

VOL 16 | ISSUE: 01 | APRIL 2023

EXPERT'S CORNER



Become an 'employee' or 'employer'? Choice is yours!

The success stories of Bill Gates and Mark Zuckerberg, among many others, are inspiring examples of students still in college who took the bold step of starting their own businesses. However, despite these shining examples, the vast majority of students still focus on securing corporate jobs after graduation. It's time for students to consider the advantages of launching their own startups.

Benefits of Starting Up on Your Own

While there are many benefits to joining a corporate job, such as a stable salary, brand recognition, and job security, starting your own business also has numerous advantages that should not be overlooked. Launching a startup allows you to explore your passions, chart your own career path, and gain skills that may not be possible in a corporate job.

-- Pursue Your Passion. One significant advantage of starting your own business is the ability to pursue your passion. When you work for someone else, you may be limited to their vision and mission. However, by starting your own business, you have the opportunity to pursue a project that aligns with your interests and values. This can lead to increased motivation and job satisfaction.

-- Shape Your Own Future. Another benefit of starting a business is the ability to chart your career on your own terms. When you work for someone else, your career path may be limited by the company's organizational structure or culture. However, when you launch your own venture, you have the flexibility to shape your career according to your goals and aspirations.

-- Gain Key Skills. Moreover, starting a business can help you develop skills that may not be possible in a corporate job. As an entrepreneur, you are responsible for all aspects of your business, from marketing to finance to product development. This can help you gain a broader understanding of how a business works and develop skills in a variety of areas.

Additionally, starting your own business can provide a sense of ownership and autonomy that may be missing in a corporate job. You have the opportunity to build something from scratch and see it grow and succeed.

"Of course, starting a business is not without its challenges. It requires hard work, dedication, and persistence. However, with the right mindset and resources, launching a startup can be an incredibly rewarding and fulfilling experience."

While joining a corporate job has its own benefits, starting your own business should not be overlooked. By pursuing your passions, charting your own career path, and gaining unique skills and experiences,

launching a startup can provide a sense of fulfillment and autonomy that may be difficult to achieve in a corporate job.

What You Should do For Starting Up as a Student

If you are considering starting your own startup or small business, it's important to take the time to educate yourself on the key aspects of running a successful venture. Learning about funding, the concept of lean startups, and other related topics can help you avoid common pitfalls and set your business up for success.

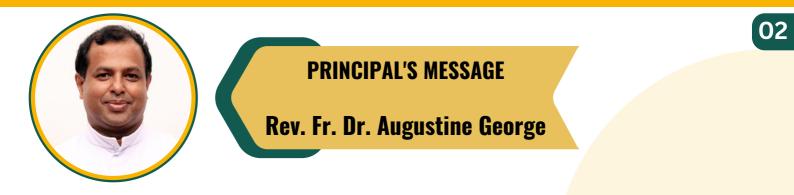
-- Educate Yourself on Funding. One critical aspect of starting a business is understanding how funding works. Whether you plan to self-fund your business or seek outside investment, you need to have a solid understanding of the different financing options available to you. You should learn about traditional funding sources such as bank loans, venture capital, and angel investors, as well as newer options such as crowdfunding and microfinance.

-- Learn About Lean Startups. Another important concept to grasp is the idea of lean startups. This approach to starting a business involves testing and iterating on your idea quickly and efficiently to determine what works and what doesn't. This approach can help you minimize costs and risk while maximizing the chances of success. Learning about lean startup principles such as the minimum viable product, customer development, and agile development can help you adopt a more streamlined approach to launching your business.

-- Become Jack of All Trades. In addition to these concepts, there are many other skills and knowledge areas that are important for running a successful business. These may include marketing and branding, financial management, legal compliance, and leadership and team management. Fortunately, there are many resources available for aspiring entrepreneurs to learn these skills and concepts. You can take online courses, attend workshops and seminars, read books and blogs, and seek out mentorship and networking opportunities. It's important to invest the time and effort to educate yourself thoroughly before launching your business.

Do you want to get a job from someone or give jobs to others? Do you want to be an employee or employer? The choice is yours!

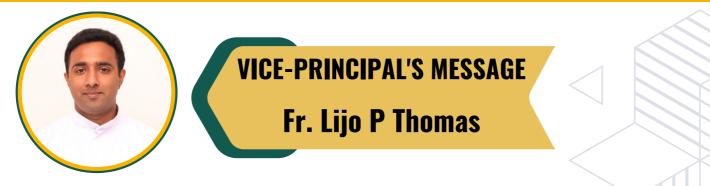
Ganesh Samarthyam Co-founder of two successful startups - CodeOps & KonfHub



As we live in an era of ubiquitous technology, it is imperative to stay abreast of the latest developments in this domain. Technology is advancing at an unprecedented pace, and staying updated with the latest developments and tools is essential for maintaining competitiveness and relevance. This requires continuous learning and upskilling of their knowledge and skills. Digitization, which involves the widespread adoption of digital services by consumers, businesses, and governments, has emerged as a key driver of economic growth and job creation worldwide. The sheer volume, variety, and speed of digital information circulating globally is remarkable.

With the ever-changing technological landscape, it is essential to anticipate future trends and proactively innovate to stay ahead of the curve. This may involve exploring new technologies, adopting emerging methodologies, and fostering a culture of experimentation and creativity to drive innovation across disciplines.

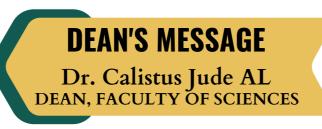
There exist various digital spaces for exchanging ideas and collaborating on innovative projects that push the boundaries of what is possible. Department of Computer Science[PG] undertakes initiatives to promote the culture of creativity and innovation among the students and faculty members. This newsletter is such a novel initiative to share their thought provoking ideas and discussions. The fusion and diffusion of ideas happening through this newsletter would definitely enrich and enhance our pursuit of innovative excellence. I appreciate the effort and wish all the best.



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We live in a world in which technology is omnipresent and technological innovations happen at an exponential rate. The volume, variety and velocity of digitized information circulating around the world is quite amazing. Digitization— the mass adoption of connected digital services by consumers, enterprises, and governments, has become a fundamental driver of economic growth and job creation has taken the world over. The power of information technology to facilitate economic and social progress is limited by two challenges : sustaining the pace of technological innovations and transforming this tremendous amount of information or data into meaningful and productive sources of knowledge.

The power of technology has become crucial in the post-pandemic period as it connects the fields that would be isolated otherwise. Technology has also played a significant role in efficiently enabling the various sectors of mankind to function with their regular norms. the dependencies increasing day by day, I feel that almost all disciplines are integrating technological calibers with their pre-existing standards. This process creates an interdependent situation where the disciplines would help each other to elevate their particular prowess. The challenge we face today is to catch up with the current trends and innovate for tomorrow. The Department of Computer Science[PG] undertakes curricular and co-curricular initiates to promote the culture of creativity and innovation among the students and faculty. This newsletter is such a novel initiative which would help the faculty and students of our department to initiate thought provoking ideas and discussions. The fusion and diffusion of ideas happening through this newsletter would definitely enrich and enhance our pursuit of innovative excellence. I appreciate the effort and wish all the best.



I congratulate the students and faculty members of the Department of Computer Science (PG) on their outstanding achievements during this academic year. Our students have excelled in various competitions, hackathons, and research projects, showcasing their exceptional talent and dedication. The faculty members have made significant contributions to their respective fields, publishing papers in top-tier conferences and journals. The efforts of the department in organizing several events and activities during this academic year, including invited expert talks, workshops, and competitions, is to be appreciated. Such events have provided opportunities for our students to enhance their skills and knowledge. The alumni meetings were a great opportunity for our former students to connect with their peers and share their experiences. I am happy that the department has brought out the annual issue of its newsletter 'Technobytes' to highlight the activities of the department. The contents are informative and comprehensive, featuring the achievements of both faculty members and students, showcasing their talents and contributions to the field of computer science. The department remains committed to providing students with the best possible education and training, equipping them with the skills and knowledge they need to excel in their career. Appreciations to all of the students and faculty members for their hard work and dedication. Your contributions are invaluable, and we look forward to achieving even greater success in the future.

DEPARTMENT AT A GLANCE

Dr. R. Kumar HEAD, DEPARTMENT OF COMPUTER SCIENCE (PG)

Master of Computer Applications (MCA) and M.Sc. Computer Science are the two programmes offered by the Post Graduate Department of Computer Science. The MCA programme was established in 2004 with the goal of providing technical education to young people who were interested in becoming professionals. It is a two-year curriculum made to instil conceptual and technical knowledge in the area of computer applications as well as to foster the development of analytical, logical, design, and implementation abilities for pursuits in industry, academia, research, and entrepreneurship. M.Sc. in Computer Science is a two-year master's degree program. The autonomous curriculum is made to sharpen the critical thinking, problem-solving, and strong software competences that are necessary for a successful software professional. Technology talks, student seminars, communication workshops, paper presentations, and modules for aptitude reinforcement. This semester, the students competed in the intercollegiate fests and won overalls at St. Joseph's College of Engineering in Mangalore, Christ University, RV College, and Surana College fests in Bangalore and runners-up at Christ college, Bangalore. The most recent innovations in the industry are presented to the faculty and students, peer-to-peer teaching is encouraged among the students as a part of information exchange. The software development cell of our department has developed and deployed three in-house projects. The first edition of Industry Connect: Unconference – Technology Start-ups: Opportunities and Challenges programme was conducted. More than 10 CEO/CTO's from various start-ups were the panel members.



Industry Connect : Unconference provided a platform for the Computer Science Post-Graduate students in association with the Institution's Innovation Council. The event aimed to organize an unconference session on "Technology Startups: Opportunities & Challenges," where a panel of experts from different technology startups shared their insights and experiences with the attendees. Through this session, the event aimed to provide a platform for students to learn, network, and explore potential startup opportunities and challenges. he session was led by a panel of distinguished industry experts from different technology startups, who shared their insights and experiences with the attendees.













A New Era of Gaming: The Promise and Potential of Cloud Gaming

The gaming industry has come a long way since the days of 8-bit consoles and cartridges. With the rise of cloud computing, gaming has taken a giant leap forward, making it more accessible, cost-effective, and convenient than ever before. Cloud gaming allows users to play their favorite games on any device with an internet connection, eliminating the need for expensive hardware and enabling gamers to play on the go.

Newzo, a game market research firm, predicts that the cloud gaming market will be worth billions of dollars. Interestingly, back in 2020, the value was \$633 million, and in 2023 it is expected to exceed \$5 billion and close to \$6,5 in 2024 with 60 M users in the world. Some of the major players in the cloud gaming market include Google Stadia(now discontinued due to low customer traction), NVIDIA GeForce Now, Amazon Luna, and Microsoft xCloud.

Edge computing and 5G are crucial technologies that have a positive impact on the future of cloud gaming by reducing latency and disruptions. The pandemic period has also proven to be advantageous for the development of the cloud gaming market, as players appreciated the ability to access interesting and new titles instantly from the comfort of their homes.

Cloud gaming, though in tune with the times, there is still significant irregularity in internet connection, even in developed countries. Cloud Gaming services are very greedy and will need some changes before this service is available and operational everywhere and for everyone. For example, Analysts predict that it will be nearly difficult for the gaming business to ever see a fall as a result of the development of more advanced technology and tools. According to estimates, the gaming sector will generate \$300 billion in revenue by 2025. Even while the gaming industry boosts the world economy, these games must also be a source of growth, harmony, and advantages for upcoming gamers.

> Avin Saji 22MCAA10



Datafication: The Double-Edged Sword of the Digital Age.

proliferation of datafication The has transformed our understanding of personal preferences, based on the wealth of information accessed through the internet. As we become increasingly reliant on digital technologies to make informed decisions, it is becoming ever clearer just how much personal data is being accessed by powerful corporations. This raises a critical question: who truly knows what information is being collected, and how it is being used? The implications for personal privacy and data security are profound and require careful consideration in our rapidly evolving digital age.

The subtle decisions we make every day in the digital world are significantly impacted multifaceted the of by process datafication. From the ads we see to the products we buy, datafication has become an integral part of our lives. However, the implications of datafication are complex and far-reaching, and it is crucial to understand the potential effects. From privacy concerns to job displacement, datafication poses numerous challenges to society. Understanding these key points is crucial to ensure that we can effectively navigate the ethical and societal implications of datafication in the modern era.

> Sabi Joseph 22MSCS21



To what extent has the technology of 3D printing progressed?

3D printing is a revolutionary technology using which, the users can create physical objects from designs made digitally. 3D printing has gained much popularity in the recent years as it can produce complex and intricate designs quickly and efficiently.

Amal Martin 22MCAA04

One of the significant benefits of 3D printing is its ability to create complex internal structures moving parts, and geometries that would be impossible to achieve with the traditional manufacturing methods. As this technology evolved, we can see even more advancements and innovations in its field. It has come a long way. From being able to switch between multiple materials during the printing process to printing 3D organs, the advancements of this technology have become unscalable. The technology of printing 3D organs,

called bioprinting, involves the use of living cells to create functional tissue and organs. While still in the experimental stages, bioprinting has the potential to revolutionize the field of medicine by providing a way to create personalized organs for transplant. As 3D printing technology continues to evolve and advance, we can expect to see even more exciting developments in the field, bringing us closer to a future where 3D printing is a commonplace manufacturing method for a wide range of industries.





Block chain and artificial intelligence convergence: boosting creativity and cybersecurity.



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Blockchain and artificial intelligence (AI) are two technologies that are reinventing various sectors. Blockchain has changed how we shield and authenticate transactions, while AI continues to enhance how we process, analyze, and use data. Together, AI and blockchain can forge potent synergies that can lead to innovative approaches to some of the most pressing problems facing the world today. There are various potential applications for blockchain and AI in various sectors. The management of supply chains is one of the most prospective uses of blockchain and AI. While AI can be used to analyse this data and find trends that might help organizations enhance their supply chain operations, blockchain can be used to trace the flow of goods and materials across the supply chain. Healthcare is another industry where AI and blockchain can be merged. Blockchain innovation can be used to safely preserve patient data and provide individuals more control over their healthcare records. In order to identify potential health hazards and develop personalized treatment plans, AI may evaluate this data.

Increased openness and confidence that may be accomplished by AI and blockchain interaction is one of the main advantages. A secure, transparent record of all transactions may be provided through blockchain's immutable ledger, and AI can help guarantee the accuracy of this data.

In conclusion, the integration of AI with blockchain has the potential to revolutionize a number of industries by enhancing efficiency, security, and transparency. Although the technology is still in its

infancy, the opportunities are limitless. We could be anticipating fresh and creative solutions to some of the most important issues facing the globe as additional companies begin examining the possibilities of these technologies.

Rachana Pemmaiah 22MCAA53

Fun Facts

- The first computer mouse was made of wood, and it was invented in 1964 by Doug Engelbart.
- The first domain name ever registered was Symbolics.com, on March 15, 1985.
- The first electronic mail message was sent in 1971 by Ray Tomlinson, who used the @ symbol to separate the user from the destination address.
- The first website ever published was info.cern.ch, created by Tim Berners-Lee in 1991.
- The first search engine was called Archie and was created in 1990.
- The first computer virus was created in 1986 by a Pakistani computer programmer named Basit Farooq Alvi.

Jeswin Jose 22MCAA30

ALUMNI INTERACTION SERIES

ALUMINI INTERACTION SERIES - I

The Department of Computer Science organized Alumni interaction to facilitate the students in preparing for their interviews and orient them about industry practices. The session was very interactive, and the students asked various queries on the points of discussion and in general too.

Mr. Anish Samuel Tech Lead, Data Engineer Google, New York, USA

Resource Persons

Date:28.01.2023 Time:10:30 am -12:00 pm ue: Conference Hall P2, PG Bl

Mr. Abhishek S

Software Quality

Engineer Hashedin by Deloitte Bengaluru

Mr. Atif Khan

Developer

Regalix Inc. Bengaluru

Note can Address:Ko Latitude

ALUMINI INTERACTION SERIES - II

The alumni shared his experiences and offered

valuable insights into the challenges and opportunities faced as a Data Engineer in Google. He also provided students with advice on how to prepare for a career in computer science and the importance of continuing education and professional enhancing the aptitude skills which are the base to crack any interview.



Laurels

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OVERALL CHAMPIONSHIPS



RV COLLEGE OF ENGINEERING





SURANA COLLEGE (PG)





CHAVARA CUP

KRISTU JAYANTI COLLEGE (AUTONOMOUS)



Kristu Jayanti College Kristu Jayanti Mba & Mca College, Kothanur, Bengaluru, Karnataka 56007 + 13 058056



National Science Day

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Computer of Science[PG] Department celebrated National Science Day in association with IEEE Bangalore Section to Commemorate the discovery of the Raman effect by Indian physicist Sir C. V. Raman. As part of this, the department organized an expert lecture on "ISRO Satellite Technology-from Inception to Launch" by Mr. V Chandra Babu, Scientist(Retd), AstroPhysics Department, ISRO, Bengaluru.



SKILL ENHANCEMENT SESSION ACCESSORIES USING CROCHET

Provided female students in the Department of Computer Science PG with a unique opportunity to learn a new skill and enhance their creativity. Led by our department professor.



Bengaluru, KA, India College Road, Kothnur Narayanapura, Bengaluru, 560077, KA, India Lat 13.058058, Long 77.642137 03/08/23 11:35 AM GMT-Activity : women's

INDUSTRY INSTITUTE INTERACTION

Topic: "Modern Technological Trends-Industry 4.0"



Resource Person Mr. Gautam Bhat CTO & CO-Founder cYAAG Technologies, Bengaluru.





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Survival strategies in the era of AI "Do something that a machine cannot do"

"AI is one of the most important things humanity is working on. It is more profound than, I dunno, electricity or fire," says Pichai, "We have to recognize where we do live, in this time where there is really dramatic change from a technology standpoint and the innovations that we have, but that doesn't mean those innovations are going to stop," says Wojcicki. As we know the fact that, Technology is going to continue, and we need to keep moving forward. And now it's our responsibility to move forward with technology.

How AI Works?

AI is one of the most powerful tools we have invented. We need to have a general understanding of how AI works. We have seen earlier, AI is based on specific algorithms that we write in computer. The human set the rules and now, we develop different machine level concepts like deep learning, reinforcement learning based on data, because we have more powerful computers which can handle more data. More the data we have, better the solutions we get.

Know the difference between AI and humans:

Understanding the ability of artificial intelligence and the ability of humans, it's simply implies that a job once a machine can do it, then let the machines do it and now we need to focus on the human part.

Know how to work with AI:

We must use AI to help us to accomplish other jobs. We humans are always trying to make life easier and in this automated world using technology as a tool figuring out that critical part which is going from 0 to 1 which is basically inventing something that doesn't exist before and we can do that with AI, providing a lot of information and things like that. So we should be preparing ourselves to generate new ideas to use AI to help us that can make our work easy.

> Divya Ghodke 22MCAA16

Manoeuvre 2022

'Manoeuvre 2022' an Intra collegiate IT fest, was conducted with the theme Retro IT on 30th September 2022. The Department has been hosting the fest Manoeuvre, which signifies skilful action, for 14 years with the goal to encourage students to learn, develop, and cherish. Aspiring programmers treasure and fondly appreciate the foundations of IT sectors.







SHELLS 2023 was a one-day National Level Intercollegiate IT Fest organized by the Department of Computer Science [PG] at College(Autonomous), Kristu lavanti aimed at providing students with a fusion of technology and accomplishments and preparing them for future leadership through education, exposure, and experience. The event was a huge success and provided a valuable experience for all the participants, with 121 participants from 12 colleges in attendance.





Student Achievements

Paper Presentations

21MCAA26 - Prarthana Ponnath International Conference on Innovations in Data Analytics(ICIDA 2022)

21MSCS04 - Juthy Shaji International Conference on Innovations in Data Analytics(ICIDA 2022)

Journal Publications

21MCAA30 - Shalini N 21MCAA32 - Steffi Sabu 21MCAA35 - Yeshodha S Kristu Jayanti Journal of Computational Sciences (KJCS), 2(1), 78-87.

21MCAB12 - Sai Prakash R 21MCAB02 - Ayesha ML 21MCAB14 - Srusti Kristu Jayanti Journal of Computational Sciences (KJCS), 2(1), 78-87.



Placements

Data Semantics

21MSCS04 - Juthy Shaji 21MSCS05 - Melza Geno I 21MSCS11 - Sarin Mendez 21MCAB20 - Bhavyashree DC 21MSCS03 - Bilbeena Benny 21MCAB06 - Lakshmi M 21MCAB08 - M Narmatha

Peol Technologies

21MCAA22 - Monika G 21MCAB03 - Babita Sharma

Projects done in collaboration with the Software Development Cell

ONLINE OPTION FOR STUDENTS TO VERIFY THE ENROLMENT

KJC ARENA (VENUE BOOKING SYSTEM)

SMART INTERVIEW MANAGER

Industrial Visit (2021-23 Batch)



Testimonials

I had a great journey at KJC for all the 6 years I was here. PG CS Dept Specially gave us a very good support to achieve all our goals with full support. Very glad to have been here and will surely be a part of this college anytime.

Vidhya Shree V (2017-2022)

I'm grateful to have graduated from KJC as its groomed overall person to what I'm now be it professionally or personal behaviour. The classes were very beneficial to all the students studying.

Krithika M (2015-2017)

2017-2020 was memorable years for me. The teachers were very welcoming and approachable and also very supportive. I'm really proud to be a jayantian, and wish to come back soon again.

Mittu Shaji (2017-2020)

Remembering old memories visiting the college, I was so happy meeting my faculty. Thank you KJC for giving me these wonderful memories and a good placement which led me into a great career.

Abhishek G (2017-2020)

" My daughter, Neha Elizabeth Prince completed her MCA from Kristu Jayanti College (Autonomous), Bangalore. She was studying under The Department of Computer Science (PG). As a parent, l was overwhelmed and scared for my daughter as she was starting a new phase in her life and that too in a completely new environment. I would be constantly thinking about how she would cope up with the new faculties and students there. But to my surprise, she was doing well within a week or two of her joining. Throughout her course in the college I have never heard her complaint even once. She was always excited to go to college. There would always be some or the other activity conducted by the department that kept her engaged. She would brag about her department and the activities and fests conducted. What made me happy was her involvement in all the activities. I was very happy with her growth. They nurtured my daughter into a strong and confident individual. I saw her blossom into the person she is today. All thanks to the opportunities and support given by the Department of Computer Science (PG). A special note of thanks to the Head of the Department, Dr. Kumar R who always supported and guided her and all the other faculties who were there for her throughout. I am very glad that I decided to send my ward to Kristu Jayanti College for her PG. I never regretted the decision and never will. Once again thanking the department. "

Ms. Jessy Prince Parent of Student (MCA, 2018-2021)

" I'm very glad that my daughter Vidhya Shree V was a student of Kristu Jayanti College (CS Dept) for 6 consecutive years i.e., BCA+MCA. I was overwhelmed by the way she was groomed for her future by the professors and staff in the College. Her life as a Post Graduate student had completely changed her life to meet all the challenges in the outside world and molded her moral and Ethical values in a better way. This department has offered my daughter more than we as parents desired for. I'm thankful for all the encouragement, individual attention and care given to the students as well as the parents and wish good luck for the success of the institution."

Ms. Chandra Kala Parent of Student (MCA, 2017-20)

Hour of Code





photo



NLP& AI Tools



What is NLP?

P2 LAE

-X-











Kabbalu, Karnataka, India

Rural Exposure



photo

Women Empowerment



DEPARTMENT OF COMPUTER SCIENCE(PG) MCA PROGRAMME Seminar

> Women **RESOURCE PERSON**

> > Sikha Das

ference Hall P2 ember 24, 2022 ; 2:30 PM



Student Research Symposium



#WTMDareToBe



NATIONAL STUDENT RESEARCH SYMPOSIUM

🗱 18th OCTOBER 2022 🔮 AZ AUDITORIUM, ADMIN B



Abhishek Mahesh Appaji

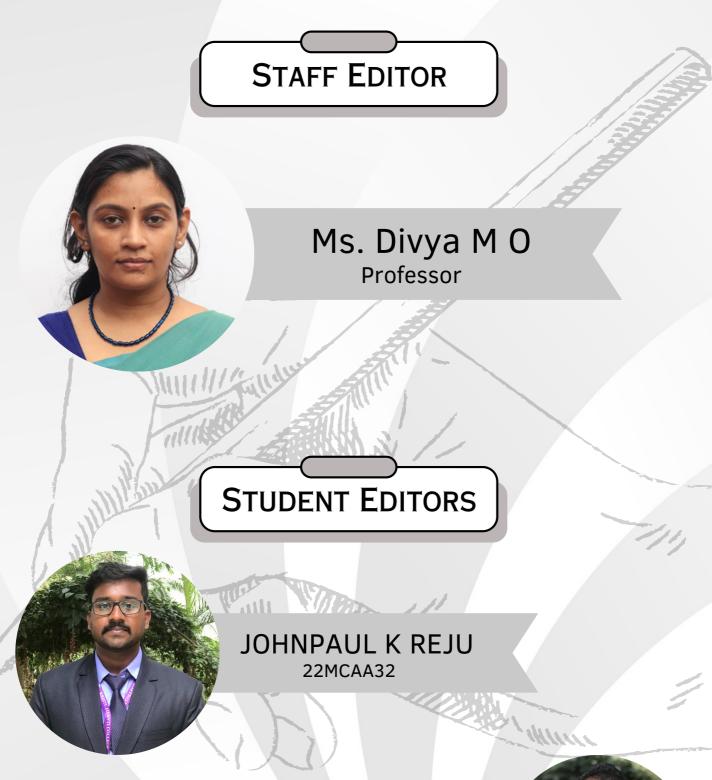
resh M Khadakbhavi



Women Techmakers



EDITORIAL BOARD



AMAL MARTIN 22MCAA04

