School of Engineering and Technology

PRISM

July - Sept 2022

FROM THE EDITOR'S DESK

With the immense pleasure and pride, we share the third quarterly edition of the PRISM 2022. During this unprecedented time, our contributors have found innovative and creative ways to showcase their knowledge and creative. This quarterly magazine bears testimony of students and faculty of SOET. As a philosophy of SOET, Students and faculty are always encouraged to bring out their talents and knowledge beyond the scope of curriculum and pedagogy. The significant facets of the school magazine are the contribution of the ongoing batch of the students, alums and faculty under the label of literary articles, technical articles, ongoing trends, technology and events. We believe each student of SOET is blessed with unique capability and novel thought process. This is evidenced as they portrayed their skill and ideas in the domain, they have chosen for themselves.

We would like to thank the leadership and faculty for all the help and support. Lastly, we would like to profusely thank all the students and faculty members for their brilliant and knowledgeable contribution. Reading through them was an enthralling experience. It is such a good experience of sharing knowledge amongst the readers which makes this magazine possible each quarter.

We wish safe and healthy times ahead while you enjoy reading the digital version of the school magazine-PRISM.

Happy Reading

PRISM- Editorial Team

School of Engineering and Technology

K R Mangalam University

FROM THE CHANCELLOR'S DESK

The School of Engineering and Technology of K R Mangalam University has come a long way and we have achieved a great deal. Essentially, we have succeeded in redefining education in so many productive ways. Our pedagogy relies far less on mechanical learning blackboard based learning. Instead it is far more attuned towards 'hands on' project based learning. We boast as Distinguished Professor's some of the leading experts from the corporate and knowledge world. Our board of governors boasts leading and highly respected experts from across the world in finance, IT, design, management and industry in addition to acknowledged academics. All in all, the most important test of our progress is the air of vibrancy, energy and creativity that we have generated in our students and faculty. I thus congratulate, through this message, the entire School of Engineering and Technology family for having taken the school forward so effectively.

Prof. Dinesh Singh

Chancellor

K R MANGALAM UNIVERSITY

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FROM THE VICE CHANCELLOR'S DESK

First of all, let me thank and congratulate the editorial team for successfully producing yet another edition of PRISM. PRISM is an appreciative idea where for both faculty and students to express their creativity and talents. I am glad to announce that PRISM is now in its third successive edition of production. It is firmly on its way to becoming a proud KRMU tradition. PRISM is a superb platform for faculty and students to manifest their academic, research and creative skills. It is also an endearing memento of the time spent in School of Engineering and Technology by our outgoing students. It is a document and tribute to the inspiration you have received from your teachers, and challenges you have dealt with in your quest for knowledge, learning and the acquisition of life skills. I am certain that the education you – as our batch of graduating students – have received at KRMU will prepare you to respond with strength and forbearance in the face of new tasks that you will encounter ahead. I wish you great success for all your future plans and careers! I am, once again, truly delighted to see PRISM go into production. It is a significant testimony to the supervision and support that students have received from their mentoring faculty. It is both the excellent guidance of our faculty as well as the creative talents of our students that make this volume an engaging and commendable success!

Prof. (Dr.) Chandra Shekhar Dubey

Vice Chancellor

K R MANGALAM UNIVERSITY

FROM THE PRO VICE CHANCELLOR'S DESK

It gives me immense pleasure to see the brightness and confidence in our students of School of Engineering and Technology of KRMU. With the new tagline Empowering the Youth; Empowering the Nation, students are getting freedom to explore, create and innovate. The students of SOET are so good with their innovation and hands-on skill that makes them ready for startups and entrepreneurships. The objective of the SOET is to empower students to choose the right path in life. The PRISM has been a platform for young minds to artistically express their ideas and perceptions. The magazine has continuously worked for evincing writing talents of students and faculty members. I take this opportunity to congratulate the Editorial Team and contributors of PRISM with the hope that it continues to ignite the literary sparks of young scholars.

I wish you all success!

Prof. (Dr.) PushplataTripathi

Pro-Vice Chancellor

K R MANGALAM UNIVERSITY

FROM THE DEAN'S DESK

It is my pleasure to pen down a message for this edition of Prism Magazine being published by School, of Engineering & Technology on a quarterly basis.

Prism serves as a platform for students & faculty to share their technical & literary articles, achievements, and school activities. Prism enables our students to share their thoughts and express themselves. It also enables our stakeholders particularly our alumni to connect with us and share their thoughts and achievements.

On behalf of the school, I wish to congratulate the editing team of Prism magazine for their efforts to release the quarter III edition for July 2022 to Sep 2022.

Dr. Pankaj Agarwal

Dean, School of Engineering & Technology

K.R Mangalam University

ABOUT THE UNIVERSITY

K.R. Mangalam University located at Sohna Road, Gurugram is the fastest growing and most promising upcoming University in India. The green and pollution free environment, world class infrastructure, advanced and comfortable learning environment, health and fitness activities, charming hangouts and safe campus are some of the special features of KRMU. The well qualified and experienced faculty members from prestigious institutions, eminent academic leaders and the highly professional management give the best to the students to groom them to be academically excellent, professionally skillful and socially responsible individuals. The University gives a perfect balance between curricular and co-curricular activities providing highly creative and innovative platform for the students to enrich their personality. Various activities like industry visit, internships, guest lectures, workshops, social services, and medical camps are some of the regular activities of the campus. Celebrations, festivals, various cultural programs add flavor to the campus life. Students get a lot of opportunities for inter and intra university competitions, and also to organize and participate in national and international conferences, seminars, and workshops. K.R. Mangalam University offers degree programms comparable to the best in the world. It offers innovative courses in: B.A. Honors (English, Economics, Historical Studies/ Psychology) with specialization in Digital Humanities, B.A. Honors (Digital Humanities), B.Sc. Honors (Innovation, IT and Entrepreneurship), B.Tech. in Digital Humanities, and B.Tech. in Innovation, IT and Entrepreneurship. KRMU aims to transform lives through knowledge, collaboration and partnership, creates niche of innovation, entrepreneurship and creativity, nurtures and rewards skills and talents, and undertakes world class research of high impact on society.

ABOUT THE SCHOOL OF ENGINEERING AND TECHNOLOGY

- B.Tech - Computer Science & Engineering (CSE) with AI & ML with academic support of Samatrix and IBM
- B.Tech - Computer Science & Engineering (CSE)
- B.Sc.(Hons.) - Computer Science with Academic Support of IBM
- B.Tech - Mechanical Engineering (ME - Automotive Designs & Electrical Vehicle) with Academic Support of Siemens
- B.Tech. (Civil Engineering) with specialization in Sustainable Development & Smart Cities
- BCA with Specialization in AI & Data Science with Academic Support of Samatrix and IBM
- B.Sc.(Hons.) - Cyber Security
- B.Sc.(Hons.) - Data Science
- B.Tech - Computer and Electronics Engineering (CEE)
- B.Tech - Computer Science & Engineering with specialization in Cloud Computing in association with Xebia*
- B.Tech - Computer Science Engineering with specialization in Full Stack Development in Association with Xebia*
- Integrated B.Tech (CSE) + MBA With Academic Support of IBM and Samatrix*
- B.Tech. in (Computer Science & Engineering) (CSE) with specialization in UX/UI in association with ImaginXP

FACULTY OF THE SCHOOL OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

Dr. Shweta Bansal Associate Professor	**Dr. Meenu Vijarania** Associate Professor	**Dr. Pooja Nagpal** Associate Professor	**Dr. Swati** Associate Professor	**Dr. Sarita** Assistant Professor
Ms. Kriti Sharma Assistant Professor	**Ms. Asha Sohal** Assistant Professor	**Ms. Y. Y. Raghav** Assistant Professor	**Ms. Jyoti** Assistant Professor	**Ms. Monika Khatkar** Assistant Professor
Ms. Pallavi Pandey Assistant Professor	**Mr. Ashwani Kumar** Assistant Professor	**Mr. Amar Saraswat** Assistant Professor	**Ms. Anubha Sharma** Assistant Professor	**Mr. Manoj Kr. Ojha** Assistant Professor

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Department of Electronics & Communication Engineering

Ms. Pooja Acharya
Assistant Professor

Department of Electrical & Electronic Engineering

Dr. Vineet Dahiya
Associate Professor

Dr. Bhavesh Vyas
Assistant Professor

Department of Civil Engineering

Ms. Gauri Aglave
Assistant Professor

Mr. Rishabh Arora
Assistant Professor

Department of Mechanical Engineering

Dr. Kaushal Kumar
Associate Professor

Dr. Jarnail Singh
Assistant Professor

Dr. Prabhakar Bhandari
Assistant Professor

Mr. Arvind Kumar
Assistant Professor

Mr. Surendra Kr. Yadav
Assistant Professor

Mr. Shri Ram
Assistant Professor

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WORKSHOP ON 3D PRINTING

Mechanical department of Schoolof Engineering And Technology Conducted workshop on 3D Printing for first year SOET students on 30th Aug, 2022 at 1:30 to 4:30 pm in B-210. The workshop aims to encourage & imbibe increased imagination, innovation, creation, and application amongst students.

The objective is to acquaint students about the 3D Printing and orient them to acquire technological skills required for building innovative projects.

In this workshop, students were briefed-up about the applications of 3D Printing. The purpose of this workshop to bring out the "technologically best" in students and to talk about the applications in innovative trends in Multidisciplinary Engineering. The workshop was conducted successfully and organized by Mr. Shri Ram and Mr. Arvind Kumar. Students were briefed about the 3d printing process and its enormous applications. A few models were printed by utilizing the 3d printer. Students provided their valuable feedback and testimonials about the workshop.

The students get to know about different types of 3D Printers, their components, design specifications and extension required, learn about the flash print software, Hands on experience on Flash Print software to convert .stl files to .gx files.

DEMONSTRATION OF COMPETATIVE CODING ENVIRONMENT/ GITHUB/ KAGGLE AND PROJECT CONTEST

Department of Computer Science and Engineering had organized an event on Demonstration of Competitive Coding Environment/Github/ Kaggle/Project Contests on 2 September 2022 at 11:00 a.m. With competitive coding and design on the rise in the tech world, more and more companies are looking for developers, data scientists, and designers to solve problems and build incredible assets in remarkably brief stints .This event is designed not only to give

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demonstrate the various coding platforms but also to showcase the powerful effects of crowdsourcing on a global scale. This event focuses on providing coding experience to students to get a pathway to work on the following days. Coding competitions have become more and more popular in recent years. Competitive programming websites like TopCoder, HackerRank, etc. have built great platforms that attract lots of competitive programmers of various ages. Participating in programming competitions can be fun, interesting, but more importantly, rewarding.

The objective of the event is to make students familiar with coding competitions and inspire them to embrace their brainstorming ability by solving problems. The students will get exposure to industry-related problems and compete to realize their true potential which would also enrich their skills. Our aim through this event is to spread more awareness among students about the importance of solving problems by using various available coding platforms.

The event was followed by experience sharing and feedback by participants of the workshop. The vote of thanks was delivered by Dr Shweta Bansal, HOD, CSE, SOET.

LIFE BEYOND ACADEMIC EVENT (COMPUTER SOCIETY OF INDIA)/ E YANTRA

Department of Computer Science and Engineering had organized an event to provide introductory session on CSI and its benefits to the students and sharing knowledge and exchange ideas on a fast emerging sector. Technical discussion were carried out with students to enhance their knowledge and skills which will motivate them to compete in a global competitive engineering field. The purposes of the Society are scientific and educational directed towards the advancement of the theory and practice of computer science and IT.

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In the activity "life beyond Academics" organized on 02nd September 2022 09:45 AM to 11:00 AM., e-Yantra co-ordinator Ms. Puja Acharya told the students about the working of e-Yantra society and various activities and projects held up in the society throughout the academic calendar.The e-yantra society aims to build ideas, innovative projects, an initiative to spread education in embedded systems and Robotics by IIT Bombay sponsored by Ministry of Human Resource Development through the National Mission on Education through ICT (NMEICT). The goal is to create the next generation of (Embedded systems) engineers in India with a practical outlook to take on challenging problems and provide solutions.

- To exchange views and information to learn and share ideas.
- To facilitate research, knowledge sharing, learning and career enhancement for all categories of IT Professionals, while simultaneously inspiring and nurturing new entrants into the industry and helping them to integrate into the IT community.
- To develop student activities (including contests, awards and promotion programs) and encourage students to participate in these activities and represent themselves in the global competition. Activity aims to
- Develop the understanding of Computer Society of India and its benefits.
- Provide an opportunity for the students to understand the recent trends in Computer science.
- To harness the talent of young engineers to solve problems using technology across a variety of domains such as: agriculture, manufacturing, defence, home, smart-city maintenance and service industries.

ENGINEER'S DAY CELEBRATION

Engineers are shaping the future by applying their skills to almost everything. They convert the theoretical knowledge of basic sciences into actual products and thus make our lives easy. Engineers possess versatile minds and help in filling the gap between science, technology and the community. Engineers in India contribute greatly to the nation's technological and industrial growth. There really is no limit to what engineers can do. Engineers' Day is celebrated on September 15 every year in India, commemorating the birthday of one of the most excellent engineers in India and Bharat Ratna recipient, Sir Mokshagundam Visvesvarayyagaru, recognizing his contributions in harnessing water resources in India. He had successfully designed and constructed several river dams, bridges and revolutionized the irrigation system all over India. The department of Computer Science and Engineering, School of Engineering

and Technology, had organised an event on 14th September 2022 in honor of Dr. M Visvesvarayya, a true gem of India and to identify the great works done by our hard working engineers each year. The main objective of the event was to encourage self evaluation, motivation, effective communication and team building among the students. The event commenced with the address of Dr. Shweta Bansal, Head of CSE department, to the students and advised them to

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take Dr M Visvesvarayyagaru as their role model, be confident in their mission and sharpen their skills to meet the global industrial demands. Associate Professor Dr. Vineet Dahiya, Academic Coordinator, encouraged the students to broaden their perspective and enhance their skills to be successful. On this occasion, Department of CSE organized a type racing competition followed by a technical quiz competition to inculcate a competitive spirit among the budding engineers. The first and second winners of type racing competition were Mohd. Soban Patel and Onkar Vatsa, respectively whereas in technical quiz Raunak and Utkarsh were the winners. Student coordinators were Rishav Jha and Sagar Vaishnov, student of B.Tech CSE-V semester played a significant role in the conduction of the event. The program was attended by many students from first year to final year, and the enthusiasm of Students was overwhelming. On this occasion, students have organized the following events: 1. Quiz Bowl -Technical Quiz Competition: The aim of this competition is to evaluate the knowledge of the students within academics as well as beyond academics and to make them familiar with the prospects of quizzes and the objectivity of the questions.

2. Type racing competition: The goal of the Contest is to identify and reward the fastest typist among all Participants, as calculated by the website. WPM scores will be based only on correctly spelled words.

The events were organized in the college campus at Lab 3, A block. More than 30 students were participated in the events orgainsed on the occasion of Engineer's Day. The great enthusiasm and participation shown by student were highly appreciated. Also on this special occasion, Dr Shweta Bansal (Head of Computer Science Department), in her presidential remarks pointed out the extraordinary qualities of Sir M. Vishweshwarayya and addressed the students to set him as their role model in order to be great engineers with technical skills as well as personal qualities. After completing all the event successfully, Prizes were distributed to winners with the Vote of thanks, the program was concluded successfully. The winners of the events are as following:

S.No.	Name of the Winners	Course	Event Name	Prize Money	Position
1.	Ronak Soni Utkarsh	B.Tech CSE V semester	Quiz Bowl	600	First
2	Shivam Piyush	BCA I semester	Quiz Bowl	400	Second
3.	Mohd. Soban Patel	B.Tech V semester	Type Racing	600	First
4.	Onkar Vats	B.Tech CSE V semester	Type Racing	400	Second

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SESSION ON CODE OF CONDUCT AND PROFESSIONAL ETHICS

SCHOOL OF ENGINEERING AND TECHNOLOGY organized a session on code of conduct and professional ethics on 16th August 2022 in Lab 6, B Block of K R Mangalam University.

A Session on code of Conduct and Professional ethics was organized for 2nd, 3rd & 4th year students to spread awareness among students about rules & regulations of K.R Mangalam University.

This session was organized as a part of Orientation cum Induction program which was organized for the students of 2nd, 3rd & 4th yr student of School & Engineering & Technology.

The session was conducted by Dr. Pankaj Agarwal, Dean SOET.

The session focused on code of conduct and ethics, rights & responsibilities of the students in the campus.

Vice Chancellor, Prof. C.S Dubey and Pro-Vice Chancellor Prof. P. Tripathi also interacted with students and made them aware of the important pointers of the code of conduct for students at K.R Mangalam. They also encouraged students

Session being taken by Dr. Pankaj Agarwal, Dean SOET

to become good citizens and show professional conduct at campus. The outcome of the session were:

1. Spread awareness on Code of conduct by students in the campus & classroom
2. To update the students on rules & regulations defined by the university.
3. To make students aware of professional ethics and its importance in professional careers.

Conduction of written aptitude test

Conductance of Mock technical interviews

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ORIENTATION PROGRAM FOR 2ND ,3RD & 4TH YEAR STUDENTS ON 16TH AUG 2022

Orientation cum Induction program was organized for the students of 2nd, 3rd & 4th yr student of School & Engineering & Technology. Orientation program focused on new initiatives by SOET for students in the coming semester. It also focused on code of conduct, career guidance, ethics, rights & responsibilities of the students in the campus. A field visit to one of the adopted village Ghamroj was also organized for the students.

ORIENTATION PROGRAM FOR 1ST YEAR STUDENTS (29TH AUG 2022) BY SCHOOL OF ENGINEERING & TECHNOLOGY

Induction program for 1st year students admitted in School of Engineering & Technology was successfully organized on 29th Aug 2022 in Room number A213, A Block, K.R Mangalam University. Prof. (Dr.) Pankaj Agarwal, Dean, SOET welcomed all the students and introduced the faculty members of SOET to students. Prof. Agarwal gave a presentation to first year students with focus on various programs, activities & initiatives of school. He focused on various aspects like career options, innovative thinking, practical projects, self-learning, Social networking, entrepreneurship, personality development, technical skill development etc. He discussed the importance of discipline & correct attitude in life. His presentation also covered the code of conduct & social ethics for students. He

proposed a complete planner for students that could help them to become a successful engineer after the completion of their degrees.

INTER- SCHOOL SPORTS EVENT

SCHOOL OF ENGINEERING AND TECHNOLOGY organized an Inter school sports event, on Friday, 01st September 2022, at C-Block, sports room, K. R. Mangalam University, Gurgaon. A total of 53 students attended the sports event.

The objectives of the event were:-

- Popularizing sports amongst the youth as a way of life.
- To promote sport and fitness in KRMU.
- Early identification of sports talent and nurturement of the identified talent.
- To help the students to participate at national level, inter university level and inter college level.

- To raise awareness of sporting facilities and achievements.
- To encourage students to join various sports teams.

As part of the sports event, Chess, Table Tennis and Pool were organized. A total of 53 students from School of Engineering and Technology took part in theses event.

The event was highly competitive in nature with students performing exceptionally well in the games. The event was successfully in demonstrating the role of sports, along with academia, in day to day life.

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SUCCESS STORY OF ALUMNI

SCHOOL OF ENGINEERING AND TECHNOLOGY organized a session with Alums for first year students on 29th August 2022 at A213, A ablock, K R Mangalam University.

Coming back to a place that shaped the trajectory of one's own life is a priceless and unexplainable experience. Meeting old friends who traveled in different directions and sharing the life experiences with them, and guiding others make this coming back an unforgettable event. Alumni Meet was organized in the School of Engineering and Technology on date 29 August 2022 in A Block-Room no. 213, at K R Mangalam University Campus.

It was a reunion of alumni coming from different states of India and Local as well as students, faculty, and staff members at the K R Mangalam University Campus, Sohna Road, Gurgaon. The alumni meet was conducted to reconnect with the alumni and share their success and various achievements with the fresh and recent batches.

As alumni know the quality and value of their experience with K R Mangalam University and can share its outcomes and impacts on their learning goals. By telling alumni success stories we can also endorse SOET programs, build credibility and instill trust in the KR Mangalam organization. These powerful stories can convert the prospective of the students in a way that other marketing efforts cannot.

The Alumni reached the university by 10.30 a.m., and they were received by the event organizing team. The refreshment was arranged for them on arrival. After refreshment, they were taken on a campus tour where they revisited the familiar places where they had studied and were shown the various developments that had taken place since then.

The Alumni Meet started with a warm welcome note by 3rd Year, B tech CSE. The hosts of the event invited the dignitaries to occupy the dais. To start the occasion on an auspicious note, Dr. Pankaj Agarwal, Dean SOET, K R Mangalam University preceded to the dais for the introduction of alumni, accompanied by Dr. Vineet Dahiya, Dr. Jarnail Singh, Dr. Kaushal Kumar, and Ms. Monika Khatkar other dignitaries on the dais.

Thereafter, the event was followed by a Preamble of the Alumni Meet by Ms. Monika Khatkar Assistant Professor, Department of Computer Science & Engineering as well as Alumni Meet Coordinator. She started her talk by highlighting various achievements of our Alumni. She also shared the aims and objectives of the Alumni Association Cell. She shared her views on the various prominent Alumni visits and interactions they have had in the department over the past years. Also, she focused her view on the Alumni contribution to the department in terms of Training, Placement, Consultation, and Mentoring of our current batch of students for progress and achievements.

Er. Daksh Mehta alumnus currently working as Technical Resourcer (Disney), who has also cracked 14 companies' interviews shared his valuable experiences, and feedback and advised the youngsters. He highlighted the role of engineering for startups and entrepreneurship in our country. He listed different primary requirements for the establishment of a startup model and different skills of presentations, during an interview, group discussion, etc.

He also said that every teacher waits for this proud moment to see his pupils shine & progress all over the globe. He was amazed to see that even after going far for so many years; these alumni still love their motherland and their institute.

Further another alumnus Ms. Divisha Jain, working with GroupM shared her life experiences at the K.R Mangalam University campus. They both entertained the students by sharing the campus stories, how to develop soft skills etc. Furthermore, a questionnaire session was scheduled for improving soft skills and interactions and networking between our pass-out and recent batches. More than 200 freshers were present and actively participated in the questionnaire session. Both alumni motivated the fresher in the best possible way. Everyone participated in this event with utmost enthusiasm.

Dr. Jarnail Singh and Ms. Monika Khatkar also expressed their happiness and proud feeling in their presidential speech. They also told that such alumni meetings should be arranged every year so new bonds, linkages, and feelings of happy get-togetherness can be achieved.

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The time came for a most awaited moment was alumni felicitation by hands of Hon'ble Dean SOET sir. Each Alumnus was felicitated by Memento & Token of appreciation. After the Inauguration of Alumni Meet, the next session of introduction and sharing their journey of success and one-to-one interaction with each alumnus started. It was a very proud moment to hear about their journey of success & hard work, the feelings of respect towards their home university & staff were also reflected at the time.

Then after lunchtime, the student's interaction session with alumni went for an hour of time. Alumni gave valuable guidance on training, and placement & also guided students on, how to make a CV strong to meet the need of the time & market. Next, the session was the interaction of alumni with the department. On this occasion, Ms. Monika Khatkar discussed important issues of matter like placement opportunities, networking, linkages, collaboration, consultation, mentorship programs, training programs, skill development programs, etc. At this time all alumni promised to help the department and the university in all possible ways. The meet saw the Alumni retracing their memory lines by taking a stroll around the campus.

Our Pride Alumni

Er. Divisha
Pass out Batch-2022

B. Tech- working as a Data Analyst at GroupM

We congratulate her for her achievements and wish all the best for her future endeavors.
Let's know his journey in his own words.............

First of all I would like to thank my college, KR Mangalam University, School of Engineering and technology, Gurgaon- for giving me this opportunity to share my success story. Uptill now I have not achieved my desired destination, so dont cosider it as my sucsess story, but you can take it as my journey so far.

Before starting my story I would like to quote one sentence, of my inspiration Shri Swami Vivekananda"

"Take up one idea. Make that one idea your life—think of it, dream of it, live on that idea. Let the brain, muscles, nerves, every part of your body, be full of that idea, and just leave every other idea alone. This is the way to success." "

If we all take this as a Gurumantra difinitely we will got success.

Hello everyone, myself Mr. Daksh Mehta, Technical Resource Disney!

I remember the day from when, the journey started, and today I feel very excited to share my story with you all, how unsuccessful events made me successful. Before going to the path and journey of success I just wants to tell all of you, whatever success you will achieve in your life, always remember your past, remember your family, teachers, friends everyone who knowingly or unknowingly contributed in your success.

"There are no limits to what you can accomplish, Except those limits you place on your own thinking" so " *Think Big, be Big* ".

Yes, everyone in life get best chance and I got same to make it golden chance .

Same as many of you I also belong to common man family. In June, 2016 I passed my 10+2 exam., then I got admission for computer Engineering branch in KRM university, where I had great teachers, college as good family. And here my journey started and today I am thank full to all my cooperative and supportive teachers, staff and my helpfull batchmates of such a good institute.

You don't have to be great to start but you have to start to be great.

After finishing degree as usual, I also had big question what is next? but I was knowing one thing I have good degree from good college and for which I was waiting. That day came , I packed my bags as my placement   done in in several companies via campus. Here are the way starting to earn money , as our faculties each and every time in college lectures, or personally guided me to focus on my carrier ..And that view also in my mind each and every time ,finaly after many failures and learnings finaly sateled in facebook, today as i am a technical resourcer at Disney, that credit also goes to my god, parents, family

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members and all Computer science Engineering dept. Staff.

"Opportunities don't happen. You create them.

So, dear aspirants I would like to share 5 things that you should always keep in mind –

1) There are no secrets to success. It is the result of preparation, hard work, and learning from failure.

2) Before anything else the *Preparation* is key to success.

3) Great things never comes from comfort zone.

4) Don't stop when you're tired. Stop when you're done

5) Dream it, do it and get it as only you can change your future.

Keep trust on yourself, success will surely be yours.

Wishing you All The Very Best for your golden future!

Freshmen interacted with alums and raised questions like

1. Why Did You Choose This School?

2. What Did You Think of the Campus and Extracurricular Activities?

3. How Did The School Prepare You For Your Career?

4. How did campus life shape your career path?

5. How do you motivate yourself during your low days?

6. How can we crack campus placement interviews?

7. What are the scope of B.Tech CSE after four years in market

Figure 7 Token Distributions by Dean SOET to Alumnus

Figure 2 Audience participation

Figure 3 Daksh Mehta – Sharing Experience   Figure 4 Interaction with fresher's

Figure5. Dean SOET addressing the audience   Figure6. Alumnus Divisha addressing the audience

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SESSION BY INDUSTRY EXPERTS

A session on 'Interaction of students with industry experts ' was organized by the school of Engineering & Technology. Mr.Ashwani Kumar coordinated the session in A block moot court from 11:00AM to12:30 PM Mr. Vishal Jain and Mr. Sunny Pathak from Samatrix introduced students with the concept of artificial intelligence and discussed about the applications of artificial intelligence and machine learning in various fields such as pharmaceuticals, finance, marketing etc. They also discussed about the career opportunities available in the field of Artificial intelligence

WORKSHOP ON ROBOTICS KITS FOR 1ST YEAR STUDENTS

Workshop on Robotics Kits for 1st year students was organized by the school of Engineering & Technology to make them aware of Robotic kits & applications in realworld

WORKSHOP ON BIGDATA ANALYTICS

Workshop on Bigdata Analytics was organized by School of Engineering & Technology on 14th September with an objective to update students on how augmented & virtual reality plays a vital role in product development by Industry expert Mr. Rajinder Kr. Chitoria, Project Director, Froyo Technologies

HEARTFULNESS SESSION ON WORLD PEACE DAY
21 SEP 2022 WAS ORGANIZED BY SCHOOL OF ENGINEERING & TECHNOLOGY

INSTA-REEL COMPETITION

School of Engineering & Technology organized an Insta-reel Competition at KR Mangalam University Campus. Total fifteen students and faculties from various departments, from university participated in this event. Theme for this event was related to College Life, Friends, Greenery, and Sustainable development or as per the latest trend. Reel video could feature an individual or a group of up to five people.

Contest participants denoted their involvement through the use of a specifically designed hash tag. Students and faculty members actively participated in this event and enjoyed it thoroughly. This Event was aimed to create awareness among students that insta-reel could be a good source to discover new contents from brands and creators.

Instagram reels are a great way for people to discover new content on Instagram, and so ads are a natural fit. Instagram Reels allows users to create engaging, fun, and short videos using a catalog of music and user-generated Reels media on Instagram. In the beginning, the student showed their instagram reel on their phone. Students of KRMU created small videos clips that had sound, effects, and music added to them.

Few faculties from different department also

took interest and created small reel videos to learn more about it. The panel of judges included Dr. Vineet Dahiya (School Coordinator –SOET) and Dr Shweta Bansal (HOD-CSE). They discussed with students that the reel could be a great engaging way to get the more followers for business and allowing people to discover new contents from brands and creators. In the end winners were announced. First prize was awarded to "Jai" student of B.Sc Cyber-VI and 2nd Prize was awarded to Vipul Kaushik Student of MCA-II.

Students came to know that Insta-Reel could be a great engaging way to get the more followers for business and allowing people to discover new contents from brands and creators. With this event, Students came to know that Insta Reel could be a great potential as a dynamic marketing and advertising tool, for people outreach.
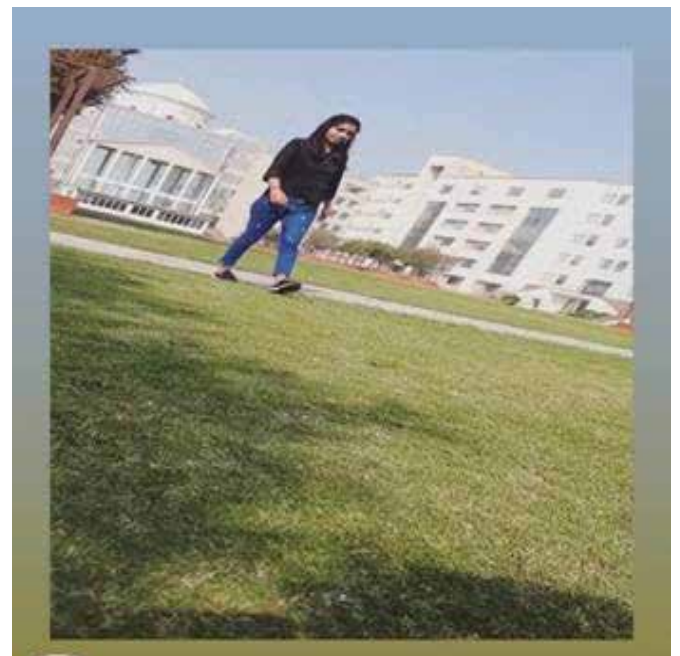
ACHIEVEMENT OF FACULTY

Faculty of School of Engineering and Technology has successfully applied and got a project from numerous government agenies. Detail are as follows

Details of Projects Submitted for Grant/Consultancy (in 2022)

S. N	Project Title	PI (Name)	Agency	Name of scheme	Amount
1	Investigation of Optoelectronic Properties of Chromium Oxide: RxCr2-xO3 (R = La, Nd, Eu and Gd = Rare-Earth ions) Thin Films	Dr. Jarnail Singh	DST	Technology Development Programme (TDP)	23.50 Lakh
2	Early Detection of Crop Deterioration using Infrared Thermal Imaging through UAV based Scanning	Dr. Pankaj Agarwal	DST	SERB-SURE	25.7 Lakhs
3	Development of mobile app (SAHET) for ederly and disabled persons	Dr. Shweta Bansal	DST	SERB-SURE	28
4	Surveying and identification of suitable compositions in building lead free hybrid perovskite solar cell	Dr. Vineet Dahiya	MNRE	RD&D in Solar Energy	37.33
5	Optimizing speech synthesis on limited resource devices and disability applications	Dr. Shweta Bansal	SERB-CRG	Core Research Grant	32
6	Aapda Setu-AI based voice Bot for providing the help after the disaster	Dr. Shweta Bansal	DST	TDP	37

In addition to get projects, faculty of the School of Engineering And Technology is very active in the field of research. Given below is the publication record of the faculty in the specific quarter.

Publication in JULY 2022

S.No.	Type	Title	KRMU authors	Journal/ Publisher/ Country	Title of the Proceedings/ book	Date of publication/ award	Year of	ISSN/ ISBN/ Patent Number	Database	Authors from other institutions	Month, Year	Department
1	Journal article	Improving MapReduce heterogeneous performance using KNN fair share scheduling	Dr. Rajat Gera,Dr. Kaushal Kumar	Robotics and Autonomous Systems/ Elsevier		30-07-2022			Scopus		July, 2022	Department of Management, Department of mechanical engineering
2	Patent	An intelligent support system (AapdaSetu) to improve the quality of service for making intelligent decisions and solving problems	Dr Shweta Bansal,Ms. Monika Khatkar,Dr. Kaushal Kumar,Ms. Yogita Yashveer Raghav	German	-	26-07-2022	2022	202022102589		Dr. Shweta Sinha	July, 2022	Department of Computer Science and Engineering, Department of mechanical engineering
3	Patent	ON-DEMAND ORDERING FOOD THROUGH ONLINE CROWDSOURCING USING MACHINE LEARNING	Dr.Sarita	Indian Patent	-	22-07-2022	2022	202211040140A		Dr. Saneh Lata Yadav	July, 2022	Department of Computer Science and Engineering
4	Book	Techniques of Data mining	Ms. Monika Khatkar	AGPH Books (Academic Guru Publishing House), Bhopal, M.P. India	Techniques of Data mining	07-07-2022					July, 2022	Department of Computer Science and Engineering
5	Book chapter	Flexible Load and Renewable Energy Integration with Impact on Voltage Profile of a Large Size Grid	Dr. Bhavesh Vyas, Dr. Vineet Dahiya	CRC Press Taylor & Francis	Smart Electrical Grid System	01-07-2022	2022	9781003242277	NA	Dr. M.P.Sharma	July, 2022	Department of Electrical and Electronics Engineering

Publication in AUGUST 2022

S.No.	Type	Title	KRMU authors	Journal/ Publisher/ Country	Title of the Proceedings/ book	Date of publication/ award	Year of publication/ award	ISSN/ISBN/ Patent Number	Database	Authors from other institutions	Month, Year	Department
1	Journal article	Prediction and Analysis of Stock Market using ARIMA Model and Machine Learning Techniques	Dr.Swati	Neuro Quantology		31-08-2022	2022	1303-5150	Scopus	Ankit Bansal,Ghada Elkady,Ram Bhawan Singh	August, 2022	Department of Computer Science and Engineering
2	Conference proceeding article	Influence of anionic surfactant (SDS) on the structural properties of chromium oxide (Cr2O3) nanoparticles	Dr. Jarnail singh,Dr. Prabhakar Bhandari,Dr. Kaushal Kumar		Materials Today: Proceedings	30-08-2022	2022		Scopus		August, 2022	Department of mechanical engineering
3	Conference proceeding article	Effect of variable blockage height ratio on performance for solar air heater roughened with 45 Z-shaped baffles	Dr. Prabhakar Bhandari,Dr. Jarnail singh,Dr. Kaushal Kumar		Material todays: Proceeding	28-08-2022	2022		Scopus	Jaya Bohra, Vijay Singh Bisht, Kamal Singh Rawat, Babita Rawat	August, 2022	Department of mechanical engineering
4	Journal article	Numerical simulation of sand–water slurry flow through pipe bend using CFD	Dr. Kaushal Kumar	International Journal on Interactive Design and Manufacturing (IJIDeM)		20-08-2022		Electronic ISSN 1955-2505 Print ISSN 1955-2513	Scopus		August, 2022	Department of mechanical engineering
5	Conference proceeding article	Role of Machine Learning in Healthcare Sector	Dr.Meenu	Elsevier	International Conference on Computational and Intelligent Data Science	20-08-2022	2022		Scopus		August, 2022	Department of Computer Science and Engineering
6	Conference proceeding article	A Review on Congestion Control Using Routing Technique and Machine Learning	Dr.Meenu	Springer	Proceedings of the Third International Conference on Information Management and Machine Intelligence	04-08-2022	2022	978-981-19-2064-6			August, 2022	Department of Computer Science and Engineering
7	Journal article	Stackelberg game approach for resource allocation in device-to-device communication with heterogeneous networks	Dr. Kaushal Kumar;Dr Shweta Bansal	Robotics and Autonomous Systems		04-08-2022	2022	0921-8890	WoS & Scopus		August, 2022	Department of mechanical engineering, Department of Computer Science and Engineering

Publication in SEPTEMBER 2022

S.No.	Type	Title	KRMU authors	Journal/ Publisher/ Country	Title of the Proceedings/ book	Date of publication/ award	Year of publication/ award	ISSN/ ISBN/ Patent Number	Database	Authors from other institutions	Month, Year	Department
1	Conference proceeding article	Suitability of turning and grinding steel chips to synthesize metal matrix composite via powder metallurgy route	Dr. Jarnail singh,Dr. Kaushal Kumar,Dr. Prabhakar Bhandari		Materials Today: Proceedings	06-09-2022	2022		Scopus		September, 2022	Department of mechanical engineering
2	Conference proceeding article	Thermodynamic investigation on solar air heater having roughness as multiple broken arc and circular protrusion	Dr. Prabhakar Bhandari,Dr. Kaushal Kumar,Dr. Jarnail singh		Material todays: Proceeding	03-09-2022	2022		Scopus		September, 2022	Department of mechanical engineering

A FASTER OPTIMAL SOLUTION FOR ECONOMIC DISPATCH PROBLEM IN A SMART GRID ENVIRONMENT USING TENSORFLOW

- Dr. Ravindra Kumar Chahar

This paper has a description of an approach that is apt for generating the solution of classical Economic Dispatch (ED) problem in a smart grid environment. There is a need for designing newer set of machine learning algorithms which can be applied for smart grid applications in cloud computing and bigdata specific situations. There are numerous advantages that are offered by a cloud computing environment, which must be addressed in a suitable manner to apply these techniques in a smart grid application. Big-data application is identified by a huge volume, velocity, variety and veracity. This paper gives a description of a scheme that can generate a simplified solution of the classical ED problem in a smart grid environment. The implementation of the scheme is done using tensor-flow. Since the classical model of ED is simplified in the final state by this scheme, this method is bound to generate a faster solution when it is implemented online. A simple sample system is used to show the implementation of the proposed scheme based on tensor-flow.

A DRONE-BASED NETWORKED SYSTEM AND METHODS FOR COMBATING CORONAVIRUS DISEASE (COVID-19) PANDEMIC

- Ms. Kriti Sharma

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. It is similar to influenza viruses and raises concerns through alarming levels of spread and severity resulting in an ongoing pandemic worldwide. Within eight months (by August 2020), it infected 24.0 million persons worldwide and over 824 thousand have died. Drones or Unmanned Aerial Vehicles (UAVs) are very helpful in handling the COVID-19 pandemic. This work investigates the drone-based systems, COVID-19 pandemic situations, and proposes architecture for handling pandemic situations in different scenarios using real-time and simulation-based scenarios. The proposed architecture uses wearable sensors to record the observations in Body Area Networks (BANs) in a push–pull data fetching mechanism. The proposed architecture is found to be useful in remote and highly congested pandemic areas where either wireless or Internet connectivity is a major issue or chances of COVID-19 spreading are high. It collects and stores the substantial amount of data in a stipulated period and helps to take appropriate action as and when required. In real-time drone-based healthcare system implementation for COVID-19 operations, it is observed that a large area can be covered for sanitization, thermal image collection, and patient identification within a short period (2 KMs within 10 min approx.) through aerial route. In the simulation, the same statistics are observed with an addition of collision-resistant strategies working successfully for indoor and outdoor healthcare operations. Further, open challenges are identified, and promising research directions are highlighted.

INTERNET OF THINGS (IOT): APPLICATIONS, TRENDS, ISSUES AND CHALLENGES

- Ms. Pallavi Pandey

The Internet of things is a new revolution that has shifted people's lifestyles from conventional to high-tech. Smart cities, smart homes, pollution management, energy conservation, smart transportation and smart industries are examples of IoT-driven developments. A lot of critical research studies and inspections have existed exhausted order to improve the electronics through IoT. However, there are still plenty of challenges and issues that need to

be focused on to reach the full potential of IoT. These challenges and issues must be thought-out from miscellaneous facets of IoT to a degree uses, challenges, permissive sciences, friendly and referring to practices or policies that do not negatively affect the environment impacts etc. The main aim of this review paper is to debate various challenges and key issues of IoT, construction and use of rules. Moreover, this paper shed some light on the existing information and pictorial representations of different facets of IoT. Moreover, the significance of substantial dossier and allure reasoning concerned to IoT has been explored. This paper would help the researchers and analyst to appreciate and allure towards the IoT.

A NOVEL SMART HEALTHCARE DESIGN, SIMULATION, AND IMPLEMENTATION USING HEALTHCARE 4.0 PROCESSES

- Ms. Kriti Sharma

Blockchain technology is found to have its applicability in almost every domain because of its advantages such as crypto-security, transparency, immutability, decentralized data network. In present times, a smart healthcare system with a blockchain data network and healthcare 4.0 processes provides transparency, easy and faster accessibility, security, efficiency, etc. Healthcare 4.0 trends include industry 4.0 processes such as the internet of things (IoT), industrial IoT (IIoT), cognitive computing, artificial intelligence, cloud computing, fog computing, edge computing, etc. The goal of this work is to design a smart healthcare system and it is found to be possible through integration and interoperability of Blockchain 3.0 and Healthcare 4.0 in consideration with healthcare ground-realities. Here, healthcare 4.0 processes used for data accessibility are targeted to be validated through statistical simulation-optimization methods and algorithms. The blockchain is implemented in the Ethereum network, and with associated programming languages, tools, and techniques such as solidity, web3.js, Athena,

etc. Further, this work prepares a comparative and comprehensive survey of state-of-the-art blockchain-based smart healthcare systems. The comprehensive survey includes methodology, applications, requirements, outcomes, future directions, etc. A list of groups, organizations, and enterprises are prepared that are working in electronic health records (EHR), electronic medical records (EMR) or electronic personal records (EPR) mainly, and a comparative analysis is drawn concerning adopting the blockchain technology in their processes. This work has explored optimization algorithms applicable to Healthcare 4.0 trends and improves the performance of blockchain-based decentralized applications for the smart healthcare system. Further, smart contracts and their designs are prepared for the proposed system to expedite the trust-building and payment systems.

STUDY THE EFFECT OF FRACTIONAL REPLACEMENT OF CEMENT PARTICLES WITH WASTE SILICA FUME IN THE FORMATION OF GREEN CONCRETE

Dr. kaushal Kumar and Mr. Rishabh Arora

Currently any individual, company and country trying their best to get benefit from the use of solid waste in valuable products. silica fume was also regarded as one of the most important waste resources in the world. The physical and chemical features of waste silica fume powder are investigated as part of its application as a cement substitute in this study. The pozzolanic properties of fine Silica Fume powder make it ideal for concrete applications. In terms of the Compressive Strength Test (CST) and Slump Test, extensive testing of silica fumepowder replacement for the age 7, 14 and 28 days in the range of 5 to 10% by cement has been carried out. The increase in strength was observed when some part of cement replaced with waste silica fume powder. The research could lead to the use of more wastes in green concrete, also reduced the dependency on costly cement and limited natural material like sand etc.

BIOMEDICAL APPLICATION OF IDENTIFIED BIOMARKERS GENE EXPRESSION BASED EARLY DIAGNOSIS AND DETECTION IN CERVICAL CANCER WITH MODIFIED PROBABILISTIC NEURAL NETWORK

Dr. Pankaj Agarwal

Cervical squamous cell carcinoma (CSC) is expected to rise to become the fourth most prevalent cancer in women globally and to replace breast cancer as the top cause of death in women in the future years, according to the World Health Organization.

According to the World Health Organization, developing countries are responsible for 86 percent of all cervical cancer cases globally in women aged 15 to 44 (WHO). Cancer mortality is associated with the largest amount of monotonous antecedent in

low- and middle-income nations, while cancer mortality is associated with the least amount of monotonous antecedent in highincome countries. Cervical cancer is thought to be caused by aberrant proliferation of cells in the cervix that is capable of stealing or invading other human organs, according to current thinking. Cancer of the cerebral cell is the most prevalent kind of cancer in women. It is expected that cervical squamous cell carcinoma (CSC) will be the fourth most frequent cancer in the world and the main cause of death in women by the year 2050. Despite the fact that technology has improved tremendously since then, this is still the case. When compared to high-income countries, low- and middle-income countries have the highest consistent antecedent for cancer mortality, according to the World Cancer Research Fund. Cancerous growths of cells in the cervix, such as cervical cancer, are caused by cells that have the ability to steal from or invade auxiliary organs of the body, as is the case with cervical cancer.

Although technological advances have been made in recent years, gene expression profiling continues to be a prominent approach in the investigation of cervical cancer. Since then, researchers have had the opportunity to examine a gene coexpression network, which has evolved into an exceptionally comprehensive technique for microarray research. ,is has helped them to get a better understanding of the human genome. When a specific biological issue is addressed, gene coexpression networks retain a considerable percentage of their once vast component of physiognomy, which was previously immense. When comparing the properties of genes in a population, it is well known that feature selection may be used to choose genes that outperform the rest of the genes in the population. ,there are several benefits to feature selection, and this is only one of them. Typically used gene selection approaches have been shown to be insufficient in acquiring the best potential sequence of genes for training purposes, and as a result, the accuracy of the classifier has likely suffered as a result of this. Recently, a considerable number of scientists have advocated for the use of optimization approaches in the process of gene selection, and this trend is expected to continue. A metaheuristic algorithm may be used to choose a suitable subset of genes, according to the preceding assertion, which is also consistent with the metaheuristic approach. A Modified Probabilistic Neural Network differs from other networks in that the underlying gene expression associated with DEGs and standard data in a Modified Probabilistic Neural Network is not uniformly distributed as it is in other networks (MPN). As previously said, selecting the most relevant genes or repeating genes is a vital step in the prediction process. It was this technique that was used in the research of cervical cancer. Since then, researchers have had the opportunity to examine a gene coexpression network, which has evolved into an exceptionally comprehensive technique for microarray research. ,this has helped them to get a better understanding of the human genome. When a specific biological issue is addressed, gene coexpression networks are able to preserve a previously major section of the face that had been lost. When comparing the properties of genes in a population, it is well known that feature selection may be used to choose genes that

outperform the rest of the genes in the population. ,there are several benefits to feature selection, and this is only one of them. Typically used gene selection approaches have been shown to

be insufficient in acquiring the best potential sequence of genes for

training purposes, and as a result, the accuracy of the classifier has likely suffered as a result of this. In the field of gene selection, several scholars have argued in favor of the employment of optimization approaches. A metaheuristic algorithm may be used to choose a suitable subset of genes, according to the preceding assertion, which is also consistent with the metaheuristic approach. It was discovered that Modified Probabilistic Neural Networks (MPNs) had a different distribution of gene expression linked with DEGs and normal data than other networks, which had not been previously seen. ,this was previously unknown. Following what has been said before, selecting the most appropriate or repeated genes is a critical task throughout the prediction process.

A VIRTUAL INTERFACING SYSTEM TO TRAIN FARMERS FOR SMART FARMING AND A METHOD THEREOF (South African Patent)

Application Number: 2022/10006, Published on 8th Sep 2022

By: Dr. Pankaj Agarwal

virtual interfacing system (100) to train farmers for smart farming, comprises of: a plurality of sensors (102) deployed on a selected area for collecting a plurality of details in real-time; a weather forecasting module (104) for forecasting weather condition of the selected area; a virtual reality module (106) for constructing atleast a 2-dimensional image of the area to create a virtual image of the area, wherein the virtual image comprises of different elements of the area for growing crops; an augmented reality module (108) for receiving signals and select a plurality of options required to learn either a plurality of agricultural practices, or track growth of crops, or enhance knowledge of tools and fertilizers; and a user interface module (110) for providing learning lessons based on the virtual image created and a plurality of options selected by a farmer.

A COMPARATIVE ANALYSIS OF DIFFERENT LOAD BALANCING ALGORITHMS ON DIFFERENT PARAMETERS IN CLOUD COMPUTING

- Ms. Yogita Y. Raghav

In recent days Cloud computing has made the trademark in hosting and delivering services to the personal or any organization. Everywhere and everybody is opting for cloud computing because it's beneficial uses i.e. worth to adopt the infrastructure, platform and services on the model of pay for only those services which are going to be used. Cloud computing gives the best infrastructure, new softwares and extended applications without investing for infrastructure maintenance, downloading, and installation of the softwares and without paying for the license cost for the individual computers and no requirement of personnel training for extended applications. Cloud computing provides the way to increase the services and capability of any organization at run time. Still cloud computing is at its initial state and many more research is going on in this field and there are many obstacles that prevent the success of cloud computing. In this paper, a survey of cloud computing basic concepts, characteristics of cloud computing, deployment models, Environment for Load Balancing algorithms as well as research challenges are included. The aim of this paper is to find out the research direction in this vast technology. We discussed performance parameters which must be satisfied to design the efficient and effective algorithm. The algorithm which makes the better trade-off with these parameters will be considered good."

GENERATIVE AI IS CHANGING CREATIVE WORK

- Dr. Pankaj Agrawal

A new buzzword, generative AI, has developed thanks to cutting-edge uses like DeepFake. Generative AI makes use of AI and machine learning techniques to provide computers the ability to create fake content such as text, images,

audio, and video based on training data, deceiving the user into thinking the content is authentic. However, there are issues with data protection and misuse for fraudulent or illegal purposes that generative AI must address.

The technology known as generative AI allows users to produce new text, audio, or visual output using pre-existing materials. With generative AI, computers can identify the underlying pattern in the input and generate material that is comparable to it.

With the introduction of generative adversarial networks (GANs), a class of deep learning architecture that could produce lifelike images from noise maps, such as faces, generative AI gained popularity in 2014. Later, scientists developed many GAN variations to carry out different functions, such changing the look of one image to another. Later, the era of deepfakes, an AI approach that changes photos and videos to swap one person's face for another, was ushered in by GANs and the variational autoencoders (VAE), another deep learning architecture.

Generative AI have created a new set of opportunities for businesses and professionals that perform content creation. Some of these opportunities include:

1. Automated content generation: Large-scale language and image synthesis for automated content Articles, blog posts, and social media postings can all be created automatically using AI models. For organisations and professionals that regularly develop material, this can be a useful time-saving tool.

2. Better content quality: Since AI models are able to learn from a big quantity of data and recognise patterns that people might not be able to detect, content produced by AI can be of higher quality than content produced by humans. This may lead to content that is more accurate and instructive.

3. Increased content variety: AI models can generate a variety of content types, including text, images, and video. This can help businesses and professionals to create more diverse and interesting content that appeals to a wider range of people.

4. Personalized content: AI models can generate personalized content based on the preferences of individual users. This can help businesses and professionals to create content that is more likely to be of interest to their target audience, and therefore more likely to be read or shared.

Applications of Generative AI?

1. Generating photographs of human faces, objects and scenes: Generative AI produces real looking photographs.

2. Image-to-image conversion: It translates an image to another. For example:

a. black and white photographs to color

b. day photos to night photos

c. a photo to an artistic painting

d. satellite photos to google maps views
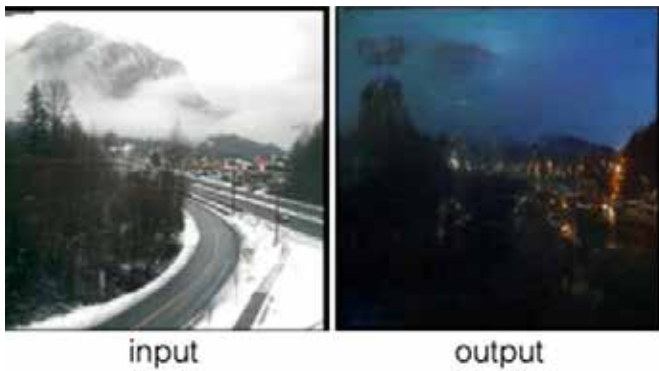
Day to night

satellite photos to google maps views

An photo to an artistic painting

3. Text to image translation: It produces realistic photographs from textual descriptions of simple objects like birds and flowers.

Source: StackGAN: Text to Photo-realistic Image Synthesis with Stacked Generative Adversarial Networks

4. Film Restoration: It improves old images and old movies by upscaling them to 4K and beyond. It generates 60 frames per second instead of 23 or less, eliminates the noise, and adds colors.

5. Semantic-Image-to-Photo Translation: It converts input that are semantic images or sketches to photo realistic images.

input   output

Semantic Image on the right and raw image on the left

Sketch to realistic image

6. Face Frontal View Generation: It generates front-on photos from photos taken in different angle for a face verification or face identification system.
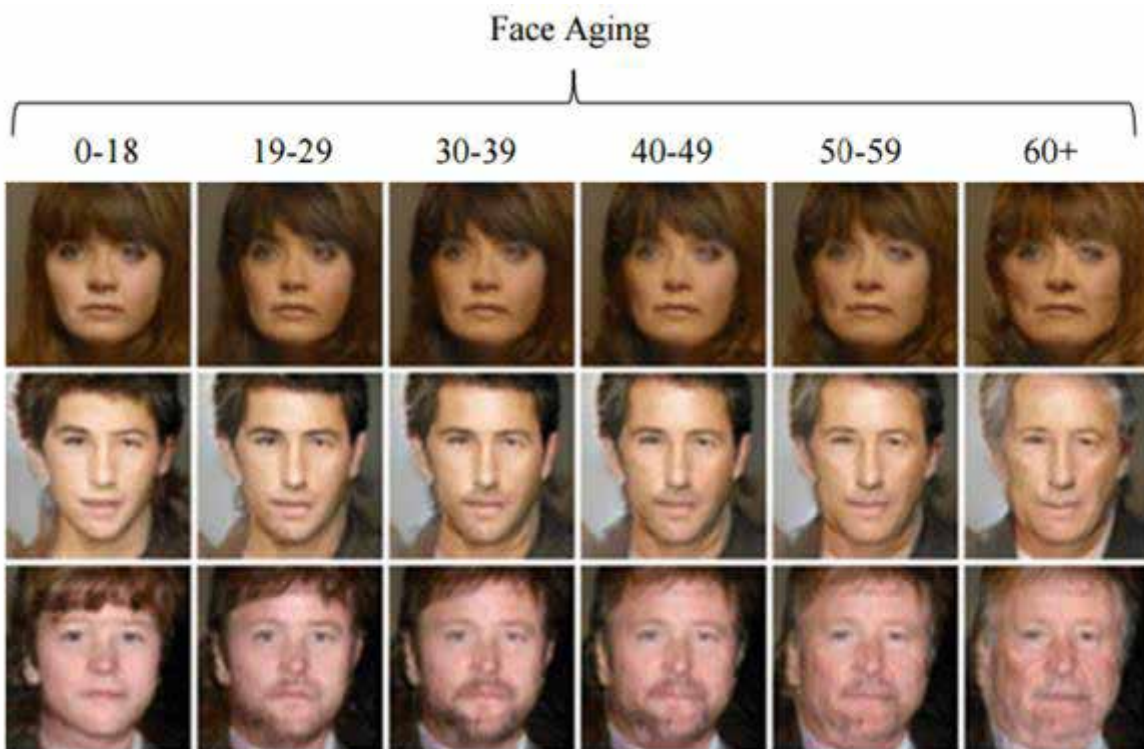

Profile on the left, the synthesized in the middle, the ground truth frontal face on the right

7. Photos to emojis: It changes real photos to emojis or small cartoon faces.

A specific photo to emoji and cartoon face example

8. Face aging: It generates older version of faces from a young face photo.

Face Aging Example

9. Media and entertainment: Deep fake technology is applied to localize content (e.g.: dubbing and moderating) while distributing it across the globe. By using face synthesis and voice cloning, artist's/ actor's original voice can be matched with a lip-sync.

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STUDENT'S ACHIEVEMENTS

Abhinav Sinha, a 3rd year B. Tech CSE student from School of Engineering & Technology, has successfully graduated from The Linux Foundation's LFX Mentorship program's Spring 2022 semester. During this program he has directly worked on the development of an official Kubernetes sub-project. Kubernetes was originally created by Google, but was later donated to the Cloud Native Computing Foundation (CNCF), and is now being actively maintained and developed through open-source contributions from many renowned organisations such as Google, Microsoft, Apple, Amazon, IBM, etc. The stipend for the successful completion of this program is $3,000 for a period of 3 months, and its acceptance rate as of now is 4.97%.

FROM OUR STUDENTS'S PEN

Mr. Kunal Kumar (B.Tech CSE- 2019-2023)

The initial thought in one's mind is always not the university to choose, it's the culture they want to opt for. The education-imparting culture has improved tremendously with the involvement of faculties, management, and most notably with students' participation. I have personally worked with real-world projects at the university. Teachers helped me through the overall process of publishing of some of my papers in my domain which is related to machine learning and Deep learning. With guidance from teachers, I got to know about the internship program at the Ministry of electronics and information technology, which I later applied for and got selected to work on the development of a real-world chatbot that dealt with farmer's query resolution. The ever-willing and helping trait of faculties have motivated me to work on things that i might have ignored in my personal capacity. This is what a good academic culture brings and this is what is needed today!

Jaanya Raheja
(BCA-AI&DS 2022-2025)

"ALL YOU'VE HAD"

What is that, spots and hair?
Oh, I'm dark and fat, that isn't fair!
looking at myself puts me in despair.
well you know what? you shouldn't really care!
the scars on your face are beautiful
the tires on your tum make you blissful
what? you think you're too slim?
no ma'am you're amazing.

your impact on the world is jaw dropping.
you maybe defined sometimes as
white brown or black
or maybe asian or maybe red
all these assumptions of beauty
are completely misled.
Stop judging people on how they look!
Stop telling people how to dress!
It's crooked.
love the glory as it's carved.
because in the end,
that's all you've had.

33

Divisha Jain
B.Tech (2018-22)

Both school life and college life is the most memorable time of a person's life, but both of them are quite different from each other. While in School life, we learn everything in a protected environment, College Life exposes us to a new environment where we have to learn new things and face new challenges by ourselves.

For me , My college life had a great impact in my life from being an introvert , fear of facing the stage I all overcome as a strength. I still remember when I was taking admission in K.R Mangalam University for my Bachelor's degree in computer science and engineering I was full of curiosity but having little sense of fear am I taking right decision will it give me what I want from college more than that What I want from myself? But gradually and slowly it happens all my questions which i was trying to answer to myself was becoming reality. In the first year I was appointed as secretary for the Computer society of India (CSI) K.R Mangalam University chapter which helped me to grow my interpersonal skills. Organised and participated in many events, making projects in field for automation and IOT. After two years of hard working and dedication I was appointed as president in my college for Computer Society it helped me to increase my networking and social interaction in professional world it was a step I realised which domain I have to take forward and choose as my professionalism skill and I took data science and started working to enhance my skills. In between of my four years journey covid hit us all very badly, and to me it was changer at personal level but all faculty and my teachers helped me too overcome that. At end my third year I did my first internship as data analyst that time I realised and get to know definition and meaning professional world where people don't get time for us just running after time and our individuality.

As a college student, the hardest part of college life was leaving college after graduation or post-graduation. The last days of college were the hardest, knowing that soon you will be departing your friends, the campus, and teachers and completely leaving behind a part of life.

 Now I'm working as data analyst In GroupM, its world leading media Investment Company. Here project i get are all at global level understanding there market all campaign running at different level I analyse and figure out all pros cons and give insights to them in form of visual, presentation.

ASSOCIATION OF THE SCHOOL WITH INDUSTRY

Memorandum of Understanding were signed between Froyo Technologies & K.R Mangalam University, Gurugram, Haryana on 14th Sep 2022.

MoU was signed in the presence of Vice Chancellor, Pro-Vice Chancellor, Registrar, Dean SOET, HoD CSE, HoD EEE representing K.R Mangalam University and Mr. Rajinder Kumar Director, Froyo Technologies Pvt ltd

Under the MOU Froyo Technologies will provide internship opportunities to our students based on its requirements & openings. Both parties have also agreed to work on collaborative research project for the development of AI enabled Device for controlling Air Pollution. The product will be designed and developed in the laboratories under the School of Engineering & Technology at K.R Mangalam University. Faculty members & students will be involved as a part of the proposed project.

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