** presented a Research Paper on "BlockChain Powered IoT Platform for Autonomous Drone operations in Smart Farming for Environment sustainability" at AICTE Sponsored International Conference on Sustainable practices in Engineering and Technology organised by SreeBuddha College of engineering Alappuzha, Kerala, 16/06/2023

▪ **Dr. Ranjitha M** presented a Research Paper on "Internet of Robotic Things in diverse arenas" at 14th International Conference on Recent Engineering and Technology-ICRET 2023, Smarkhant State University, Uzbekistan and New Horizon Engineering College, Bangalore Intensification on, 25/06/2023

▪ **Dr. Vinothina V** presented a Research Paper on "Neural Network-based Crowd Counting Systems: State of the Art, Challenges, and Perspective" at 16th International Conference on Computer Science and Information Technology, Paris, France, 06/07/2023 - 08/07/2023

FACULTY ENRICHMENT

Research Article Publications

- **Dr. Ranjitha M, Dr. Aruna Devi K and Ms. Divya M O** published research article on “Multi-mode Summarization of Surveillance Videos using Supervised Learning techniques” in IEEE Xplore, April 2023
- **Dr. Muruganantham A, Dr. Kumar R and Dr. Velmurugan R** published research article on “Yoga Asanas Pose Detection using Feature Level Fusion with Deep Learning-Based Model” in IEEE Xplore, April 2023
- **Ms. Divya M O, Dr. Ranjitha M and Dr. Aruna Devi K** published research article “Artificial Intelligent Fish Abundance Detector Model for Preserving Environmental Stability Amid Aquatic Sustenance and Fishermen” in Journal of Survey in Fisheries Sciences (SFS), Green Wave Publishing of Canada, April, 2023, 2368-7487
- **Ms. Divya M O** published research article on “Revolutionizing Foetal Cardiac Anomaly Diagnosis: Unleashing The Power of Deep Learning On Foetalecho Images, Journal of Theoretical and Applied Information Technology, August, 2023
- **Dr. Aruna Devi K** published a research article on Blended Teaching Learning Process - A Best Practice in the Proceedings of 15th National IQAC Conference (I-Con) on Revisiting Quality in Higher Education, March 16 & 17, 2023, ISBN: 978-81-956813-5-8
- **Dr. Muruganantham A and Dr. Velmurugan R** published research article on “Human Psycho Social Issue on Complexion Mania using Semantic Web Techniques”, Indian Journal of Natural Sciences, July 2023, 0976-0997
- **Dr. Vinothina V** published research article on “Optimization of Outlier Nodes of DBSCAN using PSO in Zone based Wireless Sensor Networks”, in IEEE Xplore, July 2023

Faculty Participation

- **Dr. Vinothina** participated in the National Quiz on National Technology Day 2023, organised by Sri Rama Krishna College of Arts and Science, Coimbatore Tamilnadu, 12/05/2023
- **Dr. Aruna Devi K** participated in the 7 day National FDP on ChatGPT and AI Tools for Educators, organized by Marian College Kuttikanam in association with The Kerala State Higher Education Council, 14/06/2023 - 21/06/2023
- **Dr. K. Prakash and Dr. K. Nirmala Devi** participated in the National Webinar on AI in Cyber security & Jain University, Bangalore
- **Dr. Velmurugan R and Dr. Muruganantham A** participated in the State Conference - Cloud and Data Center Convention, Sheraton Grand Bangalore Hotel at Brigade Gateway, Bangalore, 28/07/2023
- **Dr. Bharathi.V** participated in the International FDP on Recent trends on Research Methodologies, Tools and Techniques organised by KG College of Arts and Science, Coimbatore, 10/7/2023-15/7/2023
- **Dr. K. Prakash, Dr. K. Nirmala Devi, Dr. Bharathi.V and Mr. Tomin Joseph** completed Life Skills Training organised by CLSE, 11/7/2023 - 14/7/2023
- All the faculty members participated in the FDP on Implications of Changing Paradigms of Higher Education in the Context of NEP 2020 organised by Internal Quality Assurance Cell (IQAC) of the college, 6/7/2023 - 13/7/2023



Joshiana 12.0 – Overall Runners Up
St. Joseph Engineering College, Mangalore



Instellation – Overall Champions
Dayanand Sagar College, Bangalore



Enthios – Overall Runners Up
Jyothi Nivas College, Bangalore



Incognito – Overall Championship
St. Joseph University, Bangalore